

# BTS ARMY KITCHEN

## Kitchen Basics



# Dedication

We at BTSARMYKitchen first created our account in 2018 and quickly our eyes were opened to how many ARMY were interested in learning about food and cooking. Seeing that desire sparked the idea of teaching lil chefs about kitchen basics, cooking, and seeing ARMY flourish in the kitchen. We hope that, through our class content, we can guide everyone to learn and grow.

We dedicate everything we do to ARMY and BTS.

Borahae!

For more content and updates, follow us on Twitter and Instagram



@BTSARMYKitchen

# Class Course Syllabus

## Course Description

The BTS ARMY Kitchen Cooking Course aims to prepare students who want to expand their cooking skills. In addition to learning about the basics of cooking and food in the class, students will also have the opportunity to apply what they have learned in the real world. This is a comprehensive introduction to culinary basics, including classic knife cuts, terminology, equipment, measurements, and ingredients.

A primary objective of this course is to establish an atmosphere in which each student feels that they may express their own point of view without feeling threatened and that questions may be asked and answered without embarrassment. No limits are placed upon the subject matter or the extent of questioning, except that all discussions should be in "good taste" and with due recognition of the varying personal, economic, religious, and social backgrounds of each class member and the level of maturity of the group as a whole.

## We aim to teach:

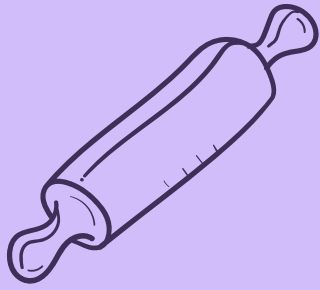
- Prepare and serve safe food
- Basic culinary skills and proper usage of kitchen equipment
- Food selection and storage techniques
- To recreate recipes

# Class Course Syllabus

## Course Objectives

Upon completion of the course, students will have an understanding of, or be able to apply the following principles and concepts:

- Name the basic knife cuts and describe them.
- Name the basic cooking method and use them confidently when cooking.
- Name the methods of heat transfer and list examples of cooking techniques that rely upon each method.
- Select and use hand tools, measuring equipment, and thermometers properly.
- Knowledge of eggs by boiling, frying, poaching, and scrambling. Prepare French, American/Country-style, and Soufflé Omelets.
- Select and prepare starches for boiling or steaming. Cook potatoes, grains, and legumes.
- Prepare vegetables using boiling, sautéing, roasting, grilling, pureeing, and pan-frying techniques.
- Select and store canned, frozen, and prepared foods properly.
- Select and store a variety of fruits, vegetables, herbs, and fruits.
- Define stock and describe several uses for stocks. Identify different types of stocks and know preparation methods for each stock.
- Name the mother sauces. Prepare and finish brown, white, and tomato sauces. Prepare two basic warm emulsion sauces.
- Select ingredients and prepare broths and vegetable soups. Prepare consommé, puree, and cream soups.
- Apply nutritional balance and variety to a complete dish.



# Course One

## Kitchen Basics



# Tips from the Kitchen

## Tips To Know Before Cooking:

### **FOLLOW THE RECIPE THE FIRST TIME**

If it's your first-time cooking something, we recommend you follow the recipe exactly. No leaving things out, no substitutions, no skipping steps in the recipe. All of those things are there for a reason, and you have no idea how changing one of those things will affect the final product.

After you've cooked it the first time, you'll be able to see how it should taste and find out what you did and didn't like. This will allow you to make informed changes the next time around! If you need to find substitutions BEFORE making the dish.

### **PREP YOUR STATION**

Multitasking can be hard for even experienced cooks! It's important to plan ahead, and be organized so you can focus on cooking. Instead of prepping three things at once while your pan gets too hot and burns something as you're digging around in a drawer for the spices you need.

It is best to prep and cut all of the vegetables and meats, measure out all of your spices, and make sure you have all of the ingredients ready and near the stove before you start. It may seem like overkill, but it will make things much more organized and stop you from frantically multi-tasking when you realize you don't have an ingredient or something ready when you need it to be!

### **CLEAN AS YOU GO**

Along with prepping all your ingredients, this will help you feel less overwhelmed while cooking. While prepping, we suggest keeping a "garbage bowl" handy to put any food scraps into or have the trash can nearby.

# Tips from the Kitchen

## **START WITH A HOT PAN**

Adding food to a cold pan with cold oil means the food is going to release more moisture as it cooks. This means less even oil distribution, too! Doing this makes the food steam and cook unevenly.

Once the pan is heated, you can add the oil at any time and start cooking. This allows you to better control the temperature of the oil - you can let it heat only a moment or let it heat until it shimmers to sear something, such as a steak.

## **COOKING AND THE SENSES:**

We eat with our 5 senses, so we should cook with our 5 senses as well.

- Cooking by sight, smell, taste, sound, and touch allows you to cook the food to just the way you like it.
- Time estimates specified in the recipes are not always the best guide. They do not necessarily apply to all situations since cooking conditions will vary depending on the type and materials of the utensils and stoves. Different materials in cooking utensils: aluminum, carbon steel, copper, non-stick, composites, ceramic, etc. Different types of stoves: gas, electric, infra-red, induction, etc.
- Cooking by sight: vegetables turning a vibrant, brighter green; vegetables and meat browning when caramelized; pasta turns translucent (or less opaque), fish turns opaque; rapid, large bubbles mean boiling, whereas small, slow bubbles mean simmering, etc.
- Cooking by smell: cooking is also about bringing out the aromas from the ingredients - smell the aromatics, herbs, and spices as they cook.

# Tips from the Kitchen

- Cooking by sound: the sizzling of the food tells you the pan is hot enough to vaporize the moisture rapidly, using ingredients with crunch adds to your eating experience, etc.
- Cooking by touch: vegetables turn soft, proteins firm up when cooked. Control your preferred doneness by feeling the food with your spatula or chopstick, and if you prefer, with a clean finger. This will take practice and you will get better at it over time.

## **FOOD SHOPPING**

This course will have information about new ingredients so getting smarter about your grocery shopping trips is a good way to start. We have included tips to get the most out of your shopping trips. When we dive into actual cooking and trying international dishes (ie: Korean cuisine), your list will expand but you have to be savvy about what to buy and where to buy it. Keep in mind a lot of the international ingredients might not be found locally and many of you can't buy certain things or even their substitute so being mindful of your budget when trying new foods is something to start thinking about. For example, you may want to save up to try some of the more advance dishes some time in the future!



# How to Read a Recipe

**What is a Recipe?** A recipe is a set of instructions for cooking. Properly written recipes allow for easy completion of the desired dish.

## Here are the five essential parts of a well-written recipe:

**1. Ingredients including measurements** - The ingredients of a recipe are all of the foods and flavorings that are combined to create a dish. This can be used as what you will want to review so you can add any items to your shopping list that you do not already have.

**2. Yield** - number of servings

**3. Time and temperature** - How long and at what temperature?

**4. Container size and shape** - What container (e.g., pot, pan, bowl, baking dish, the shape of the container, etc...)

**5. Step by step directions** - Written in sequential order. Directions can be written in two ways: in paragraph form or numerical form. It is suggested to read the instructions one time in full before starting to make the dish so you know what is coming next and are not caught off guard when you are actually cooking the dish!

# How to Read a Recipe

## Characteristics of a Good Recipe

**A good recipe has two parts:**

1. A list of ingredients with the amounts required
2. The directions for mixing the ingredients

**It also includes the following things:**

- Ingredients listed in the order of their use
- Exact measurements (amounts) of each listed ingredient
- Simple, step-by-step directions listed in sequence
- Cooking time
- Cooking temperature
- Size of the correct cooking equipment to use
- Number and size of the servings the recipe makes
- The recipe has been tested prior

### **Remember:**

**Read the recipe first.** Take a good look at the recipe. Don't just skim it; read it through from start to finish. As you read, visualize doing the steps, which will help when you're prepping and prevent that dreaded yikes-I'm-missing-an-ingredient moment. A recipe is loaded with info, like tips and serving sizes, so you'll know exactly how many people it will feed and whether there are any shortcuts you can take.

**Tip:** Pay attention to the order in which ingredients are laid out so you can prep them efficiently and in order of their use in the recipe.

### **Know the assumptions.**

All recipes are written using certain conventions, which define the characteristics of common ingredients. The rules vary from place to place, and these assumptions are often not specified in the ingredient list.

For example, when our recipes call for "eggs," we mean large eggs. "Flour" means all-purpose (we specify whole wheat and other kinds), "sugar" means granulated sugar (other types, such as brown, are mentioned specifically) and "butter" means salted butter.

# How to Read a Recipe

## **Figure out the timing.**

Check the “prep time” and “total time” listed at the top to be sure you have enough time to complete the recipe. Look for hints, such as the words “meanwhile” or “at the same time,” which indicate that two or more steps can happen simultaneously. Our recipes also show hands-off periods — look for phrases like “let rise”, “refrigerate until chilled”, or “marinate for 30 min.,” which indicate moments when you can step away. Tip: Our prep times and total times don't cover ingredient-list requirements, such as bringing refrigerated butter up to room temperature, so add those activities to your timetable.

## **Plan ahead.**

Missing a prep instruction can leave you scrambling in the middle of a recipe. Keep your eyes peeled for time-consuming steps, such as using an already prepared ingredient (like cooked chicken or rice), thawing a frozen ingredient or preheating the oven. A lot of people have trouble with situations, like adding preheated time into the total time the recipe required. We just wanted the total timing for the 3 batches stated but it was nice seeing how y'all had a sense to also add preheating timing to the total time (2 hrs., 15 + preheating).

## **Learn up on new techniques.**

If you're trying out a skill for the first time, look up how-to's (tutorials) before you start, such as videos about how to use a knife, roasting, stir frying etc. Especially if you're a visual learner. Don't try new things right when you're about to do the recipe as it can end in chaos.

## **Lay out your tools.**

Read up about “mise en place” or “putting in place”. This isn't just for ingredients. Making sure you have the right pans and other equipment ready as this makes the cooking process go smoothly and quickly.

# How to Read a Recipe

**Make notes about the dish/recipe.** Jot down any special prep instructions, and highlight cooking times or other important info you'll be looking for as you cook

**Take notes of how much you're making by reading the servings after the title.** That way you'll know to cut the recipe in half or add more depending on how many people you're cooking for. The ingredients list can also serve as a shopping list in case you do not have your ingredients at home. You might also need to replace ingredients in case of allergies or if you have none in your area available to you. Understanding each ingredient and the importance in the dish can go along way especially cooking with Korean ingredients.

The infographic illustrates the components of a recipe for 'Muffin Pizzas'. It features a central recipe card with several callout boxes explaining key parts:

- Title:** 'Muffin Pizzas' - Explained as 'The title of the recipe tells you what you're about to make'.
- Serves:** 'Makes 36' - Explained as 'The number of serves is usually written under the title. This tells you how much food you'll have to eat when you're done'.
- Ingredients:** A list including 18 wholemeal or wholegrain English muffins and 36 teaspoons of tomato paste. Explained as 'The ingredients list tells you all the foods you'll need to make your dish. Write them down on a shopping list so you don't forget'.
- Toppings:** A list of options like sliced tomato, ham, mushrooms, corn, cheese, and herbs.
- Method:** A 7-step guide from splitting muffins to serving them.
- Variation:** Suggests alternative breads like Lebanese bread or pita. Explained as 'Sometimes the recipe has suggestions for other ways you can make the dish. You can change it up next time to make it interesting!'.
- Instructions:** Explained as 'The methods are a step by step guide to making your dish. Read them carefully!'.

# Metric Measurement Abbreviations

**When reading a recipe, you might have come in contact with these.**

You may know the basics of cooking measurement, but there can be a big difference between a tsp and a tbsp when preparing a meal, so it's best to be sure. Here are some measurement abbreviations that are perfect when reading recipes.

## **Volume Measurements**

A set of measuring cups and measuring spoons can only get you so far. If you don't know what the recipe is asking for, no measuring spoon will save your dish from disaster.

## **Weight Measurement**

The United States typically uses pounds to measure the weight of ingredients. However, countries that use the metric system employ grams to describe how much of an ingredient one should add.

### **Some common weight abbreviations include:**

- g - gram
- kg - kilogram
- lb or # - pound
- mg - milligram
- oz - ounce

### **You may see these abbreviations in your cookbook:**

- bu - bushel
- C or c - cup
- dsp - dessert spoon (in Australia)
- fl oz - fluid ounce
- gal - gallon
- mL - milliliter
- L or l - liter
- pk - peck
- pt - pint
- qt - quart
- T, TB, or tbsp - tablespoon
- t or tsp - teaspoon
- gal - gallon
- doz. - dozen
- lb. - pound
- pkg. - package
- min. - minutes
- hr. - hour
- sq. - square
- med. - medium
- temp. - temperature

# Metric Measurement Abbreviations

4 ounces = 1/2 cup

8 ounces - 1 cup = 1/2 pint

16 ounces = 1 pint = 2 cups

32 ounces = 1 quart = 4 cups = 8 pints

64 ounces = 1/2 gallon = 2 quarts = 8 cups

128 ounces = 1 gallon = 4 quarts = 8 pints = 16 cups

3 teaspoons = 1 tablespoon

4 tablespoons = 1/4 cup

1 teaspoon + 5 tablespoons = 1/3 cup

8 tablespoons = 1/2 cup

16 tablespoons = 1 cup

**Butter or margarine measurements are typically on the wrapper, however:**

1 stick = 4 ounces or 1/2 cup or 8 tablespoons or 1/4 pound

**Common fractions/decimals in cooking:**

1/4 = .25

1/3 = .33

1/2 = .5

3/4 = .75

**Most countries use the metric system:**

ml = milli-liter

L = liter

g. = grams

kg = kilograms

# Cooking Utensils, Tools & Equipment

What's the proper name to that "big spoon" you have in your kitchen? Here are a few of the best tools you will need in your kitchen whether you're opening a can or needing to blend ingredients right on the pan these tools make our life so much easier.



Solid Turner



Potato Masher



Solid Spoon



Whisk



Soup Ladle



Tongs



Grater



Pizza Cutter



Can Opener



Bottle Opener



Peeler



Rubber Spatula



Measuring Spoons



Garlic Crusher



Pasta Server



Measuring Cups

# Cooking Equipment: Pots & Pans

What are the different pots or pans and what will you need them for when cooking?

Here you can learn the cooking techniques related to each pot or pan.

These are some of the basic cookware you might encounter a recipe calls for. You can add to the list a wok, rice cooker, pressure or slow cooker as well.

Do you have any of these in your home?





# Cooking Utensils, Tools & Equipment



**Food Processor**



**Stand Mixer**



**Pressure Cooker**



**Crock Pot**



**Water Kettle**



**Immersion Blender**



**Hand Chopper**



**High Speed Blender**



**Hand Mixer**



**Toaster**



**Skillet or frying pan**

Best for cooking, sauteing, frying, browning, & searing



**Sauce pan**

Best for: cooking with liquid, simmering, boiling, poaching, cooking grains, and making sauces.



**Dutch Oven**

Best for: slow cooking, roasting, stews, braises & casseroles.



**Stock Pot**





Best for: cooking with large amounts of liquid, boiling, cooking pasta, steaming, large amounts of soups & sauces.



**Wok**

Best for: many cooking techniques , large stir-frying, stewing, braising, boiling and making soups

# Cooking Equipment: Pots & Pans

COOKWARE	USES	TIPS
 <p><b>2-quart sauce pan with lid</b></p>	<ul style="list-style-type: none"><li>• Reheating soups</li><li>• Making sauces</li></ul>	<ul style="list-style-type: none"><li>• Perfect for 1 person</li></ul>
 <p><b>4-quart sauce pan with lid</b></p>	<ul style="list-style-type: none"><li>• Cooking larger stews and soups</li><li>• Making larger amounts of sauces</li></ul>	<ul style="list-style-type: none"><li>• Perfect for 2-3 people</li></ul>
 <p><b>6 and/or 10-inch stainless steel sauté pan</b></p>	<ul style="list-style-type: none"><li>• Go-to for stir fries, vegetables, braising, and finishing dishes</li></ul>	<ul style="list-style-type: none"><li>• Make sure you have a lid</li></ul>
 <p><b>8-inch non-stick sauté pan</b></p>	<ul style="list-style-type: none"><li>• Cooking eggs and fish</li><li>• Allows you to cook at a lower temp.</li></ul>	<ul style="list-style-type: none"><li>• Don't use metal instruments because they scratch the surface and get teflon in the food.</li></ul>

# Cooking Equipment: Pots & Pans

COOKWARE	USES	TIPS
 <p><b>8-quart dutch oven with lid</b></p>	<ul style="list-style-type: none"><li>• Blanching, frying, poaching, and making casseroles</li><li>• Heats evenly and goes from the stove-top to the oven to the table</li></ul>	<ul style="list-style-type: none"><li>• Don't sauté food from the dutch oven</li></ul>
 <p><b>10-inch cast iron pan</b></p>	<ul style="list-style-type: none"><li>• Grilling meats, fish, and vegetables</li></ul>	<ul style="list-style-type: none"><li>• Cast iron won't tarnish and is easy to clean, when kept up properly</li></ul>
 <p><b>10-inch cast iron grill pan</b></p>	<ul style="list-style-type: none"><li>• Has grooves in the bottom for searing meat</li><li>• Fat stays below in the grooves</li></ul>	<ul style="list-style-type: none"><li>• Make sure to season and clean in between the grooves</li></ul>

# Cooking Equipment: Pots & Pans

## Q&A



Should I cover my pan to reduce splatter?

No. When you cover your pan, water vapor collects under the lid and falls back onto the food, steaming it, instead of browning it. Instead, use a splatter screen, which is an immensely handy tool that traps cooking splatter and keeps your arms and stovetop free of hot spits of oil. The screen allows steam from the cooking meat to pass through so it does not hinder the browning process.

Can I use a non-stick pan?

This is an often asked question, and we understand why. However, we do not recommend non-stick cookware for cooking anything but eggs, potatoes, pancakes, and the like. Everything else benefits from the beautiful caramelization that happens when food browns onto the bottom of a pan, especially meat. A little liquid will always remove (deglaze) brown of a pan.



When should I use my convection oven?

If you have this setting on your oven, use it every time you cook. This setting activates a small fan built into the back of the oven, circulating the air during cooking. This results in better browning, and a little more efficient cooking time. If using convection, shave off about 10 minutes for every hour of cooking time, making sure you check your food in advance of the recipe's cooking time.

For baking, lower the oven temperature by 25°F, because ingredients, like butter and sugar brown quicker than meats and vegetables.

# Cooking Utensils/ Equipment: Korean

Here's a list of some of the most used items in a Korean kitchen. If you were to splurge and buy any of these make sure you buy a durable brand like Cuckoo rice maker for me is one of the most lasting out there and their guarantee is pretty great as well!

Some recipes, such as dolsot bap, call for special equipment like the stone pot. So thinking about investing in these is a great idea.

## Utensil and Tools:



### Rice cooker

The convenience of pressing a button and letting your rice cook and even stay warm is so wonderful. A great investment is a good rice cooker.



### Pressure cooker

If you don't want to buy a rice cooker, you could also use a pressure cooker to make rice. It works best, as pressure cookers will also help you when making certain Korean dishes as well.



### Dolsot Pot (Stone bowls) and Earthenware Pot (Ddukbaegi)

Korean stone bowls are the epitome of kitchen versatility. They can be used on an open flame, on an electric coil, in the oven, under the broiler, and right in the microwave, basically any way you can think of to get something hot. You can eat directly from the bowl once it's ready, and the stoneware actually keeps the food hot while you're chowing down. Though traditionally made with natural stone, it's common now to see ceramic versions, which are more practical for the home cook. Dolsot is more commonly used for rice dishes like bibimbap, while ddukbaegi is used for soups and stews.

# Cooking Utensils/ Equipment: Korean

## Utensil and Tools:



### Kimchi Box

It allows the fermented gases to escape without any of the smells permeating the rest of the refrigerated items. If you cannot find this specialized container where you are, they can easily be ordered online. Placing kimchi in any other type of sealed container is not recommended as the fermented gases will not escape as necessary and it can create a mini explosion.



### Cooking scissors

We still wonder why every person doesn't have a pair of scissors in their kitchen, as they are probably more useful there than in any other location in the home. Koreans have long seen the value in having scissors at-the-ready for cutting through meat, noodles, kimchi, and the like. They're cheap, fast, and effective. How many things can be described that way?



### Reusable spice bags for anchovy broth etc...

Anchovy broth is a Korean staple, and a spice bag will allow all that deep, rich, salty flavor in there while leaving the heads and "scrapes" out of the broth. It also creates an overall cleaner final product.



### Mandoline

With the amount of slicing and dicing of vegetables that goes into Korean cuisine, this tool is one that will save your fingers from developing calluses and a perfect slice every time. Always practice safety first and use that chopping guard!



### Disposable Plastic Gloves (optional)

Buy a box specially when making kimchi. This is one trick I learn in the commercial kitchens of Korea and I've never been so happy to have learned it!

# Rules of Knife Usage

## **Keep your knives sharp.**

But be sure to keep them out of reach of children. Dull knives can slip while you're cutting. Also, you're more apt to be careful with sharp knives.

**Slice away from your hand and keep your fingers clear of the blade.** Slicing away from your hand prevents an accidental cut if the knife slips.

## **Don't ever use the palm of your hand as a cutting board.**

That's just inviting the knife to slice into your hand!

**Curl your fingers under and hold the food with your fingertips when chopping.** Better to ding a knuckle than slice a fingertip!

**Use caution with steak knives.** They're sharp enough to cut meat, which means they're sharp enough to cut you.

**Secure your cutting board.** If it doesn't have rubber feet to help grip the counter, put a damp towel under the board when cutting

**When mincing, keep the tip of your knife on the cutting board and pump the handle up and down quickly.** However, because that knife is moving fast, be extra careful about your fingers.

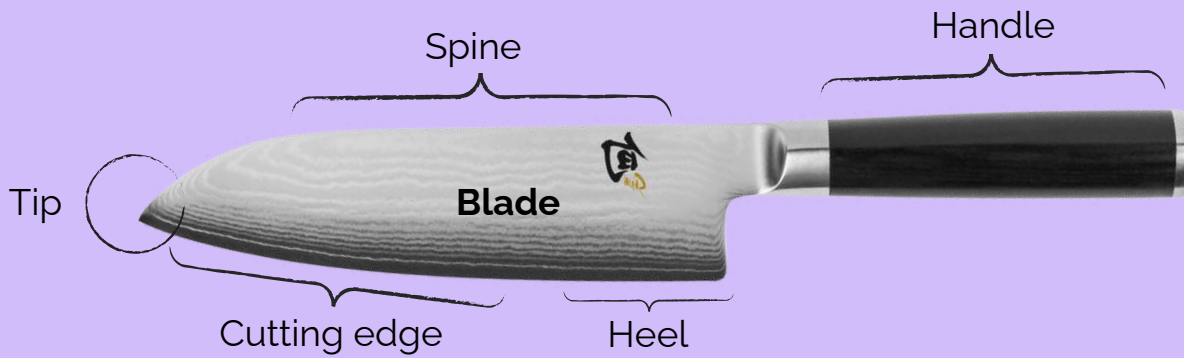
**If you do cut yourself, wash the cut and apply pressure to stop the bleeding.** Raise your hand above your head while you press the cut with a cloth or paper towel until the bleeding stops. Then, put antibiotic cream on the cut and bandage it.

**Don't lick the cream cheese off that butter knife (or any knife for that matter)!** It really can cut your tongue.

**Never slice things freehand over the sink.** That's just an accident waiting to happen!

# Cooking Utensils: Knives

## Anatomy of a Knife



## Forged vs. Stamped Knives



**Forged knives** are heated and pounded using a single piece of metal. Because they are typically crafted by an expert, they are usually more expensive but higher quality.

**Stamped knives** are stamped out of metal; much like you'd imagine a license plate would be stamped out of a sheet of metal. These types of knives are typically less expensive and the blade is thinner and lighter.



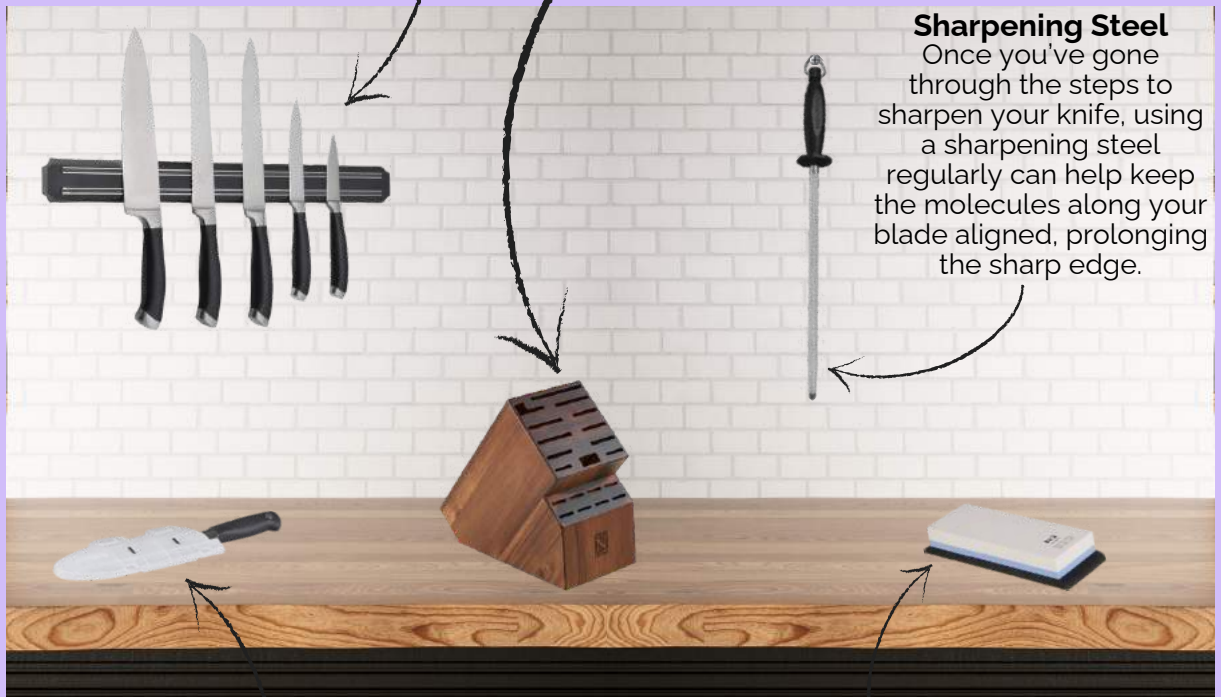
# Cooking Utensils: Knives

## Magnetic Knife Strip

A magnetic strip designed to be attached to a kitchen wall, which can hold all of your kitchen knives magnetically. This option is best for those looking to optimize space and keep their countertops clear.

## Knife Block

A large unit made for housing multiple knives. Generally made out of wood, these units feature several different sized slots for knives to fit into. You can also get a magnetic knife block, which allows you to "attach" your knives to the exterior of the block, eliminating guesswork required with a traditional knife block which hides blades from view.



## Sharpening Steel

Once you've gone through the steps to sharpen your knife, using a sharpening steel regularly can help keep the molecules along your blade aligned, prolonging the sharp edge.

## Knife Guard

A simple plastic cover that slides snugly over your knife blade, and keeps it from getting scratched when storing knives in a drawer, or amongst other kitchen utensils. This is best for stray kitchen knives that aren't stored in a more permanent way.

## At-home sharpener/ whetstone

If you're feeling ambitious, you can purchase at-home sharpening tools and follow the tools and follow the manufacturer instructions. At-home tools can be either electric or can involve some sort of manual sharpening mechanism, like a whetstone.

## Professional Sharpening

Using a variety of tools and knife sharpening tools, professionals can grind down their blades to remove imperfections and create a like-new sharpened edge.

# Cooking Utensils: Knives

**The Chef's / Cook's / Gyuto Knife**



**The Utility Knife / Petty**



**The Pairing Knife**



**The Santoku Knife**



**The Bread Knife**



**The Cleaver / Chinese Knife**



**The Kitchen Scissors**



**The Steak Knife**



**The Boning Knife /**



Knife to peel



Puntilla knife



Cleaner knife



Knife to carve



Salmon knife



Spatula



Fork to carve



Vegetables knife



Cutlet knife



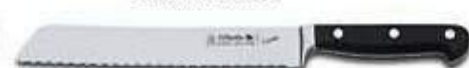
Knife to fillet



Cook knife



Jam knife



Bread knife



Santoku knife



Kitchen axe

# Cooking Utensils: Knives

With so many different types of kitchen knives out there, and it can be a little overwhelming for an aspiring home chef.

Understanding your knives can help with that.

The multi-purpose chef's knife is a classic basic knife collection and will handle all of your basic kitchen needs.



Cutting meat



Dicing vegetables

Disjointing large cuts



## Chef's knife

## Paring knife



The paring knife is used for more intricate cutting and peeling, and is an ideal knife to take on a camping or picnic trip too.



Peeling fruit and vegetables



Deveining prawns



Remove pepper seeds

A boning knife is narrow and flexible with a fine tapered tip to allow it to work around bones.



Boning cuts of meat, poultry, & fish



Removing skin from meat and fish



## Boning knife

## Utility knife



A utility knife is a versatile knife with a long blade and is basically the middle ground between a chef's knife and a paring knife.



Slicing herbs



Chopping vegetables



Slicing bagels & buns

# Cooking Utensils: Knives

## Q&A



How often should I sharpen my knife?

The best test is to cut something up, wash it, then sharpen your knife. Once you've cleaned your knife off again, cut something else up. You should be able to feel a difference in how it glides. Sharpening it is never the wrong decision, so whenever you're considering whether you should or not, do it.

How do I remove the smell of garlic from my hands?

Garlic's potent scent lies in its sticky oils and needs a good scrub with an abrasive to remove it, along with hot water and soap. Your best bet is the scrubby part of the sponge, rubbing each fingertips against the coarse texture to remove the fragrant oil. Rubbing your hands against a cut lemon or something stainless steel (under running water) also does the trick.



# Cooking Utensils: Knives

## HOW TO BUY A KNIFE

### Knife Brands to Know

Most premium knives come from Germany or Japan. German manufacturers make mostly European-style knives, which often feature thicker blades and a large bolster. Many Japanese manufacturers opt for a thinner blade and a finer edge. Steel is the metal used to form most knife blades, but not all steel is the same. Most knives use a combination of stainless steel and carbon steel, but in varying quantities. Stainless steel resists rust and corrosion, while carbon steel can take a better edge. Look for a knife that offers "high-carbon stainless steel" if you want to blend the best of both metals.

### What to Consider When Shopping for Kitchen Knives

Focus on Essentials: You only need three knives in your kitchen—a chef's knife and a serrated bread knife. The chef's knife cuts just about anything, except for crusty bread, while the bread knife, well, you can probably guess. A small utility or paring knife for items like strawberries, as are kitchen shears, which work for everything from twine to trimming a rotisserie chicken into pieces. Unless you're committed to buying or building a full set, you can keep to the basics.

### Consider Size

As the workhorse of the kitchen, the size of your chef's knife needs some consideration. The ones you'll find most are between 6 and 10 inches. Shorter knives are easier to handle and control, but longer knives let you slice through larger foods, like a watermelon or a roast. For many, an 8-inch chef's knife hits the sweet spot, which is why it's the most common size you'll find. Some people are accustomed to smaller knives so consider this as well when buying.

# Chef Cuts

If you have read many of our recipes, we usually give you a few ways to cut your veggies or herbs. If the terminology confuses you, that is ok. Now you have a chance to learn. These are the most used terms in recipes overall when it comes to cutting vegetables.

## CUTS

### **Chop:**

This is a general method for cutting food into bite-sized pieces (about 1/4-inch in size, or the thickness of a pencil). A large-bladed chef's knife is helpful for chopping, dicing, and mincing. When a recipe calls for finely chopped, aim for pieces about 1/8-inch in size (or half the thickness of a pencil). When the recipe specifies a coarse or rough chop, chop larger pieces (but no more than about the size of a quarter). Cooking times impact how quickly the size of the chopped food will cook, which is why it's important to chop approximately to the size called for in the recipe.

### **Dice:**

Dicing is similar to chopping, except dicing is always finely chopped, consistent in size, and neat in appearance. It's the precision of the cut that distinguishes dicing from chopping. Feel free to finely chop for home recipes.

### **Julienne:**

To julienne is to cut food (usually vegetables), into matchstick sized pieces. This can be very time consuming.

### **Mince:**

This is the finest level of chopping, and is frequently done using a food processor, or a sharp chef's knife. Mincing is a technique that allows the maximum amount of flavor to be contributed by the minced food; frequently the minced vegetable is chopped so finely that it "melts" into the dish. Mincing will definitely impact the taste of the food, if called for in a recipe. We usually reserve this for garlic.

# KNIFE SKILLS 101

**First step you learn before cutting is to make sure that your cutting board is stable and not moving around while you cut.**

An unstable cutting board can be dangerous, and you may cut yourself. A better method is to put a damp cloth underneath the cutting board to secure it in place. Next, make sure that the ingredients you use are not rolling around on the cutting board. It might be easy to control small foods, like herbs, but larger items like onions, cucumbers even carrots can roll around on the cutting board making it dangerous. So here's a tip to make it easier to cut relatively large ingredients, you'd want to cut one side off just a small piece so that it has a flat end and you can see it's not rolling around on the cutting board which is going to make it a lot safer to cut.

## **Safety**

- Keep your blades sharp!
- Only cut on appropriate surfaces, never on metal, glass, or hard stone such as marble or granite.
- Never attempt to catch a falling knife.
- Use the right knife for the task at hand.
- Never use a knife for any purpose other than what it was intended – e.g., never use your knife to open a can or pry something loose.
- Do not leave your knives in a sink full of water.
- Pass a knife by its handle when handing it to someone.
- Always cut away from yourself; never cut towards yourself.
- Learn and use the proper grip for your knife.
- Keep fingers on guiding hand curled.
- When walking with a knife, hold it closely to your side with the tip-end down and the blade facing away from you.

# KNIFE SKILLS 101

## Knife Care

Here's how to keep your blades sharp.

- **Wash by Hand.** Dishwashers are harsh on blades: Knives can hit other items or corrode from food or water. Wash them in warm soapy water, then dry and store.
- **No Scraping.** After chopping, avoid scraping the blade across the cutting board to move ingredients. Use the blunt side of the knife instead.
- **Sharpen Regularly.** Look for knife-sharpening services at specialty grocery or kitchenware stores. Dull knives do a sloppy job — and they're dangerous, too

## ESSENTIAL KNIVES:

Tackle any kitchen task with these three basic blades:

- **Chef's:** This all-purpose knife (8- to 10-inch blade) is your go-to for most prep work. It can handle small jobs, like mincing garlic, or big ones, like breaking down squash or carving meat.
- **Serrated:** The saw-toothed edge of this long knife is essential for cutting bread but also does a great job slicing ripe tomatoes or trimming cake layers.
- **Paring:** A small, sturdy paring knife (3- to 4-inch blade) is key for detail work, like deveining shrimp, hulling strawberries and other tasks that require precision.



# KNIFE SKILLS 101

## Chef's Knife (French Knife or Cook's Knife)



Typically 8 to 14-inches long, this all purpose Knife used for chopping, slicing and mincing is the workhorse of the kitchen. The tapered blade curves up at the tip to facilitate its ability to be used with a rocking motion for chopping and mincing. These knives are purposely fairly heavy, as their weight assists with chopping and mincing tasks.

## Hollow-ground Chef's Knife



Typically 8-inches in length, this knife combines the classic tapered blade of the chef's knife with the hollow-ground blade design of the santoku and the meat slicer. Considered by many to be the best of both worlds, the shape of the blade facilitates its ability to be used with a rocking motion for chopping and mincing, while the hollow-ground feature reduces drag when cutting and slicing delicate fish, meats, fruits or vegetables.

## Santoku



Compared with a classic chef's knife, the santoku is typically shorter and has a thinner blade, a stubbier tip, and a straighter edge. It is thought to have evolved from the narrow, rectangular Japanese vegetable knife and may be called an Asian chef's knife. It may have a smooth or a granton blade (hollow-ground with oval recesses along the blade). The thinness of the blade makes it an excellent choice for delicate or precise knife work, most notably for slicing. Because it does not have as curved a tip as the French or chef's knife, it does not rock as easily for standard chopping and mincing.

## Utility Knife



Typically 5 to 7-inches long, it is a smaller, lighter version of the chef's knife. It may be used as a chef's knife on smaller items or as a paring knife on larger items.

## Paring Knife



Typically 3 to 4-inches long, a paring knife looks very much like a chef's knife, but is considerably smaller. Structurally, because the parer is not an impact tool, the curve of a paring knife blade is usually not as pronounced as that of most chef's knives. Instead, a paring knife works more as an extension of your hand and is used for paring and trimming fruits and vegetables.

# KNIFE SKILLS 101



## Bird's Beak or Tourné

Typically 2 to 4-inches long, this small knife is similar to a paring knife, but with a pronounced forward curve in the blade at the tip. Used to peel vegetables and carve rounded surfaces on vegetables (such as tourné vegetables)



## Boning Knife

Approximately 6-inches long, its stiff, thin blade is used to separate raw meat from the bone. It typically has a pronounced heel that helps to stop the knife at the handle when it is thrust into firm meat



## Fillet Knife

Approximately 6-inches long with a flexible blade, it is used for filleting fowl and fish. Its flexibility allows it to move smoothly over delicate bones that would be cut by a firm boning knife



## Slicer or Carving Knife

Typically 10 to 16-inches long, it is used for slicing cooked meats. The long blade may be wide or narrow, flexible or rigid, have a rounded or pointed tip, and have a smooth or modulated surface. The heavier, hard bladed slicers are designed to cut broader slices through hot, softer meats. If the surface of the meat is firm and relatively dry (as in cold roast or a ham), the meat is less resistant, and the thinner, narrower blades are suitable



## Cleaver

Comes in various sizes with a rectangular blade, it is usually heavy and is traditionally used for chopping through bones and large pieces of meat.



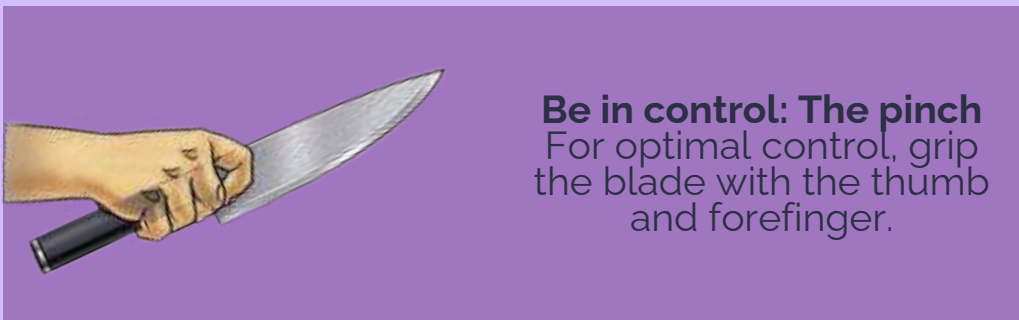
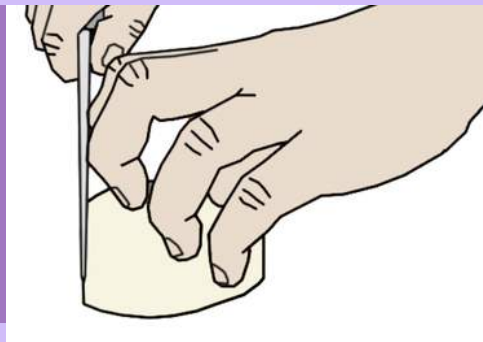
## Serrated Knife

Typically 8 to 12-inches long, it is also referred to as a bread knife, as the serrated blade is perfect for cutting breads, pastries, tomatoes or other soft foods. It is also an excellent choice for large, very hard vegetables such as butternut squash. The combination of the serrated teeth used with a sawing motion allows you to break through the hard skin without as much pressure or force as would be required with a non-serrated blade, and consequently is much safer.

# KNIFE SKILLS 101

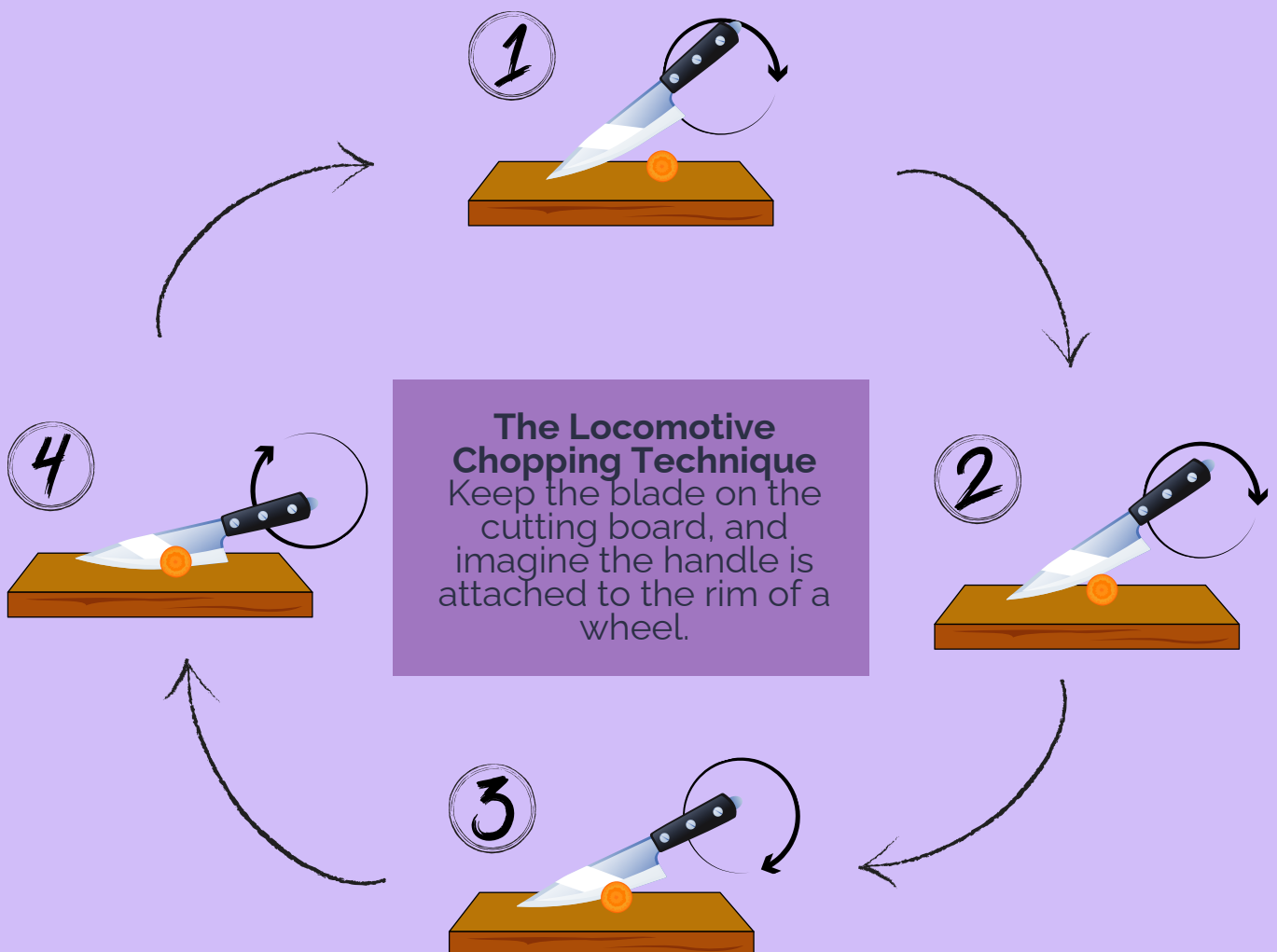
## Stay safe: The claw grip

Keep your knuckles in front of your fingertips at all times. Prop your thumb and pinky on the board for stability. With practice, it's easy!

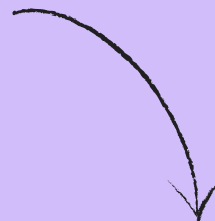


## Be in control: The pinch

For optimal control, grip the blade with the thumb and forefinger.



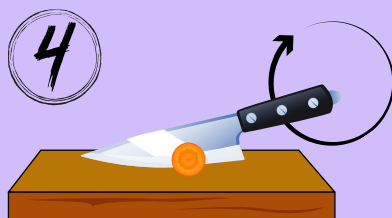
1



2



**The Locomotive Chopping Technique**  
Keep the blade on the cutting board, and imagine the handle is attached to the rim of a wheel.



4

3



# KNIFE SKILLS 101



Minced



Julienne



Diced



Chiffonade



Sliced



Half moons

# Chef Cuts

*Different vegetable cuts suit particular dishes.  
Traditional cuts based on classical French cookery.*



## Brunoise

This is a very small diced cube, sized between 1-3 mm square. Often used as a garnish for consommé. Typical vegetables used are carrot, onion, turnip and celery.



## Macédoine

This is diced cube 5 mm square. Root vegetables are suited to this cut, e.g. carrot, turnip, swede.



## Jardinière

A short thin baton or stick, about 2.5 cm long and approximately 3 mm wide and 3 mm thick. Size may be varied depending on end use.



## Baton

Sticks of vegetables approximately 5 cm long, 5 mm wide and 5 mm thick. Used as an accompaniment.



## Paysanne

Various thin shapes such as squares, triangles, circles or half rounds. In order to cut economically, the shape of the vegetable will decide which shape to choose. All are cut thinly, about 1-2 mm thick.



## Julienne

Long thin match-stick shaped pieces about 4 cm in length. Vegetables cut julienne are mostly used as garnish.



## Chiffonade

Finely sliced or shredded green leafy vegetables, usually lettuce or spinach. Mostly used as a base for serving food or as a garnish.



## Mirepoix

A mixture of roughly chopped vegetables which are used as the flavour base for sauces or other dishes. Usually includes onion, celery and carrot.



## Matignon

Roughly cut vegetables cooked in butter, with ham, thyme and bay leaf, finished by deglazing the pan with a little Madeira or wine. Usually includes onion, celery and carrot. Used to add flavour, especially when braising large pieces of meat.

## VEGETABLE STORAGE

Most vegetables benefit from storage in a refrigerator (1-4°C) or cool store (7-14°C). Store vegetables separately from raw meat.

Specifically:

### Roots

- Best refrigerated.

### Tubers

- Best kept in a dry and ventilated cool store, away from light.

### Bulbs

- Store garlic and onions in a dry, dark, ventilated cool store and away from other foods that may absorb their flavours.
- Seal leeks and spring onions in plastic and refrigerate.

### Leaves

- Best sealed in plastic and refrigerated.

### Stems

- Refrigerate.
- Best if stem ends are kept wet (especially asparagus), otherwise wrapped in plastic.

### Flowers

- Wrap in plastic, refrigerate.

### Fruits

- Refrigerate most soft fruit.
- Store whole hard skinned squash in a dry, cool store, away from light. Store cut portions after removing seeds, wrapped in plastic and refrigerated.
- For better flavour, store tomatoes at room temperature (18-20°C).

### Seeds / legumes

- Wrap in plastic, refrigerate.

# Cooking Method: Wet/ Dry

Why are foods cooked in so many different ways? What happens to food as heat gets added to it? Knowing the answers to these questions can help you choose the right method for you to create amazing dishes.

**Here's a crash course on heat and how it cooks your food.**

## Heat Transfer

Heat is a type of energy. When two items of different temperatures have contact, energy, in the form of heat, *transfers* from the warmer items to the cooler until they both reach the same temperature.

- **Conduction** is the transfer of heat from one item to another when the items come into direct contact with each other.
- **Convection** is the transfer of heat caused by the movement of molecules (in the air, water, or fat) from a warmer area to a cooler one.
- **Radiation** does not require physical contact between the heat source and the food being cooked. Instead, heat moves by the way of microwave and infrared waves.
- **Infrared** heat is created when the heat from a source is absorbed by one material and then radiated out to the food.

# Cooking Method: Wet/ Dry

## **Dry-Heat Cooking Methods**

In dry-heat cooking, food is cooked either by direct heat, like on a grill or by indirect heat in a closed environment, like in an oven.

- **Broiling** is a rapid cooking method that uses high heat from a source located above the food.
- **Grilling** is a very simple dry-heat method that is excellent for cooking smaller pieces of food.
- **Roasting and baking** are techniques that cook food by surrounding the items with hot, dry air in the oven.

# Cooking Method: Wet/ Dry

## Dry-Heat Cooking Methods

- **Griddling** is cooking a food item on a hot, flat surface (known as a griddle) or in a relatively dry, heavy bottomed fry pan or cast-iron skillet.
- The **sautéing** method cooks food rapidly in a small amount of fat over relatively high heat. The fat adds to the flavor.
- **Stir-fry** is a cooking method closely related to sauté. Like sauté, it is a quick-cooking, dry-heat method.
- To **pan-fry** food, cook it in an oil over less intense heat than that used for sautéing or stir-frying.
- To **deep-fry** food, bread or batter coat it, immerse (completely cover) it in hot fat, and fry until it is done:
  - A **breading** has the same components as batter, but they are not blended together. A standard breading would be seasoned all-purpose flour and an egg and buttermilk dip.
  - The "**float**" of the item is the point when the item rises to the surface of the oil and appears golden brown, will indicate its doneness.
  - **Recovery time** is the amount of time it takes oil to reheat to the correct cooking temperature once food is added.
  - The **smoking point** is the temperature at which fats and oils begin to smoke, which means that the fat has begun to break down.



# Cooking Method: Moist-Heat

## Moist-Heat Cooking Methods

**Moist heat cooking** techniques produces food that is delicately flavored and moist, which can be served as a separate course or used a sauce base.

- When **simmering**, completely submerge the food in a liquid that is at a constant, moderate temperature.
- When **poaching**, cook the food between 160-180°F (71-82°C). The surface of the poaching liquid should show some motion, but no air bubbles should break the surface.
- **Blanching** is a variation of boiling. When blanching, partially cook the food, then finish it later.
- **Steaming** is cooking food by surrounding it in steam in a confined space, such as a steamer basket, steam cabinet, or combi-oven. Direct contact with the steam cooks the food.

## Sous Vide and Microwave Cooking

- **Sous vide** is a method in which food is cooked for a long time, sometimes well over 24 hours. Sous vide is French for "under vacuum". Rather than placing food in a slow cooker, it cooks the food in an airtight, plastic bag and then place the bags in water that is hot, but well below the boiling point.
- Many foods can be baked or roasted in a microwave oven. However, microwave ovens do not give the same results as convection or conventional ovens because they cook food with waves of energy or radiation- microwaves - rather than with heat.

# Cooking Method: Moist-Heat

## Sous Vide and Microwave Cooking

When the best method for preparing certain food is a combination of dry-heat and moist-heat cooking methods, it is called **combination cooking**.

- In **braising**, first sear the food in hot oil, and then partially cover it in enough liquid to come halfway up the food item. Then cover the pot or pan tightly and finish the food slowly in the oven or the stovetop until it is tender.
- When **stewing**, first cut the main food item into bite-sized pieces, and either blanch or sear them. As with braising, cook the food in oil first, then add liquid. Stewing requires more liquid than braising. Cover the food completely while it is simmering.

To determine when food is done cooking, identify if the product has reached its desired texture and minimum internal temperature.

# Basic Cooking Techniques Explained

## Water bath

You need two utensils; one bigger than the other. It's best to use a set of casserole dishes. Boil water in one of them and place the other one containing the cooked food inside. This method is used to cook easily burning mixtures, for example, sauces or creams. You don't really want to spend all afternoon cleaning the caked on food leftovers, are you? One of the main advantages of water bath is, that it provides even heat distribution. Another advantage is that it assures a better temperature control, since boiling the water in the outer utensil is easy to be seen and controlled, whereas the temperature in the inside one is quite close, but lower than that of the outer pot.

## Glazing

Pouring a glaze over the ready dish, aiming to give it a complete, aesthetic look and taste. It is used mainly on sweets, fruits, bread and meat. Glazing's are most often sweet.

## Grilling

A way of meat preparation, through roasting directly on top of the heat source, usually a BBQ or a grill. Although the most often used appliance is an electric barbecue, you can only get the best of the taste by burning wood coal, made of oak or beech and cook on the glowing embers. Usually, you will need to marinade the meat in advance, so that it can get a better taste and keep it from drying during roasting.

## Deglazing

After cooking meat, there's a lot of oil and concentrated, caramelized juices inside the pan. Take out the meat and heat the utensil again, simultaneously adding water or broth and stir until you make sauce that can be served together with the meat.

## Caramelization

Heating of sugar or sugar syrup, until it reaches a dark caramel color. During the process an oxidation occurs degrading of the compound sugars into simple ones. Visually, the sugar melts and changes its color to dark brown, releasing a nutty flavor. The caramelized sugar is used for glazing, candies, as an addition to certain sauces and so on.

# Basic Cooking Techniques Explained

## Refreshment

Washing vegetables with cold water, straight after boiling them, just before serving, in order to stop the process of thermal preparation and to preserve the color and nutrients.

## Cooling

A process in which the readymade foods or cooked dishes and products' temperature is decreased between 0 and 5°C. It is used for temporary storage and slows down the development of bacteria.

## Coating with breadcrumbs

Coating the product in breadcrumbs, after which frying follows up. The bread crumbs can vary, whereas the main ingredients are flour (wheat or corn), crushed dry bread or genuine breadcrumbs. Another main ingredient is egg (yolk, egg white or both).

## Pureeing

Crushing and smashing a product in a blender or a mixer, until reaching a homogeneous state, without any pieces or small lumps.

## Roasting

A method of cooking by dry heating of products. The temperature varies between 100° to 300°C, according to the kind of food. Roasting most often happens in an oven, but you can also roast in a pan or in a microwave.

## Frying

A way of meal preparation, during which the product is dipped in hot oil until cooked. It varies greatly according to the product, the type of oil, the amount of oil, the used utensil, etc.

# Basic Cooking Techniques Explained

## Reduction

Thickening a liquid or a sauce by boiling. As a result, the taste and the aroma intensify. You need to avoid long hours of boiling, since the flavors can disappear.

## Sautéing

Quick frying in a pan with a bit of oil at a strong temperature. The products are not stirred but flipped inside the pan. The utensil itself should be big enough, so that all food is at the same level. The oil should just cover the bottom. Fry until slightly brown, after which toss the veggies in the air to flip them. The appropriate pan also should have slightly curved walls so that the tossing will be easier.

## Severing

Cutting the cooked meat into appropriate pieces for serving. It is used for big chunks of meat, or for whole parts or birds, such as a whole leg, chicken, turkey, etc.

## Stuffing

Filling the inside of a product with finely cut vegetables, meat, fish. Usually, you can stuff whole birds, peppers, eggplants, tomatoes, shoulder of a lamb and so on. When stuffing meats, the opening should be sewed with a thick thread.

## Filleting

Cutting a piece of meat without any bones in a flat, wide shape.

## Flambé

A cooking technique, which consists of adding alcohol in the pan with the dish and fire it. Most often it is performed in front of the client, when serving. It is considered that when the alcohol burns, it passes a part of its flavor to the dish, but, most probably, the main advantage of this method is the spectacle it creates. It is considered that flambéing was officially discovered in 1895 in Monte Carlo by the waiter Henri Carpentier, who accidentally lit a pancake on fire, which was cooked for the young uncrowned king of England Edward VII.

# Basic Cooking Techniques Explained

## Larding

Using a thin knife, spike the meat and in the formed hole you can put different products, such as bacon, garlic, celery, carrot, onion, etc. It adds up to the flavor, whereas the bacon protects the meat from drying out.

## Spritzen

Taking out a cream-like product under pressure through a hose with a certain shape (spritze), during which the leaking cream acquires the shape of the hose. It is used to decorate salty and sweet dishes, cakes and pies. No matter which cooking technique you apply, in order to produce well-done and healthy meals, you will need to use clean and sanitized equipment. That means no food leftovers or charred burnt-on stains on the stovetop, the racks and trays, the oven chamber itself, the grills and pans. Producing quality dishes requires a bit of time before and after cooking mainly for cleaning and preparation of the working area.

# Basic Cooking Techniques Explained

## Gourmand's Guide to Cooking Techniques

KEY	MEAT						VEGGIES					OTHER				
	BEEF (TENDER)	BEEF (TOUGH)	LAMB (TENDER)	LAMB (TOUGH)	PORK	POULTRY	ROOT	CRUCIFEROUS	PODDED	BLUB & STEM	TUBERS	FISH	SHELLFISH	EGGS	FUNGI	JUICES & SAUCES
TENDER JUICY FLAVORFUL CRISPY CRUNCHY																
BLANCH & STOCK								●	●							
BRAISING		●		●		●	●	●	●	●	●	●				
BROILING	●		●		●	●		●		●		●	●		●	
COLD OIL SPHERIFICATION																●
CONFIT					●	●				●						
DEEP FRYING	●		●		●	●	●	●	●	●	●	●			●	
DEHYDRATING	●						●		●	●	●					
GRILLING	●		●		●	●		●		●		●	●		●	
PAN ROASTING	●		●		●	●	●			●	●	●				
POACHING						●						●		●		
PRESSURE COOKING		●		●	●											
SAUTEING	●		●		●	●		●	●			●			●	
SEARING	●		●		●	●						●	●			
SLOW ROASTING		●		●	●		●			●	●					
SMOKING		●		●	●	●		●		●		●		●	●	
SOUS VIDE	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
STEWING		●		●				●		●		●				
STIR-FRYING	●				●	●		●	●	●	●	●	●			



# Course Two

## Food Basics





# Food Substitutions

Whether you're a vegan, vegetarian, or have any other dietary restriction, these tips may help you in deciding what type of substitution may be right for you.

## **Substitutions for Eggs**

- Applesauce
- Bananas
- Purees
- Silken tofu
- Egg replacers
- Aquafaba
- water + Chia/flax seed

## **Substitutions for Milk**

- Soy milk Hemp milk Rice milk Almond milk Coconut milk Rice milk
- To substitute buttermilk, simply add about 1tsp of vinegar for every cup of plant-based milk.

## **Substitutions for Cheese**

- Tofu cheese
- Nutritional yeast
- Cashew cheese
- Potato cheese
- Carrot cheese
- Any of your favorite cheese substitutes

## **Substitutions for Meat**

- Tofu and tempeh
- Beans
- Eggplant
- Mushrooms
- Jackfruit



# Food Substitutions

## **Substitutions for Honey**

- Agave nectar
- Maple syrup
- Coconut nectar

## **Substitutions for Butter**

- Coconut oil
- Vegetable oil
- Plant-based butter (or play Butter by BTS)

### ***NOTE:***

These are not the only substitutions available. They are only some suggestions available to use as substitutions.

Remember to do your research to find what best works for you and your dietary needs.

# Food Substitutions

## Delicious Non-dairy milk alternatives



### Soy milk

- Rich and creamy.
- A great all-rounder, ideal for drinking straight, cooking, baking, etc...
- Can curdle in hot drinks



### Rice milk

- Has a thin, quite water consistency
- light and naturally sweet
- Great on cereal and in cooking, but a little too watery for some hot drinks



### Hemp milk

- Creamy with a strong, robust flavor compared to other non-dairy milks so not ideal for hot drinks
- Good for cooking, especially savory dishes



### Oat milk

- Creamy and naturally sweet
- Great in cooking, but a little heavy for baking
- Easy to make at home by simmering oats and water, cooling, then straining.



### Almond milk

- Creamy and slightly nutty
- Great in teas and coffee, as well as cooking and baking
- Easy to make at home by soaking overnight, blending with water and straining. It can also be sweetened.



### Hazelnut milk

- Light with a rich, nutty flavor
- Great in drinks and light desserts, but not really suitable for cooking and baking
- Easy to make at home the same as one would almond milk.



### Coconut milk

- Smooth and fresh and not highly flavored
- Comparable to semi-skim milk in consistency
- Ideal for all uses, especially good on cereal and in hot drinks and smoothies



### Cashew milk

- Smooth, creamy, slightly nutty, and sweet
- Great for cooking, desserts, and making cream
- Easy to make at home

# Food Substitutions

Handy Substitutions	
Spices	
allspice, ground, 1 tsp	1/2 tsp ground cinnamon + 1/2 tsp ground cloves
apple pie spice, 1 tsp	1/2 tsp ground cinnamon, 1/4 tsp ground nutmeg, 1/8 tsp ground cardamom
anise, 1 tsp	1/2 tsp dill leaf + 1/2 tsp cumin
basil dry 1 tsp	1/2 tsp oregano and 1/2 tsp thyme
bay leaf, 1 whole	1/4 tsp crushed bay leaf
caraway seeds	use anise or fennel seeds
cardamom 1 tsp	1/2 tsp cinnamon and 1/2 tsp ground cloves
cayenne pepper 1 tsp	1/2 tsp paprika plus 1/2 tsp chili powder
chives, chopped, 1 tbsp	1 tbsp chopped green onion tops
dill plant, fresh or dry 3 head	1 tbsp dill weed
garlic salt, 1 tsp	1/8 tsp garlic powder plus 7/8 tsp salt
garlic, 1 small clove	1/8 tsp garlic powder or dried garlic
ginger, raw 1 tbsp	1/8 tsp powdered
herbs fresh 1 tbsp	1 tsp dried herbs
horseradish, fresh 1 tbsp	2 tbsp bottled
lemon peel, dry 1 tsp	2 tsp grated fresh peel or 1/2 tsp lemon extract
lemon juice, fresh	1/2 tsp vinegar
mustard, dry, 1 tsp	1 tbsp prepared mustard
onion powder, 1 tbsp	1 medium onion, chopped or 1 tbsp dried minced onion
orange peel, dry 1 tbsp	2 to 3 tbsp grated fresh orange peel or 1 tsp orange extract
parsley, dry, 1 tsp	1 tbsp fresh parsley chopped
pepper, 1 small hot	1 small hot pepper, use 1/4 tsp cayenne pepper or 1/4 tsp Tabasco sauce
pepper, 1 mild	1 tbsp chili powder
peppermint or spearmint, dry 1 tbsp	1/4 cup chopped fresh mint
pumpkin pie spice, 1 tsp	1/2 tsp ground cinnamon, 1/4 tsp ground ginger, 1/8 tsp ground allspice, 1/8 tsp ground nutmeg
vanilla bean, 1	1 tsp vanilla extract
Handy Substitutions	
Baking Products	
arrowroot, 1 1/2 tsp	flour 1 tbsp or 1/2 tsp cornstarch
baking powder, 1 tsp	1/2 tsp cream of tartar + 1/3 tsp baking soda
biscuit mix, 1 cup	1 cup flour + 1 1/2 tsp baking powder + 1/2 tsp salt + 1 tbsp shortening
chocolate chips, 1 oz.	1 oz. sweet baking chocolate
semisweet baking chocolate, 2 oz.	1 oz. unsweetened chocolate + 4 tsp sugar OR 2 tbsp cocoa + 2 tbsp sugar + 2 tbsp shortening
semisweet chocolate chips, 6 oz., melted	2 oz. unsweetened chocolate, 2 tbsp shortening, 1/2 cup sugar
unsweetened baking chocolate, 1 oz	3 tbsp unsweetened cocoa + 1 tbsp butter, margarine, shortening, or oil
unsweetened cocoa, 1/4 cup	1 oz. unsweetened chocolate (decrease fat in recipe by 1/2 tsp)
sweet chocolate, 1 oz.	1/4 cup cocoa + 1/3 cup sugar + 3 tbsp shortening
corn syrup, 1 cup	1 1/4 cup light brown sugar + 1/3 cup water OR 7/8 cup honey (baked goods will brown more)
corn syrup, light, 1 cup	1 cup sugar heated to a syrupy consistency with 1/4 cup water
corn syrup, dark 1 cup	3/4 cup light corn syrup + 1/4 cup light molasses
cornmeal, self-rising 1 cup	7/8 cup plain, 1 1/2 Tbls. baking powder, and 1/2 tsp salt
cornstarch, 1 Tbsp for thickening	2 tbsp all-purpose flour or granular tapioca
flour, all-purpose 1 cup	3/4 cup whole wheat flour plus 1/4 cup AP flour OR 1 cup rye or rice flour OR 1/4 cup soybean flour and 3/4 cup all-purpose flour OR 1 and 1/2 cups bread crumbs, OR 1 cup rolled oats
flour, bread	1-2 tbsp gluten to desired amount of AP flour
flour, cake 1 cups	1 cup minus 2 tbsp all-purpose flour
flour, self-rising	1 cup minus 2 tbsp all-purpose flour, 1 1/2 tsp. baking powder, 1/2 tsp. salt
shortening, melted 1 cup	1 cup cooking oil
shortening, solid 1 cup	1 1/8 cups butter or margarine
powdered sugar, 1 cup	1 cup sugar + 1 tbsp cornstarch, processed in food processor
white sugar, 1 cup	1 cup corn syrup, OR 1 1/3 cup molasses OR 1/4 cup honey (decrease liquid called for in recipe by 1/4 cup) OR 1 cup powdered sugar
sugar, dark brown	1 cup white sugar plus 2 tsp molasses
sugar, light brown	1 cup white sugar plus 1 tsp molasses
tapioca, granular 1 tbsp	2 tbsp pearl tapioca

# Food Substitutions

Handy Substitutions	
Miscellaneous	
bread, 1 slice dry	1/3 cup dry bread crumbs
bread, 1 slice soft	3/4 cup soft bread crumbs
broth, beef or chicken 1 cup	1 bullion cube dissolved in 1 cup boiling water OR 1 envelope powdered broth base dissolved in 1 cup boiling water OR 1 1/2 tsp powdered broth base dissolved in boiling water
chili sauce, 1 cup	1 cup tomato sauce, 1/4 cup brown sugar, 2 tbsp vinegar, 1/4 tsp cinnamon, dash of ground cloves, dash of allspice
garlic, 1 clove	chopped garlic, 1 tsp OR minced garlic, 1/2 tsp OR garlic powder, 1/8 tsp OR garlic flakes, 1/2 tsp OR granulated garlic, 1/4 tsp
honey, 1 cup	1 1/4 cup sugar and 1/4 cup water
ketchup (for cooking)	1 cup tomato sauce, 1/2 cup sugar, 2 tbsp vinegar
lemon peel, dried 1 tsp	1 to 2 tsp fresh grated or 1/2 tsp lemon extract
lime, 1 medium	1 1/2 to 2 tbsp lime juice
mayonnaise, 1 cup	1/2 cup plain yogurt and 1/2 cup mayo or 1 cup sour cream or pureed cottage cheese
onion, fresh 1 small	rehydrate 2 tbsp instant minced onion
onions, fresh 1 lbs.	3 large onions or 2-2 1/2 cups chopped
tomato juice, 1 cup	1/2 cup tomato sauce plus 1/2 cup water
tomato paste, 1 tsp	1/2 cup tomato sauce minus 1/4 cup of liquid in recipe OR 1 tbsp ketchup
tomato sauce, 2 cup	3/4 cup tomato paste + 1 cup water
Handy Substitutions	
Dairy Products	
butter, 1 cup	7/8 cup lard + 1/2 tsp salt
buttermilk, 1 cup	1 tbsp vinegar or lemon juice, plus milk to make 1 c. (let stand 10 minutes) OR 1 cup milk + 1 3/4 tsp cream of tartar OR 1 cup plain yogurt
cream cheese, 8 oz.	8 oz cottage cheese blended with 1/4 cup margarine
cream heavy, 1 cup	1 cup evaporated milk OR 3/4 cup milk and 1/3 cup butter or margarine
	3/4 cup milk + 1/3 cup butter or margarine (if used for baking)
cream light 1 cup	1 cup evaporated milk for soups or sauces
egg, whole, uncooked 1 large	3 tbsp + 1 tsp thawed frozen egg OR 2 1/2 tbsp sifted, dry whole egg powder + 2 1/2 tsp lukewarm water OR 2 egg whites
half and half, 1 cup	3/4 cup whole milk + 1/4 cup heavy cream OR 2/3 cup skim milk/low fat milk + 1/3 cup heavy cream
milk, 1 cup	3 tbsp dry powdered milk + 1 cup
milk, evaporated (12 oz can)	1 1/2 c water + 1/2 cup & 1 tbsp dry powdered milk
milk, sweetened condensed 14 ounce	Heat 1/3 cup + 2 tbsp evaporated milk, 1 cup sugar, 3 tbsp butter or margarine until sugar and butter dissolve
milk, whole 1 cup	5/8 cup skim plus 3/8 cup half and half OR 2/3 cup 1% plus 1/3 cup half and half OR 3/4 cup 2% plus 1/4 cup half and half OR 7/8 cup skim plus 1/8 cup heavy cream
ricotta cheese, 1 cup	1 cup cottage cheese + 1 tbsp skim milk, blended until smooth
sour cream, 1 cup	1 cup plain yogurt
yogurt, 1 cup	1 cup sour cream OR 1 cup buttermilk

## WHOLE FOOD VEGAN MEAT SUBSTITUTES



CAULIFLOWER



LENTILS AND CHICKPEAS



TEMPEH



KING OYSTER MUSHROOMS



JACKFRUIT



CABBAGE



TOFU



GRATED VEGGIES AND GRAINS



WALNUTS

# Food Substitutions

*vegan baking*  
**egg substitutes**

	<b>substitution</b>	<b>works best in</b>
	1 overripe banana	<ul style="list-style-type: none"> <li>quick breads</li> <li>muffins</li> <li>cookies</li> </ul>
	1/4 cup silken tofu	<ul style="list-style-type: none"> <li>quick breads</li> <li>muffins</li> <li>pound cakes</li> </ul>
	1/4 cup vegan yogurt	<ul style="list-style-type: none"> <li>quick breads</li> <li>muffins</li> </ul>
	1 T. flaxseed + 3T. water	<ul style="list-style-type: none"> <li>cakes</li> <li>brownies</li> </ul>
	1/4 cup fruit or veggie puree	<ul style="list-style-type: none"> <li>quick breads</li> <li>muffins</li> <li>cookies</li> </ul>
	1/4 cup chickpea brine	<ul style="list-style-type: none"> <li>meringues</li> <li>cakes</li> <li>cookies</li> </ul>
	2 T. cornstarch + 3 T. water	<ul style="list-style-type: none"> <li>custards</li> <li>pies</li> <li>cheesecakes</li> </ul>

**Egg SUBSTITUTIONS**

Ground flax	Chia seed	Soy protein	Agar agar	Ripe bananas	Applesauce	Peanut butter
						
ground flax	chia seed	soy protein powder	agar agar	1/2 mashed banana	unsweetened applesauce	peanut butter
+	+	+	+	=	=	=
						
water	water	water	water	egg	egg	egg
=	=	=	=			
						
egg	egg	egg	egg			
(blend until mixture is thick, creamy & egg-like)	(mix and let sit for 15 minutes)					

**SWANSON**  
Health Products  
swansonvitamins.com

# Meats & Non-Meat Products

Learn the cuts of meats before buying them. Certain recipes call for certain cuts due to their durability or flexibility with the ingredients involved in the recipes. For example, using boneless chicken thighs when making things like skewers is better because the meat will not dry as fast as chicken breast. Meat with bone intact to also be juicier when braising or oven braising.

Before you start a dish learn what cut is what. Learn to identify the cuts.

## **SUBSTITUTION**

Not everyone eats meat or certain cuts of meats but that shouldn't stop you from trying a recipe. Replacing animal products with plant base is always a smart way to go I find that also adding things like tofu, tempeh or seitan enhances a recipe. Take a look at some of my favorite plant base products and remember you have a plethora of things you can do even if you don't eat meat. Most recipes great without it anyways !

Vegan "meats" also available

## **DON'T ALWAYS RELY ON RECIPE COOKING TIMES OR SIMPLE FORMULAS**

Don't rely only on the cooking times prescribed in recipes books because they don't always guarantee a successful cooking. Recipes can't account for significant changes in cooking time caused by small variations in meat thickness, temperature, and the temperature of grills and ovens and pans and so on.

# Meats & Non-Meat Products

## **BRING MOST MEATS TO ROOM TEMPERATURE BEFOREHAND**

Don't lay your steak on the hot pan directly from the refrigerator. Bring most meats to room temperature or even warmer before cooking. This reduces cooking times a lot and the usual surface being overcooked when the inside just gets heat. The only case you can cook meat cuts directly from the refrigerator is when cuts are thin, to give the surface time to brown, but not more.

## **COOK LARGE PIECES OF MEAT, ON THE BONE WHEN POSSIBLE**

Larger pieces of meat and meat on the bone are better because they to retain the most moisture and flavor. The more meat is cut up, the more surfaces it has through which juices will get squeezed out.

## **COOK MOST MEATS IN TWO STEPS**

- **Step one:** cooking at very high heat kills surface bacteria, browns and flavors the meat surface.
- **Step two:** a finishing period of low and controlled heat cooks the meat through slowly and gently while preserving its moistness and tenderness. Keep the finishing cook-through as close as possible to the final inner temperature you want. Think that meat continues cooking when you get it off the stove or oven, so this time is to take into account, especially for thin cuts.



# Meats & Non-Meat Products

## **CHECK MEAT DONENESS EARLY AND OFTEN**

If you're using a thermometer, check its accuracy beforehand. This is your best choice. Avoid pink or red meat unless cooking steaks and your preference is rare-medium rare

## **WHEN COOKING AT HIGH TEMPERATURES**

As stated above, stop cooking when meat is still slightly underdone. The hot surface will continue to heat the inside for some more time.

## **TO COOK TENDER CUTS SO THAT THEY'RE JUICY**

To cook tender cuts so that they stay juicy, heat them until rare or medium rare, which correspond to an inner temperature of 125 – 140°F (52 and 60°C). This is where your probe thermometer will be your best friend.

Tenderloin, steaks and pork chops and ground meats are tender cuts. Chicken and turkey breasts have not as much juice but they are more pleasing at slightly higher cooking temperatures, around 150°F (65°C).

# Meats & Non-Meat Products

## **COOKING TOUGH CUTS "RELATIVELY QUICKLY"**

To cook tough cuts like pork shoulders, chuck roasts, and pork and beef cheeks relatively quickly, so while being dry and fibrous meat, they're still tender when serving. You have to heat them to an inner temperature of 180 – 200°f (80 to 90°c). This cooking method helps to produce a tender meat in 2 to 12h, depending on the temperature and the cut (how said "slow cooking"?). It works best with cuts rich in gelatin and fat, which can lend moistness to the dry meat fibers.

## **COOKING TOUGH CUTS TO KEEP THEM TENDER AND JUICY**

Cook tough cuts so that they're tender, and their fibers retain some juiciness is not an impossible task. Heat them to an internal temperature of 140 – 160°f (60-70°c). This modern method will require cooking for 12 up to 24 hours or more to totally dissolve connective tissue into gelatin and produce a tender meat.

## **Non-Meat Foods to Eat:**

A vegetarian diet should include a diverse mix of fruits, vegetables, grains, healthy fats and proteins. To replace the protein provided by meat in your diet, include a variety of protein-rich plant foods like nuts, seeds, legumes, tempeh, tofu and seitan. If you follow a lacto-ovo-vegetarian diet, eggs and dairy can also boost your protein intake.

Eating nutrient-dense whole foods like fruits, vegetables and whole grains will supply a range of important vitamins and minerals to fill in any nutritional gaps in your diet.

# Meats & Non-Meat Products

## A few healthy foods to eat on a vegetarian diet are:

- **Fruits:** Apples, bananas, berries, oranges, melons, pears, peaches
- **Vegetables:** Leafy greens, asparagus, broccoli, tomatoes, carrots
- **Grains:** Quinoa, barley, buckwheat, rice, oats
- **Legumes:** Lentils, beans, peas, chickpeas.
- **Nuts:** Almonds, walnuts, cashews, chestnuts
- **Seeds:** Flaxseeds, chia and hemp seeds
- **Healthy fats:** Olive oil, avocados
- **Proteins:** Tempeh, tofu, seitan, natto, nutritional yeast, spirulina, eggs, dairy products

## VEGAN

What is a vegan diet?

A vegan diet means you don't consume anything that comes from animals, including:

- Meat, poultry and fish/shellfish.
- Eggs.
- Dairy – including cream sauces, dressings, or condiments.
- Meat-based broths, gravies or sauces. Foods to eat Vegan protein sources Protein is critical for growth and cellular repair.

# Meats & Non-Meat Products

## **Good plant-based sources include:**

- Beans.
- Lentils
- Peas
- Soybeans and soy milk
- Tempeh
- Tofu
- Seitan

## **Vegan calcium sources**

Calcium supports bone health. Zumpano says most milk alternatives are calcium fortified, so they are a good place to start.

## **Vegan-friendly milk alternatives include:**

- Almond milk.
- Cashew milk.
- Coconut milk.
- Rice milk.
- Soy milk.
- Hemp milk.
- Flax milk.
- Oat milk.

Be sure to check nutrition facts and ingredients for calcium, vitamin D and protein for these can vary greatly based on type and brand.

## **Other calcium-rich choices include:**

- Dark, leafy green vegetables, such as spinach, kale, broccoli and collard greens.
- Calcium-fortified cereals
- Calcium-fortified orange juices.



# Meats & Non-Meat Products

## **Vegan sources of B vitamins Vitamin B12:**

- Helps make red blood cells.
- Prevents anemia.
- Protects nerve cells.

## **Since you can't get vitamin B12 from plant sources, try:**

- Fortified breakfast cereals.
- Fortified soy foods, including tofu and soy milk.
- Nutritional yeast (a flaky dietary supplement that has a cheesy flavor).
- Multivitamins.

# Fish & Shellfish

The varieties of fish and shellfish plus the safety of the consumption of mercury.

A lot of you would love to make sashimi or sushi like Jin and Jungkook and you can. We have provided ways to debone and butterfly a fish, in the future classes you will get the full step by step of creating sashimi. Now non-sushi grade fish may contain high levels of parasites that could cause food-borne illnesses, including listeria, salmonella, Staphylococcus aureus and Vibrio parahaemolyticus. Even sushi-grade fish may contain some amount of these parasites, especially if it isn't kept refrigerated below 41°F (5°C) or frozen until you are ready to use it to keep these parasites from multiplying. Thaw frozen fish in the fridge and keep it refrigerated until you serve it, as thawing it on the countertop increases the risk of food-borne illnesses. Always ask your fishmonger to help you when it comes to choosing “sushi grade fishes”.

## **TYPES OF FISH**

Seafood commonly used in raw preparations like sushi include sea bass, tuna, mackerel, blue marlin, swordfish, yellowtail, salmon, trout, eel, abalone, squid, clams, ark shell, sweetfish, scallop, sea bream, halfbeak, shrimp, flatfish, cockle, octopus and crab. Certain types of tuna, including yellowfin, southern bluefin, northern bluefin, Thunnus alalunga, Thunnus atlanticus and Thunnus obesus are particularly good for serving in raw form because they are less likely to cause food-borne illnesses and don't need to be frozen first.

# Fish & Shellfish

## **BUYING FISH**

When buying fish to serve raw, purchase fish that are labeled sushi-grade, as this type has been pretreated in such a way as to limit the risk of food-borne illnesses. This involves freezing the fish for a certain time at very low temperatures that you cannot achieve with a home freezer. Health regulations stipulate that seafood that is going to be served raw must first be frozen in this manner, except for certain types of tuna, so any sushi you purchase at restaurants has been previously frozen. Don't purchase frozen fish in packages that are damaged, that contain ice crystals or frost on the packages or that are stored above the frost line of the freezer.

## **MERCURY LEVELS**

Blue marlin, mackerel, sea bass, swordfish, tuna and yellowtail are high in mercury, so limit your consumption of these high-mercury raw fish, since mercury in high amounts can affect your nervous system function. King mackerel and swordfish are among the types of seafood with the highest levels of mercury, so you may want to avoid consuming them.

## **SEAFOOD 101**

*How to make fish less smelly?*

1. Before cooking, soak the fish in milk for 20 minutes. In this scenario, the protein in the milk binds with the compounds that cause that fishy odor, in essence extracting it from the fish. What's left behind is sweet-smelling, brighter flesh with clean flavor. (Just make sure you pour that milk down the drain. 'Cause ew.)
2. Squeeze lemon juice over the fish before cooking it. Lemon juice will neutralize those odors, but it will also leave the fish with a citrusy flavor.
3. Vinegar also works wonder.
4. Adding aromatics like garlic and ginger etc... can also help lessen the potent smell.

# Fish & Shellfish

## Best Choices *(about 2-3 servings a week)*

- Anchovy
- Atlantic croaker
- butterfish
- catfish
- clams
- cod
- Crab
- Flatfish
- Haddock
- Hake
- Herring
- Lobster
- Mackerel
- Mullet
- Oyster

## Best Choices *(about 2-3 servings a week)*

- Pollack
- Salmon
- Sardine
- Scallop
- Scup
- Shrimp
- Skate
- Smelt
- Squid
- Tilapia
- Trout
- Tuna
- Whitefish
- Whiting

## Good Choices *(up to 1 serving a week)*

- Black sea bass
- Buffalo fish
- Carp
- Grouper
- Halibut
- Mahi-Mahi
- Monkfish
- Rockfish
- Sablefish
- Sheepshead
- Snapper
- Spanish mackerel
- Tautog
- Tilefish
- Weakfish
- White croaker

## Seafood to avoid *(highest mercury: 1 serving per month)*

- Bluefish
- Chilean sea bass
- Eel
- King mackerel
- Marlin
- Orange roughy
- Sea lamprey
- Shark
- Striped bass
- Swordfish
- Tilefish



# Fish & Shellfish

## 6 Ways to Cook a Fish



**Poaching**



**En papillote**



**Frying**



**Grilling**



**Baking**



**Steaming**

# Fruits & Vegetables

In this section we will learn about the different fruits and vegetables, how to store them and the best way to keep them longer.

## **SELECTIONS**

**Shop early** - This will allow you to find the best selection of fresh produce.

**Choose in-season fruits and vegetables** - The closer you are to the growing season, the fresher your produce and the better it tastes.

**Check for freshness** - Look for brightly colored fruits and vegetables. Leaves or greens should be crisp, not wilted.

**Larger does not mean better** - Larger sized vegetables may be too mature and have little flavor.

**Bag properly** - Place the heavier, firmer produce at the bottom of the bag or basket.

## **STORAGE**

Store produce right away to prevent spoilage. Most fruits will not continue to ripen if they are refrigerated. This is true for tomatoes as well. Potatoes and onions will lose quality in the refrigerator.

Punch holes in plastic bags before storing.



# Fruits & Vegetables

## **CLEANING**

- Just before preparation give your produce a good washing in cold water.
- When cooking firm produce with tougher skin, scrub with a brush.
- Allow leafy greens to float in clean water.
- Soaps or cleaners are not needed- water does the job.

# Fruits & Vegetables

## KEEP IT FRESH

Stretch your produce and dollars by knowing how to store fresh fruits and vegetables. The American Heart Association recommends 2 cups of fruit and 2.5 cups of vegetables per day.

### Generally:

Fridge temperature should be at 40° F or below. Always refrigerate cut or peeled produce. Store vegetables and fruits separately. Keep apples, bananas, broccoli, cauliflower, cucumbers, onions, pears, potatoes and watermelon away from other produce, as they can affect how quickly other items ripen and rot.

### Pantry

Pack away in a cool, dark place like your pantry or cellar:

**GARLIC, ONIONS & SHALLOTS**

**HARD SQUASH**  
(Winter, Acorn, Spaghetti, Butternut)

**SWEET POTATOES,**

**POTATOES, & YAMS**

**WATERMELON**

### Countertop

Store loose and away from sunlight, heat and moisture:

**BANANAS**

**CITRUS FRUIT**  
Store lemons, limes, oranges and grapefruit loose or in a mesh bag. Refrigerate for longer storage.

**STONE FRUIT**

Ripen avocados, apricots, nectarines, peaches and plums in a paper bag, then move to the fridge where they'll last a few more days.

**TOMATOES**

### Refrigerator

Store in plastic bags with holes in your produce drawer, unless noted:

**APPLES & PEARS**

**BEETS & TURNIPS**  
Remove greens and keep loose in the crisper drawer.

**BERRIES, CHERRIES & GRAPES**  
Keep dry in covered containers or plastic bags.

**BROCCOLI & CAULIFLOWER**

**CARROTS & PARSNIPS**  
Remove greens.

**CELERY**

**CORN**

Store inside their husks.

**CUCUMBERS,**  
**EGGPLANT & PEPPERS**

Store on the upper shelf, which is the warmer part of the fridge.

**FRESH HERBS**

Except basil. Keep basil stems moist and wrap loosely in plastic.

**GREEN BEANS**

**LETTUCE & LEAFY GREENS**

Wash, spin or pat dry, wrap loosely in a dish towel or paper towels and place in a plastic bag in vegetable drawer. Keep stems moist.

**MELON**

**MUSHROOMS**

Keep dry and unwashed in store container or paper bag.

**PEAS**

**ZUCCHINI &**  
**SUMMER/YELLOW SQUASH**



## PRODUCE SHELF LIFE & STORAGE GUIDE

Storing ingredients correctly and planning to cook more perishable ingredients first will help you #ReduceFoodWaste and save money! Store in fridge unless otherwise noted. Store more perishable ingredients in more visible places, so you'll remember to use them sooner.

### USE ASAP

3-5 Days



- Asparagus
- Basil
- Bok Choy
- Chard
- Chives
- Cilantro
- Escarole
- Kale
- Okra
- Onions, Cut
- Raddicchio
- Snow Peas
- Spinach
- Tomatoes  
(Countertop)

### USE SOON

5-7 Days



- Artichokes
- Arugula
- Bell Peppers
- Broccoli
- Broccoli Rabe
- Brussels Sprouts
- Cabbage, Savoy & Napa
- Cauliflower
- Cucumbers  
(Countertop)
- Eggplant
- Endive
- Fennel
- Green Beans
- Jicama
- Leeks
- Lettuce/Mixed Greens
- Mint
- Mushrooms  
(Paper bag in fridge)
- Potatoes, Baby  
(Cool dark place away from onions)
- Radishes
- Scallions/  
Green Onions
- Winter Squash, Cut
- Zucchini & Summer Squash

### NO RUSH

2+ Weeks



- Cabbage, Green & Red
- Carrots
- Celery
- Rosemary
- Sweet Potatoes  
(Countertop)
- Thyme
- Turnips
- Beets
- Ginger
- Lemons
- Limes
- Potatoes, Large  
(Cool dark place away from onions)
- Parsnips
- Onions, Whole  
(Cool dark place away from potatoes)
- Winter Squashes  
(Countertop)

# Flavor Profiles

Before you learn about ingredients, herbs and spices you must learn about taste. Here are the basic profiles.

## Balance Bitterness. Enhance Sweetness

If you need to add salt/umami:

- kosher salt
- sea salt
- anchovies/anchovy past
- hard cheese, like parmesan
- soy sauce
- fish sauce
- seaweed
- miso
- pickled vegetables

Food ingredients that are salty:

- mushrooms
- tomatoes
- bacon and other cured meat

## Balance Spice and Sweetness. Enhance Saltiness

If you need to add sour:

- lemon juice
- lime juice
- orange juice
- vinegars, like sherry, red wine, rice, balsamic, and apple cider
- tomato paste
- yogurt
- sour cream
- pickled vegetables

Food ingredients that are sour:

- tomatoes

## Balance sourness, bitterness, and spice. Enhance saltiness

If you need to add sweet:

- sugar
- stevia
- maple syrup
- honey
- jam
- molasses
- balsamic vinegar
- apple cider vinegar
- ketchup
- bbq sauce

## Balance sourness, bitterness, and spice. Enhance saltiness

Food ingredients that are sweet:

- carrots
- sweet potatoes
- corn
- beets
- butternut, kabocha squash
- sugar snap peas
- fennel
- parsnips
- peas
- most fruits

# Flavor Profiles

Before you learn about ingredients, herbs and spices you must learn about taste. Here are the basic profiles.

## Balance Sweet and Salty

If you need to add bitter:

- coffee
- cacao
- grapefruit juice
- beer

Food ingredients that are bitter:

- dandelion greens
- endives
- broccoli
- spinach
- kale
- okra
- bitter melon
- radicchio

## Balance Sour and Sweet

If you need to add spice:

- hot sauces
- wasabi
- horseradish
- dijon mustard
- harissa
- jalapeños
- habaneros

Food ingredients that are spicy:

- arugula
- radishes (when raw)
- watercress

# Flavor Profiles

## Spicy

The degree to which capsaicin, piperine, or other spicy element is detectable in food. Like salt and sugar, spicy ingredients are used to enhance the flavor of the other elements of a dish. The degree of spiciness is as much a personal preference as it is a profile element.

## Umami

The degree to which glutamate is detectable in food. With no coherent definition in English, umami refers to the savoriness of a dish, using ingredients whose flavors are commonly described as earthy or meaty.

## Texture

Also known as mouthfeel, this element is the sensory experience of food in your mouth. It can be anything ranging from silky to crunchy.

## Temperature

The temperature at which a food is consumed affects the flavor by dulling or heightening the flavor, as well as the overall eating experience.

## Sour

The degree to which acid is detectable in food. Acidity is used to temper the richness of foods.

## Sweet

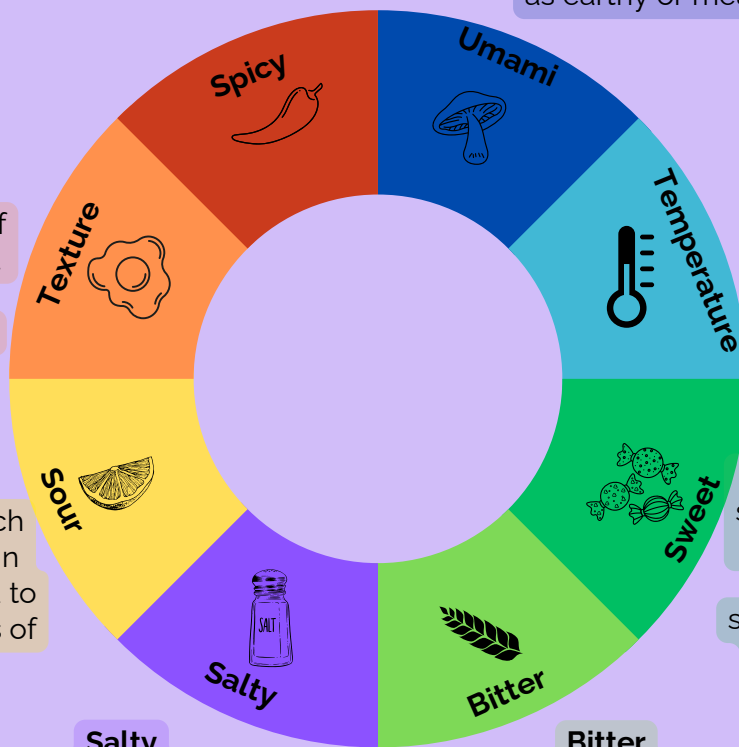
The degree to which sugars are detectable in food. It is the most pleasant of taste sensations. Sugars, like salt, can be used to enliven flavors.

## Salty

The degree to which sodium is detectable in food. It is the oldest known flavoring agent in the world. Salt acts to enhance flavors in food by brightening the other flavors in the dish.

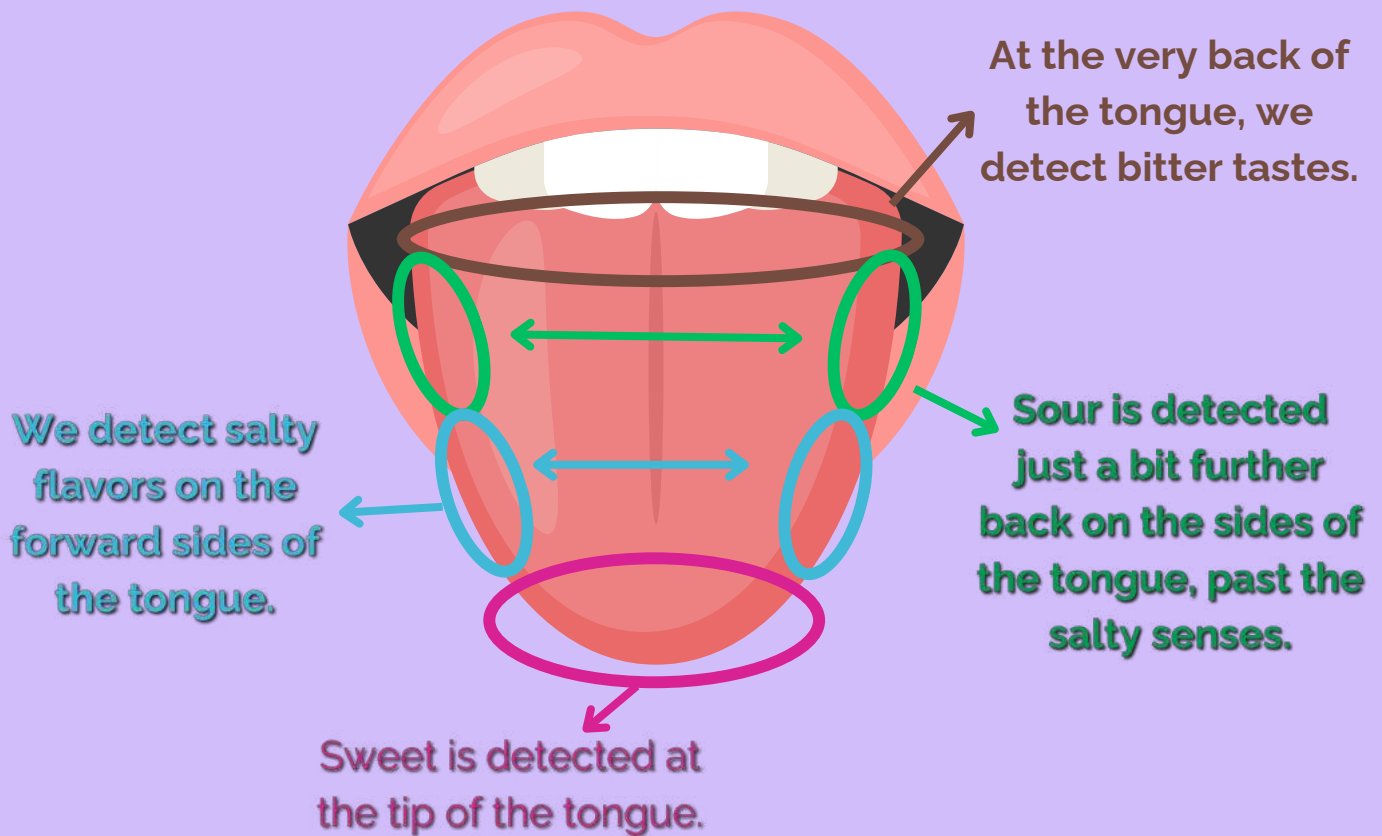
## Bitter

Bitter flavors provide counterpoints to sweet and savory foods. Bitter is more of a sensation than a flavor description. It is detectable in coffee, mustard, cocoa, olives, and citrus peel.



# The Science of Taste

Different areas of the tongue are more sensitive to different flavors (however they are not solely exclusive to those parts of the tongue and mouth).





# Basics: Essential Ingredients

Every cook should have these ingredients in their kitchen:

## Oils, Vinegars and Condiments

- Oils: canola oil, extra-virgin olive oil, toasted sesame
- Vinegars: balsamic, distilled white, red wine, rice
- Ketchup
- Mayonnaise
- Dijon mustard
- Soy sauce
- Chili paste
- Hot sauce
- Worcestershire

## Seasonings

- Kosher salt
- Black peppercorns
- Dried herbs and spices: bay leaves, cayenne pepper, crushed red pepper, cumin, ground coriander, oregano, paprika, rosemary, thyme leaves, cinnamon, cloves, allspice, ginger, nutmeg
- Spice blends: chili powder, curry powder, Italian seasoning
- Vanilla extract

## Canned Goods and Bottled Items

- Canned beans: black, cannellini, chickpeas, kidney
- Capers
- Olives
- Peanut butter
- Preserves or jelly
- Low-sodium stock or broth
- Canned tomatoes
- Tomatoes, canned and paste
- Salsa
- Tuna fish

# Basics: Essential Ingredients

## Grains and Legumes

- Breadcrumbs: regular, panko
- Couscous
- Dried lentils
- Pasta: regular, whole wheat
- Rice
- Rolled oats
- One other dried grain: try barley, millet, quinoa or wheatberries

## Baking Products

- Baking powder
- Baking soda
- Brown sugar
- Cornstarch
- All-purpose flour
- Granulated sugar
- Honey

## Refrigerator Basics

- Butter
- Cheese: sharp cheddar, feta, Parmesan, mozzarella
- Large eggs
- Milk
- Plain yogurt
- Corn tortillas

## Freezer Basics

- Frozen fruit: blackberries, blueberries, peaches, strawberries
- Frozen vegetables: broccoli, bell pepper and onion mix, corn, edamame, peas, spinach



# Basics: Essential Ingredients

## **Storage Produce**

- Garlic
- Onions (red, yellow)
- Potatoes
- Dried fruit: raisins, apples, apricots
- Nuts or seeds: almonds, peanuts, sunflower

# Korean Essential Ingredients

We have brought you guys this list before. When making Korean dishes you will need a lot of these. Most can't afford to buy it or even consume it. Some of these have substitutes

## **Gochujang**

- sub: Garlic chili paste/Sriracha. There is also halal certify brands like CJ Brands.

## **Gochugaru**

substitutes:

- Ground chili powder
- paprika
- Chipotle Powder.
- Cayenne Pepper.
- Chile Pasilla.
- Paprika.
- Gochujang.
- Chile De Arbol.
- Guajillo Powder.
- Aleppo Pepper Powder.

## **Vegan substitute**

Kikkoman Vegan soy sauce is not only vegan but also halal. It is not the same as Korean soy sauce but it will do as soy sauce has a big dominance in profile taste of a lot of Asian cooking.

Many of the Korean soup bases are predominantly created with kelp and anchovy stock. You can easily substitute this using dried shiitake soaked in water for about 30 minutes. Make sure you do not drop in the sediments left behind from the soaking when pouring the soaking water into a clean bowl before using it as a stock. You can also use miso paste and vegetable stock as a great sub.

# Korean Essential Ingredients

## **Doenjang (soybean paste)**

This will be your friend when treating soups and sauces, having this paste in your kitchen is a great add on!

## **Vegetables**

- garlic/ manul
- ginger/ saenggang
- Korean pears/ apples
- canned sweet red beans
- dried red/ black beans
- dried soybeans
- Korean eggplant
- cucumber
- zucchini
- Nappa cabbage/ baechu
- potatoes
- sweet potatoes
- bell peppers (all colors)
- Korean chili peppers
- corn
- daikon/ turnips/ radishes
- green onion (spring onion/ scallion/ chives) / pa
- shallots
- white/sweet onions
- shiitake
- oyster mushroom/ any mushroom
- soybeans
- spinach
- leeks
- mung bean sprouts



# Korean Essential Ingredients

## **Meats, seafood, other:**

- tofu/ dubu
- pork belly
- pork meat (any cut)
- sausages/ hot dog
- spam
- beef (any cut, but especially sirloin)
- beef ribs/ galbi
- chicken (whole or cut up)
- prawns/ shrimp
- mackerel
- eggs
- tuna
- abalone
- clams/ oysters

# Herbs & Spices

## **Difference and similarities between herbs and spices.**

Both herbs and spices come from plants, but herbs are the fresh part of the plant while spice is the dried root, dried stalk, seed or dried fruit of the plant and is almost always dried not fresh.

## **Sometimes a plant can produce both an herb and a spice.**

The classic example is like cilantro and coriander. Cilantro is the aromatic leaf of the plant, *Coriandrum sativum*, while coriander is the seed that comes from that same plant.

Dill weed also produces seeds that are used as a spice while the leaves are used as an herb

Both herbs and spices can be used for savory dishes, desserts, jams, chutneys, dips, cocktails and mocktails. Both herbs and spices add flavor to the dish, however herbs are more subtle while spices have stronger flavor.

Herbs and spices can not only be paired with each other, but you can use a combination of two or more herbs or multiple spices. In order to create a flavor profile, you need to understand the texture, flavor, aroma and taste of each. Layering is very important in cooking. The French have always used multiple herbs in their cooking called bouquets garni. While the Indian cuisine is famous for its spice blends like the garam masala. The trick is to get the right blend, in either case so that no one herb or spice, dominates the dish. While the spice blend is stronger the bouquet garni is often subtle.

## **VOCABULARY**

The bouquet garni is a bundle of herbs usually tied together with string and mainly used to prepare soup, stock, and various stews).

# Herbs & Spices

## **CLASSIC SPICE COMBINATIONS**

Chinese five spice – star anise, cinnamon, cloves, Szechuan peppers, and fennel seeds.

### **Herbs de Provence**

rosemary, fennel seed, dried savory, marjoram, tarragon, thyme, oregano, and lavender

### **Italian seasoning**

(more of an American creation than Italian) – basil, oregano, rosemary, thyme,

### **Jerk Seasoning**

(Caribbean) – allspice, cloves, cinnamon, nutmeg, thyme, garlic, and the super-hot scotch bonnet peppers.

### **Indian Garam Masala**

coriander seeds, cumin seeds, black pepper, cardamom, cinnamon, clove, red chili, turmeric

These combinations are just an example of how multiple combinations of herbs and spices that can be layered to create a flavor profile. Balance is key. While the spices add bold strokes of flavor the herbs add a subtleness to it.

Herbs are not only used for flavoring but are also used as a garnish, not only adding flavor but visual appeal to the dish. Spices could be used for garnish but are not as popular as herb.



# Herbs & Spices

## STORING

Herbs are best used when it is fresh, and have a short shelf life, however you can store your spice in an air-tight container for as long as a year. In fact some spice blends need to be aged a bit like rasam powder. You can use dried herbs, but they are not as aromatic as fresh, and you certainly cannot use dried herbs for garnish.

Herbs needs to be refrigerated or stored in water like cut flowers while spices are best preserved in glass bottles in your pantry.

## Spices by Cuisine

### Mexican

- coriander
- cumin
- oregano
- garlic powder
- cinnamon
- chili powder

### Caribbean

- allspice
- nutmeg
- garlic powder
- cloves
- cinnamon
- ginger

### French

- nutmeg
- thyme
- garlic powder
- rosemary
- oregano
- herbes de provence

### North African

- cardamon
- cinnamon
- cumin
- paprika
- turmeric
- ginger
- ras el hanout

### Cajun

- cayenne pepper
- oregano
- paprika
- thyme
- rosemary
- bay leaves
- cajun seasoning

### Thai

- basil
- cumin
- garlic
- ginger
- turmeric
- cardamom
- curry powder

# Herbs & Spices

## Spices by Cuisine

### Mediterranean

- oregano
- rosemary
- thyme
- bay leaves
- cardamom
- cinnamon
- cloves
- coriander
- basil
- ginger

### Indian

- bay leaves
- cardamom
- cayenne pepper
- cinnamon
- coriander
- cumin
- ginger
- nutmeg
- paprika
- turmeric
- garam masala
- curry powder

### Middle Eastern

- bay leaves
- cardamom
- cinnamon
- cloves
- cumin
- ginger
- coriander
- oregano
- za'atar
- garlic powder

# Herbs & Spices

## Herb and Spice Food Pairings



### Basil

Pairs well with dressings, sauces, fish, soups, salads, and stews.



### Cumin

Pairs well with beans, vegetables, stews, dressings, sauces, fish, poultry, and meats



### Ginger

Pairs well with cooked fruits, fish, poultry, broth soups, vegetables, stir-fries, tea, and baked goods



### Oregano

Pairs well with dressings, sauces, stews, meat, poultry, and fish



### Chili powder

Pairs well with beans, vegetables, stews, fish, poultry, and meats



### Turmeric

Pairs well with whole grains, stews, curries, vegetables, poultry, and fish



### Rosemary

Pairs well with vegetables, dressings, sauces, fish, meat, and poultry

# Herbs & Spices

## Herb and Spice Food Pairings



### Sage

Pairs well with poultry, whole grains, vegetables, soups, and salads



### Cinnamon

Pairs well with whole grains, squash, fruits, sweet sauces, coffee, and baked goods



### Dill

Pairs well with whole grains, vegetables, fish, dressings, and sauce well with beans, vegetables, stews, dressings, sauces, fish, poultry, and meats



### Parsley

Pairs well with dressings, sauces, stews, meat, poultry, and fish

# Sauces- Mother Sauces

## What are the Mother Sauces?

The term "mother sauce" refers to any one of five basic sauces, which are the starting points for making various secondary sauces or "small sauces." They're called mother sauces because each one is like the head of its own unique family.

A sauce is essentially a liquid plus some sort of thickening agent along with other flavoring ingredients. Each of the five mother sauces is made with a different liquid, and a different thickening agent—although three of the mother sauces are thickened with a roux, in each case the roux is cooked for a different amount of time to produce a lighter or darker color.

## TERMINOLOGY

**Roux** - (pronounced "roo") is one of the basic thickening agents in cooking. Used primarily for bulk up sauces and soups, roux is made from equal parts fat and flour. The "equal parts" are measured by weight, not volume.

## THINGS TO REMEMBER WHEN MAKING YOUR SAUCE:

- To balance the flavor and seasoning of your sauces consider all the basic taste sensations
  - Salt is the most primal taste and reduces bitterness
  - Bitterness is derived from herbs and spices including tarragon, sage and peppercorn
  - Sweet is added with the addition of sugar, butter, and cream
  - Butter also adds a savory sensation
  - Acidity lifts and lightens the flavor of the sauce on the tongue; a little wine vinegar, wine, or lemon can do the trick
  - Umami is the savory taste found in meats, poultry, fish, cheese, tomatoes, and mushrooms
- Consistency & Texture
- Thin sauces release aromas that are more immediately noticed by the sense of smell

# Sauces- Mother Sauces

- Thickening agents obstruct the flavor of a sauce requiring more salt and seasoning
- Thickened sauces tend to linger on the tongue longer and prolong the flavor better than thin sauces
- Too Thin? - If the consistency of a sauce is too thin or too weak it can be adjusted by reducing the sauce on the stove. Other alternatives include adding more thickening agent, cream, a swirl of butter, or a liaison of egg yolk and cream.
- Too Thick? - If it is too thick it can be thinned with a little water, stock or other liquid. Be careful to taste and adjust seasoning. Thinning with water will dilute the flavor so it is normally not recommended except in the case where it may be too intense. Sauces that sit in a steam table will evaporate over time becoming too thick or salty; in this situation it may be appropriate to adjust with water.

## Béchamel

### Ingredients

- white roux
- milk
- flavorings (nutmeg, onion, and white pepper)



## Espagnole

### Ingredients

- brown roux
- red meat
- browned bones
- vegetables
- flavorings: tomato paste and mirepoix



## Velouté

### Ingredients

- white roux
- chicken
- veal
- fish stock



# Sauces- Mother Sauces

## White Roux

A mixture of flour and butter, cooked together to thicken a sauce.



## White Roux

A white roux that is allowed to cook until it darkens.



## Hollandaise

### Ingredients

- clarified butter
- lemon juice
- eggs (seasoned with salt and white or cayenne pepper)



## Sauce Tomate

### Ingredients

- rendered pork fat
- tomatoes
- onions
- carrots
- roux
- veal stock



# Sauces- Cold Sauces

**How To:** Learn about Tamari and different soy sauces from bean to bottle.

**Extra:** Take a look at the condiments and their shelf life. And sauces to spice up your cooking.

## Cold sauces

In the kitchen, the chef's sauce repertoire includes:

- cold emulsion sauces: vinaigrettes and mayonnaise
- dairy-based sauces
- salsas
- coulis and purees
- coating sauces
- miscellaneous cold sauces, such as horseradish and mignonette

## Guide to cold sauces



### Aioli

garlic and olive oil mayonnaise



### Aspic

a flavored stock that is clarified and set with gelatin



### Cocktail sauce

A red sauce of tomatoes, horseradish, lemon, and Worcestershire, served with shellfish.



### Collée

A cold sauce of mayonnaise and aspic gelatin used to coat foods



### Compote

fruit preserved in sugar



# Sauces- Cold Sauces



## Chutney

A sweet and spicy condiment of Indian origin that contains fruits or vegetables, peppers, onions, spices, vinegar, & sugar



## Coulis

A puree of fruits or vegetables used as a sauce



## Guacamole

A dip consisting of mashed avocado, jalapeno, cilantro, and lime



## Harissa

A North African hot sauce of roasted red peppers with olive oil, garlic, cumin, coriander, and caraway.



## Hummus

A middle eastern puree of chick peas, tahini, garlic, olive oil, and lemon, used as a dip.



## Mignonette

a sauce prepared with vinegar, pepper, herbs, and spices served with oysters



## Muhammara

A middle Eastern hot pepper sauce of Syrian origin, containing Aleppo peppers, walnuts, breadcrumbs, olive oil, garlic, and lemon.



## Pesto

A puree of basil, garlic, pine nuts, olive oil, and parmesan cheese, served with pasta



## Relish

A condiment of cooked or pickled fruits or vegetables with other flavorings and seasonings.



## Salsa

The Italian and Spanish word for sauce, salsa usually refers to cold, spicy sauces, made with tomatoes, peppers, onions, & seasonings.



## Tapenade

A provencal paste or dip, made from black olives, capers, and anchovies

# Soups & Stocks

## Introduction To Stocks

Stocks are flavorful liquids used in the preparation of soups, sauces, and stews, derived by gently simmering various ingredients in water. They are based on meat, poultry, fish, game, or seafood, and flavored with mirepoix, herbs, and spices.

Vegetable stocks are prepared with an assortment of produce, or intensely flavored with a single ingredient, such as mushrooms, tomatoes, or leeks.

There are different French terms used for stocks, including fond, broth, bouillon, fumet, and nage. The term fond, meaning base, is a fitting definition for these liquids because they are the foundation of many different food preparations. The terms stock, broth, and bouillon can be confusing but they are essentially quite similar. A broth is usually made from simmered meats, while a stock is made from the bones. A bouillon, from the French term "bouillir", meaning to boil, can be any liquid produced by simmering ingredients in water. Fumet is a concentrated liquid that often contains wine, and nage, meaning to swim, refers to cooking ingredients in a court bouillon, and is often associated with shellfish.

Stocks are divided into white and brown categories. White stock is uncolored and subtle flavored, while a brown stock uses roasted components to create a rich color and robust flavor. Depending on the desired outcome, any stock can be white or brown. A stock can also be as simple as the Japanese preparation of Dashi, a light stock made with dried seaweed (Kombu), dried bonito fish flakes (Katsuobushi), and mushrooms (shiitakes). Similar to basic Korean stock which consists of kombu and dried anchovies (Vegan: shiitake and kombu), it looks simple it enough because it is!

# Soups & Stocks

Stocks are prepared with a few basic ingredients including bones, mirepoix, herbs and spices, and sometimes tomatoes or wine. They are often prepared using leftover ingredients as a cost-effective measure for the kitchen.

Always remember to make sure the ingredients are of good quality; a stockpot should never be a dumping ground for old leftovers that are past their prime.

Meat trimmings can be added, as long as they are cleaned of fat and gristle. Aromatic vegetables, usually onions, celery, and carrots, are typically incorporated. Substituting leeks for the onions, or adding garlic, enhances the flavor of a stock. Tomatoes are incorporated in brown stock for color and flavor; they also add acidity and help clarify the liquid.



## White stock

A light-colored stock made from bones that have not been browned and aromatic vegetables (typically carrot, celery, and onion) simmered in water.



## Brown stock

An amber-colored stock made from bones that have been browned (caramelized) and browned aromatic vegetables (typically carrot, celery, and onion) simmered in water.



## Reduce (reduction)

To boil or simmer a liquid until the volume is reduced by evaporation, thickening the liquid's consistency, and intensifying its flavor. The resulting liquid is referred to as a reduction.

# Soups & Stocks



## Glace

Stock that has been reduced, usually by about 90%, to the consistency of a syrup when hot and the texture of hard rubber when cold. The term also refers to a reduced stock used as a coating for roasting meat, a flavoring for soups and sauces, or a base for a sauce.



## Roux

A cooked mixture of equal parts flour and fat (usually butter) used to thicken liquids. Roux is cooked to varying degrees (white, blond, or brown) depending on its use, the darker the color, the richer the flavor. Liaison: A binder or thickening agent for soups and sauces. Roux, egg yolks, and starches such as flour, cornstarch, and arrowroot are all liaisons.



## “Mother sauces” or “Grand sauces”

A core group of basic sauces, from which the large family of classic French sauces is derived. The concept was originally developed and named by the nineteenth-century French chef, Antonin Careme, and it was later refined in the early twentieth century by the French chef Auguste Escoffier in his famous cookbook, *Le Guide Culinaire*. The mother sauces are Espagnole, Velouté, Bechamel, Tomato, and, to a lesser degree, Hollandaise.



## Espagnole sauce

“Spanish sauce” or “brown sauce.” Made with reduced brown stock, herbs, tomato (fresh or purée), and caramelized mirepoix and thickened with brown roux



## Demi-glace

Literally, “half-glaze.” A mixture of Espagnole sauce and brown stock that has been reduced by half, to produce a glossy, full-bodied, full-flavored sauce. The term is also used more generally to refer to any reduced stock having the consistency of a light syrup. Nap, Nappé, Naper: To coat with sauce. Sauces are said to nap when they leave an opaque coating on the back of a spoon.

# Soups & Stocks



## Emulsion

The mixture of one liquid with another with which it cannot normally combine smoothly (such as oil and water). Emulsifying is done by slowly adding one ingredient to another while mixing rapidly. This disperses and suspends minute droplets of one liquid throughout another. Emulsified mixtures are usually thick and satiny in texture. Mayonnaise and vinaigrette are two classic emulsions.



## Hollandaise sauce

An emulsion sauce made with a vinegar or wine reduction, egg yolks, melted butter, and lemon juice.



## Jus

French for "juice." The natural juices released by meat during roasting. Meat served "au jus" is served with its cooking juices.



## Jus lié

Meat juice thickened slightly with arrowroot or cornstarch.



## Render

To melt animal fat over low heat so that it separates from any connective pieces of tissue, which, during rendering, turn brown and crisp and are referred to as cracklings. Often, the rendered fat is then filtered to remove any residue.



## Reduction sauce

A sauce made by adding a flavorful liquid (stock or wine) to pan juices from roasted or sautéed meat, poultry, or fish (after the main item has been removed from the pan), reducing the liquid by about half, enriching the sauce with fat (butter, cream, or olive oil) and finishing it with seasonings. This version of a reduction sauce is also called a pan sauce because it's made in the pan in which the main ingredient of the dish was cooked. Reduction sauces can have more layers.



## Mirepoix

A combination of chopped aromatic vegetables (usually two parts onion, one part carrot, and one part celery) used to flavor stocks, soups, and braises

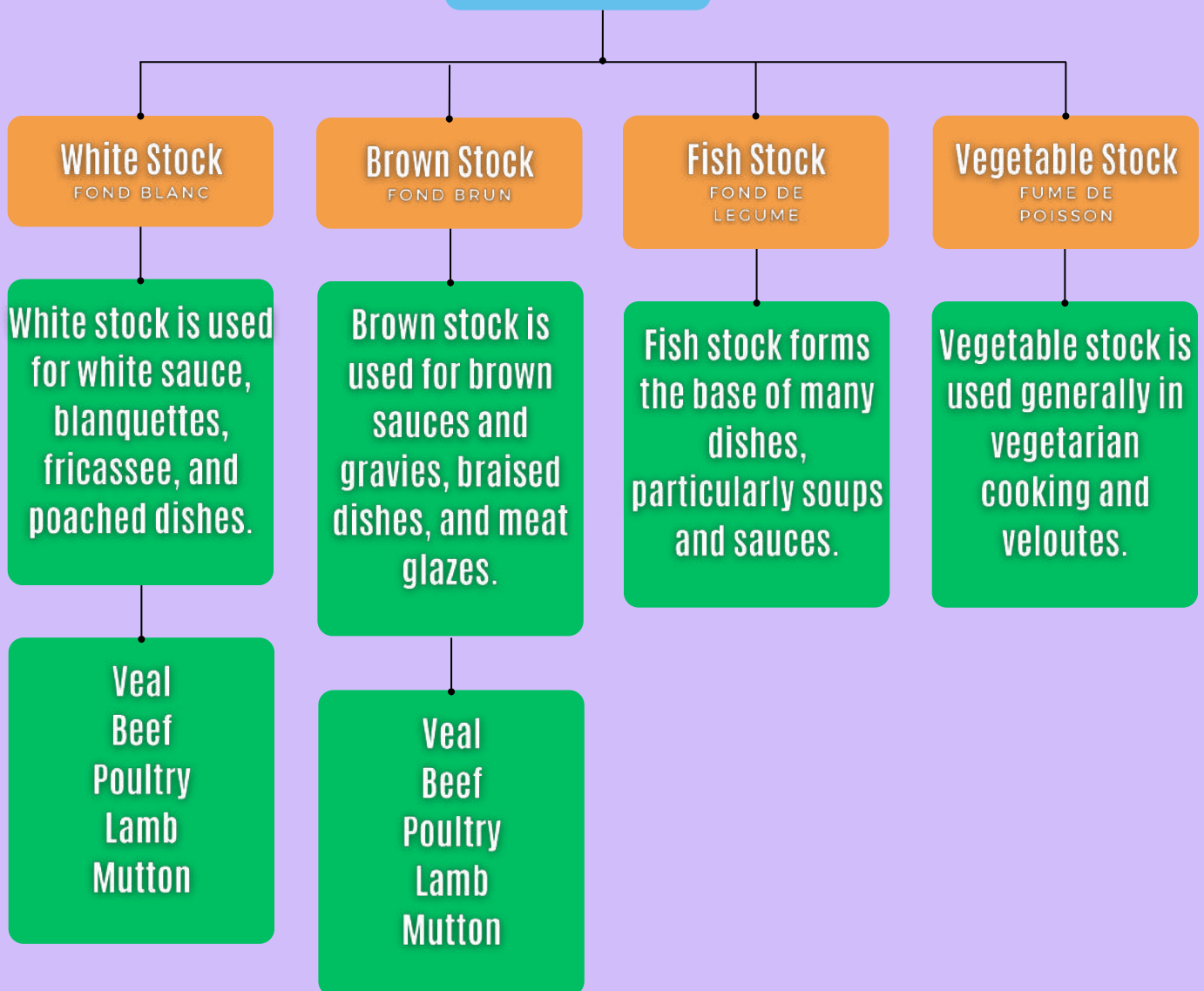
# How to Build a Soup



Heat your fat with your aromatic veggies, such as garlic.	Sauté for 3-5 minutes, and then add in your meat and cook until cooked through (remove any bones if there are any)	Add in additional veggies and let cook for 5-10 minutes, or until fork-tender. Add softer veggies towards the end (e.g., spinach)	Add in your base(s) and then your spices and mix well to combine.	Bring to a boil, then reduce heat and let it simmer.	Add cream if you want a cream soup and transfer to a high speed blender, if you want a pureed soup.	Garnish and enjoy!
---	--	---	---	--	---	--------------------

# Stocks

## Types of Stocks



## Essential Ingredients

Stocks are the most essential ingredients in a kitchen because they are the basis of all soups and sauces.

There are 4 essential parts of a stock:

- a major flavoring ingredients
- a liquid (most often water)
- mirepoix
- aromatics

# Stocks

## Flavoring a Stock

- Mirepoix is a French word that refers to the mixture of coarse chopped onions, carrots, and celery that provide a flavor base for stock.
- 50% onions, 25% carrots, 25% celery based on weight
- Aromatics are the herbs, spices and flavorings that create a savory smell.
- Bouquet garni: French for "bag of herbs" is a bundle of fresh herbs, such as thyme, parsley stems, and a bay leaf tied together.
- Sachet d'epices: similar to a bouquet garni, except that it really is a bag of herbs and spices.

## Making a Stock

- The first step in making stock is to prepare the bones.
- To use bones for stock, they must first be cut to the right size and then prepared by blanching, browning, or sweating.
  - **Blanching**: rids the bones of impurities that can cause cloudiness in a stock. Once the bones have reached a foil boil, remove the scum.
  - **Brown**: roast in a hot oven for about an hour until they are golden brown.
  - **Sweating**: causes bone and mirepoix to release flavor more quickly when liquid is added.



# Stocks

## Preparing stock

- Flavor, color, body, and clarity determine the quality of stock.
- Should be flavorful but not so strong that it overpowers the other ingredients in the finished dish.
- With the exception of a fumet, stocks should be crystal clear when they are hot.
- Mirepoix should be trimmed and cut into size suited for the type of stock.
  - Small dice for quick cooking stocks, large dice for longer cooking stocks
- Aromatics are added in the last hour of cooking to allow the heat to bring out their flavors and prevent the loss of flavor from overcooking.
- Once finished, stocks should be cooled appropriately.
- After cooling and before using, stocks need to be degreased.
  - This process removes any fat that has cooled and hardened on the surface.

## Cooking Times for Stocks



# Things to Know About Soups

In many parts of the world, soup is considered a nourishing breakfast. For much of America's history, many households served a soup course for dinner. Soup and sandwich remains a favorite American lunch. There's even dessert soup.

In the French tradition, soups are classified into two broad groups: clear soups (bouillon and consommé) and thick soups. Most chicken soups are clear soups. Add some cream and you've got a cream soup, in the thick soup category.

Thick soups are classified depending upon the type of thickening agent used:

- purées are vegetable soups thickened with starch
- bisques are made from puréed shellfish thickened with cream
- cream soups are thickened with béchamel sauce
- veloutés are thickened with eggs, butter and cream

When serving soup as part of a larger meal, the soup should complement the rest of the meal. A light soup complements a heavy main course (steaks, chops, stew); a heavier soup goes well with a lighter main course (pasta or grilled fish, for example).

Soups are most commonly made by combining ingredients (such as meat and vegetables) with a stock (water or other liquid). The soup is then boiled to form a broth.

# Things to Know About Soups

Most soups fall into two categories: clear soups (bouillon and consommé) and thick soups. Thick soups are classified by the type of thickening agent used. Bisque is thickened with cream; purees use starch; and cream soups use béchamel (white) sauce. Other common thickeners are lentils, rice flour and grains.

Soups can be either hot or cold. There are almost endless varieties of hot soups, like tomato, chicken noodle, beef vegetable and broccoli cheese. Cold soups include Gazpacho and Vichyssoise, as well chilled avocado or cucumber soups.

But, soups don't have to include vegetables. Some soups are served as dessert.

Usually made with seasonal fruit, dessert soups can be served either warm or cold.

Other ingredients likely to be used are milk or cream, dumplings, spices and alcoholic beverages like champagne or brandy. Ginataan is a Filipino dessert soup made with coconut milk, fruits and tapioca pearls that can be served hot or cold.

# Things to Know About Soups

## **Common types of soups:**

- Bisque is a rich, thick, smooth soup that's often made with shellfish, such as lobster or shrimp.
- Chowder is a thick, chunky soup. Traditionally, a chowder is made with seafood or fish, but chowders made with poultry, vegetables, and cheese have become popular.
- Stock or broth is a strained, thin, clear liquid in which meat, poultry, or fish has been simmered with vegetables and herbs. While normally used as an ingredient in other soups, it can be enjoyed as a light course on its own.
- Bouillon is basically the same as broth, but the term refers to commercial dehydrated products sold as granules or cubes.
- Consommé is a strong, flavorful meat or fish broth that has been clarified.

# Guide to Cooking Oils



## Olive oil

Rich, fruity, and a tiny bit bitter

Best for: light sauteing, salad dressings, and bread dunking



## Canola oil

Neutral and smooth

Best for: baking, stir fry's, and searing meats



## Vegetable oil

Neutral and mild

Best for: baking



## Grapeseed oil

Light and nutty

Best for: sauteing, baking, salad dressings and frying



## Avocado oil

Rich and buttery

Best for: grilling and pan roasting, and drizzling on salads and pizza



## Peanut oil

Mostly mild and lightly nutty

Best for: Asian dishes- as well as deep-drying, pan-frying, roasting, and grilling



## Hemp oil

Nutty and grassy

Best for: dips and pestos



## Sunflower oil

Light and delicate

Best for : baking and frying



## Sesame oil

Smokey with a hint of sesame seeds

Best for: stir fries

# Guide to Cooking Oils



## Almond oil

Subtle toasted almond  
Best for: sautés and stir-fry's



## Corn oil

Mild and slightly nutty  
Best for: grilling, sauteing, stir-frying, deep-frying



## Flaxseed oil

Fishy and bitter aftertaste  
Best for: finishing oil and is not recommended as a cooking oil



## Butter

Creamy, and sometimes salty  
Best for: baking, cooking



## Ghee

Buttery, but less creamy  
Best for: frying and sauteing



## Lard

umami  
Best for: baking (especially flatbreads, like tortillas and frying

# How to: eggs



## Soft, Creamy Scrambled Eggs

Comforting and kid-friendly, a soft scramble is there for you when you need a warm and familiar meal. Plus, you can enjoy it in a variety of ways: with toast, wrapped into a burrito, or alongside a pile of bacon.



## Fry an Egg

Once you learn how to achieve crispy, lacy edges and a runny yolk, you'll find a fried egg can pair with just about any meal. Slide onto grain bowls, salads, creamy polenta, and more.



## Eggs Over Easy

Eggs over easy are very similar to a fried egg, except that you'll flip the egg and let it cook for a few seconds on the other side so that the white cooks all the way through but the yolk stays runny. If you keep it in the pan for longer so that the yolk begins to harden, you can make eggs over medium or over hard.



## Soft-Boiled Egg

Whether you serve your soft-boiled eggs with buttered toast "soldiers" for dipping or slice it in half and enjoy it with a grain bowl, you'll love the way the egg white firms up and sets around the gooey, runny yolk.



## Hard-Boiled Egg

Cook your soft-boiled egg a few minutes longer and you've got the classic hard-boiled egg, which you can enjoy on its own as a snack or turn it into egg salad for lunch.



## Poached Egg

Famous for its starring roll in eggs Benedict, a poached egg has silky whites and a runny yolk, making it feel sort of luxurious. You'll want to start by poaching one egg at a time, but before you know it you'll be poaching eggs for a crowd.



## Bake Eggs in the Oven

Speaking of fancy, baked eggs are another impressive-looking dish that couldn't be easier to make at home. Plus, you can try something new every time you make them: Add cheese, herbs, veggies, or crumbled bacon.

# How to: rice

Now-a-days it's easier to make rice by just pressing a button in a rice cooker, but if you don't have one try using these charts and tips!

## **How to make rice on the stove top?**

First, rinse the rice. Do not skip this step! It washes away starches that will cause the rice to clump together, so it's key for cooking soft, fluffy rice. Add the rice to a fine mesh strainer set over a large bowl, and rinse until the water in the bowl runs clear.

Rinsed rice in a fine mesh strainer

Then, measure the proper water to rice ratio. Measure 1 1/2 cups of water and 1 teaspoon olive oil for every cup of uncooked rice. (1 cup dry rice yields about 3 cups cooked.) Combine the rice, oil, and water in a medium saucepan, and stir to combine. Bring to a boil over high heat.

Next, simmer. When the water starts boiling, cover the pot with a tight-fitting lid, and reduce the heat to low. Simmer for 15 minutes.

Finally, let it steam. Turn off the heat and let the pot stand, covered, for 10 minutes. Remove the lid and fluff the rice with a fork. That's it!



# How to: carbonara

Carbonara is a favorite of the members of BTS. Such a simple and easy dish that is so delicious. Learn and make this simple dish

**VOCABULARY** - Carbonara is an Italian pasta dish, based on eggs, cheese, bacon, and black pepper. Spaghetti is usually used as the pasta, however, fettuccine, rigatoni, or bucatini can also be used.

Base ingredients used in carbonara:



# How to: carbonara

## Spaghetti Carbonara

Servings: 2

### INGREDIENTS

1/2 lb (200g) of spaghetti  
About (50g) pancetta (or bacon)  
1 whole egg + 2 yolks  
4 tablespoons of grated pecorino  
tablespoons of grated parmesan  
1 clove garlic  
Olive oil  
Salt and pepper

### DIRECTIONS

1. Cut the pancetta into cubes or sticks and brown in the pan with a little olive oil and the whole peeled garlic clove. Ingredients have to color without burning. cook for about 10 minutes.
2. In a bowl, mix the whole egg and yolks with a fork add half the Parmesan, pecorino and pepper.
3. Boil a large amount of salted water in a saucepan. Cook the spaghetti "al dente".
4. Drain the pasta. Set one cup of cooking water aside . In the bowl containing the eggs and cheese, add a few tablespoons of pasta cooking water and emulsify with a fork. Pour over pasta and mix well. The sauce will gradually form a fluid cream (if necessary add a little cooking water). Add pancetta (without garlic), a little salt if needed, pepper and sprinkle the remaining pecorino.

# How to: carbonara

## Vegan Spaghetti Carbonara

Servings: 2-4

### INGREDIENTS

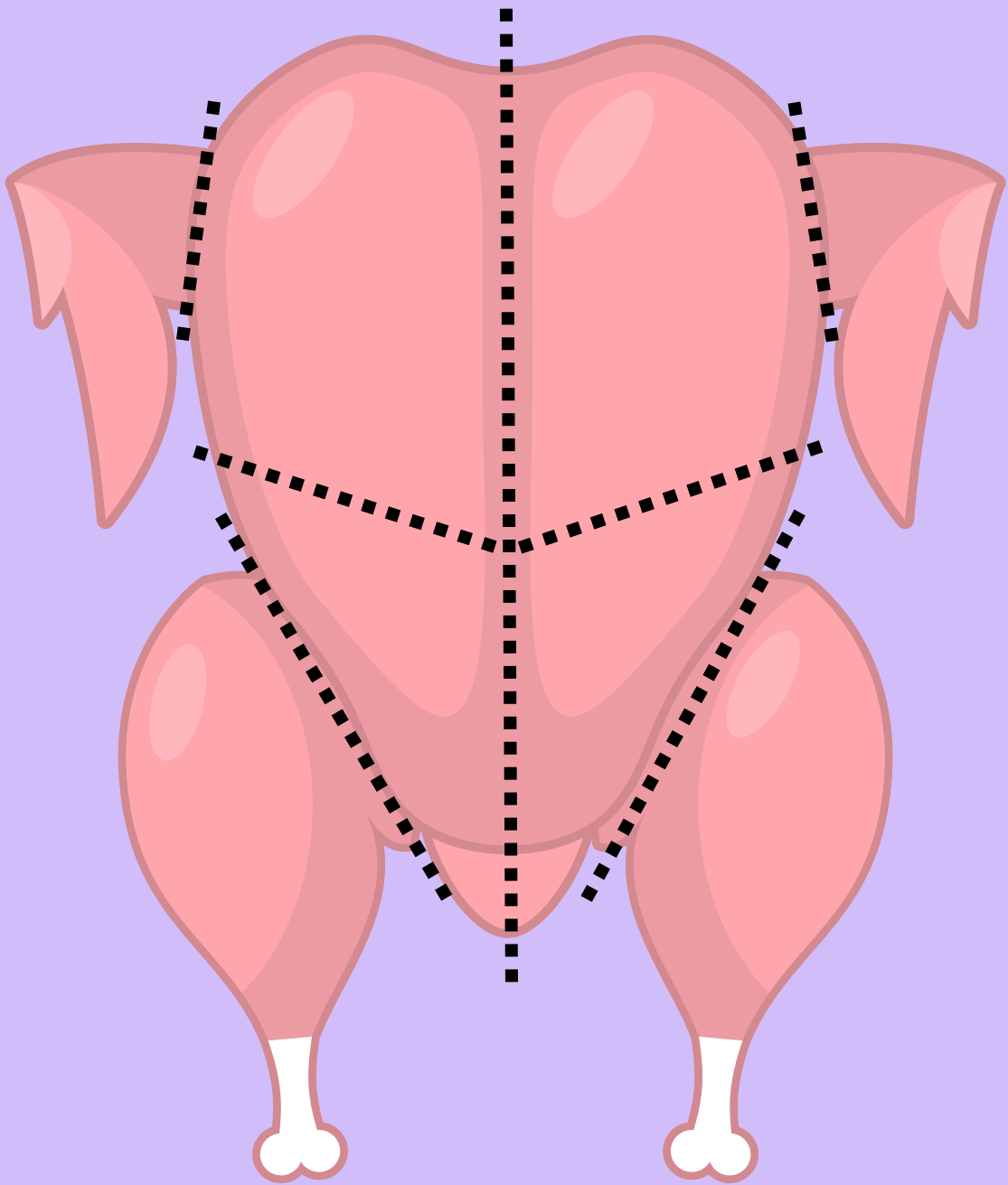
1/2 lb (200g) of spaghetti  
3 cups shiitake mushroom cap,  
thinly sliced  
3 tablespoons olive oil  
1/2 teaspoon smoked paprika  
1/2 teaspoon salt  
1/4 teaspoon pepper  
1/2 cup cashews, soaked overnight  
1/4 cup olive oil  
1/3 cup unsweetened non-dairy milk  
3 cloves garlic, chopped  
1 1/2 tablespoons nutritional yeast  
1 1/2 tablespoons lemon juice  
1/2 teaspoon pepper  
1 teaspoon salt  
1/4 teaspoon paprika  
fresh parsley, for serving

### DIRECTIONS

1. Preheat oven to 375°F (190°C).
2. Cook pasta according to package instructions.
3. Toss shiitake mushrooms, oil, smoked paprika, salt, and pepper in a medium bowl.
4. Arrange mixture on parchment paper-lined baking sheet and bake for 7 minutes. Flip the mushrooms and continue baking for 7-8 minutes, or until mushrooms are crispy and brown. Cool mushroom slices on baking sheet.
5. For the sauce, combine cashews, olive oil, garlic cloves, nutritional yeast, milk, lemon juice, pepper, salt, and paprika in a blender or food processor. Blend until smooth and creamy.
6. Drain water from pasta and return pasta to pot. Add the sauce and stir until pasta is well-coated. Mix in mushroom bacon. Top with parsley. Enjoy!

# How to: poultry

How to section a chicken:



# How to: poultry

1. **Prep.** Place the chicken on a cutting board, and pat dry with paper towels then place it breast side up.
2. **Remove the Legs.** Start cutting where the leg attaches to the breast, then pull away the leg from the breast. Cut through the skin, and then pull away the leg with a little more force until you pop the joint (hip bone) out of its socket then cut away at the joint. Repeat on the other side.
3. **Remove the Wings.** Flip the chicken to one side, and locate the joint (not the bone) where the wing is attached to the carcass. Pull the wing away and cut through the joint to remove it. Repeat with the second wing. Remove the wing tips if you like (you can save them for stock).
4. **Remove the Backbone.** Flip the body over, then using kitchen shears, cut through where the back and the breast meet. There will be a clear fat line. Remove the backbone and save it for stock!
5. **Separate the Breast.** Flip the breast skin side down, and find a white thin line in the center. That's the cartilage and exactly where you need to cut. Cutting through it will separate the breast.
6. **Cut the Breast.** If you'd like to cut the breast into smaller pieces (this will help the breast cook evenly with the smaller pieces of chicken, such as the thigh and drumstick). Flip the breast over, skin side up then take your chef's knife and cut through the breast almost in half/off center to the thicker side so the thinner piece is bigger. This will help the chicken cook more evenly.
7. **Separate the Leg.** If your recipe calls for leg quarters, then skip this step. If you want to separate the leg, find the white fat line running between the drumstick and the leg and cut through it. Make sure that you're cutting between the joint and not the bone.

# How to: poultry

## TIMING & TECHNIQUES

### Chicken

Rotisserie	Oven-Ready	Classic	Crispy	Speedy
Juicy low and slow technique	Cook-in-bag, set it and forget it	Easy main event- best for stuffed birds	Start high for darker, crispier skin	Cut cooking time in half with a butterflied bird
250°F/121°C	Preheat at 400°F/204.5°C Lower to 350°F/176.6°C to cook	350°F/176.6°C	450°F/232°C for 15 minutes then lower to 350°F/176.6°C	450°F/232°C
75 minutes per pound	N/A	25 minutes per pound. If stuffed, roast for an additional 20 minutes	20 minutes per pound	12 minutes per pound
4 pound bird: 5 hours	5 pound bird: 130 minutes (fresh) 5 pound bird: 4 hours (frozen)	4 pounds stuffed bird: 2 hours	4 pound bird: 80 minutes	4 pound bird: 48 minutes
Baste every 45 minutes	No basting necessary	Baste every 30-45 minutes	Baste every 30 minutes	Baste after 15 minutes and at finish

# How to: poultry



## WHAT'S THE DIFFERENCE?

### White Meat and Dark Meat Chicken

#### GET TO KNOW WHITE MEAT

##### MILD FLAVOR

goes well with all kinds of recipes



MEDITERRANEAN



ITALIAN



CAJUN



MEXICAN

##### CHICKEN WINGS ARE GROWING IN POPULARITY

spicy, tangy, zesty, flaming hot, dry rubbed or plain—you name it, people love it



##### LOWER IN FAT AND CALORIES

than dark meat



##### MORE ZINC AND IRON

than white meat, and rich in **NIACIN; FOLIC ACID;** and **VITAMINS A, K, B6 and B12<sup>1</sup>**

##### FILLED WITH MINERALS,

such as **SELENIUM** and **PHOSPHORUS**—good for the immune system and strong teeth and bones<sup>1</sup>



##### RICH FLAVOR

and juicy, tender texture that's nearly impossible to overcook



##### COST-EFFECTIVE

ingredient in all kinds of recipes

##### EXTRA VERSATILE



GRILL IT

BAKE IT

STIR-FRY IT

#### DID YOU KNOW?

ACCORDING TO THE USDA, Americans were predicted to eat

**92**

pounds of chicken **PER PERSON IN 2016.<sup>2</sup>**



#### WHAT MAKES DARK MEAT DARK?

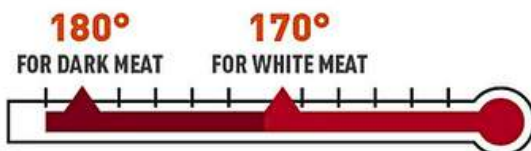
##### IT'S MYOGLOBIN:

a protein that carries oxygen to muscles while they move. Since chickens use their legs and thighs to get around, these parts are darker than breasts and wings.<sup>2</sup>



#### ALWAYS REMEMBER

Whether you're using white meat or dark meat, be sure it's cooked to the proper temperature.



<sup>1</sup><https://www.chicken.ca/health/v/white-meat-vs-dark-meat> <sup>2</sup><https://www.nationalchickencouncil.org/chicken-consumption-continues-soar-u-s/>



# How to: steak

Get to know the different cuts of steak and how to cook them!

## CUTS:



### Top Round (AKA London Broil)

Very lean with mild flavor; dense and slightly chewy.

Inexpensive with no fat to trim off, so more meat for your money; even shape makes it easy to slice thin.

Marinating will tenderize the meat.

Best served rare to medium (overcooking will turn this cut into leather).

Must be carved very thin, against the grain.

Great cold for sandwiches.



### Ribeye (AKA Delmonico Steak)

Naturally tender cut cooks up juicy, with a rich flavor of caramelized meat.

Can be sold bone-in for rib lovers and for a more dramatic presentation.

Lots of marbling makes it self-basting.

These steaks are pricey, so look for ones with a large "eye" and less surrounding fat.



### Filet Mignon (AKA Tenderloin)

Its mild flavor and tenderness make it the perfect canvas for a starring sauce.

Expensive, but unlike other cuts, it doesn't need to be trimmed and doesn't shrink much during cooking.

Avoid acidic marinades -- they'll deteriorate the fine grain and make the meat mealy.

Best eaten rare to medium.

Lean and tender enough to be eaten cold.

Skip the steak knife -- it cuts like butter!



# How to: steak

Get to know the different cuts of steak and how to cook them!

## CUTS:



### T-Bone

Nothing says "steakhouse" like a T-bone. Great for steak lovers who eat with their eyes first. Combines two contrasting cuts in one sitting -- part of the delicate tenderloin and robust, juicy strip. The bone adds flavor and seals in juices. Perfect for carnivores who feel the meat's just a vehicle for getting to gnaw on the bone.



### Skirt Steak (AKA Fajita steak)

Good bang for your buck -- juicy and flavorful; quick-cooking and versatile. Firm, accordion-like grain soaks up dry rubs and marinades. Best served rare to medium-rare. Anything more toughens the meat.



### Strip Loin (AKA strip steak, New York Strip steak, Shell Steak)

A beef-lover's steak -- you can really taste the steer. A trophy cut -- tenderness, succulence and a satisfying chew. Low maintenance: cooks evenly, ideal for a variety of cooking methods (grilling, broiling and pan-roasting). Serve rare or medium-rare: This cut turns mealy when overcooked.

# How to: steak

## Temperature and Meat: Know your temps

The list provided below contains the official degrees of doneness as deemed by the Beef Association. Perhaps the best way to achieve these levels of doneness (and not overcook your meat) is to pull your steaks off the grill a few degrees early, and then let carryover cooking bring them up to those temperatures on the chart. Of course, continue to cook all burgers to 160°F/ 71°C (well done) as a means of food safety.

### ***HOW TO TAKE A TEMP***

So, you've got your grill or cook-top raging, your steaks are seared, flipped and seared again, and it's to the point you're starting to worry you might miss the sweet spot. Overcook the steaks and you risk a poor eating experience, undercook them and you risk having picky eaters turn your food away. So it's best to temp. Using tongs, lift the steak off the grill and take out a trusty thermometer. Place it carefully into the thickest part of the steak, from the side. Be careful not to touch bone or fat, as that will give you a false temperature reading. After removing the steak from the grill, place it somewhere to rest, about 3-5 minutes for an average steak. This lets the juices redistribute evenly throughout the meat.

### **To test doneness:**

To check your steak, press a finger on the center and compare the tenderness to the parts of your hands as shown in the image below.

# Levels of doneness



## RARE (120°F)

It is typically seared quickly for it to remain mostly red in the center. Once it is taken out of heat and left to rest, the steak should achieve the perfect tenderness and juiciness. This is said to be The Perfect Steak condition.



## MEDIUM RARE (125°F)

Also seared and after doing so, it should be warm with the center mostly pink and becoming red towards the center. This condition will make the steak soft and juicy on the inside; though this is said to be past the point of having 'The Perfect Steak' state, this is actually my favorite 'doneness'.



## MEDIUM (134°F)

This kind of 'doneness' has a mostly pink center, but it is said that grayish-brown colors should be more prominent than the pinkish color. This is especially drier and tougher than 'The Perfect Steak'.



## MEDIUM WELL (150°F)

Only has a slight tinge of pink inside and will mostly be grayish brown. This is often picked by those who want a slightly juicy steak without it having any signs of 'red' or 'blood' in it; this condition is way past the condition of being 'The Perfect Steak'.



## WELL DONE (160°F)

This is 100% brown with no signs of pink coloration and usually has a slight char outside. Well done steaks are said to be a waste of good steak meat; for those who favor this, it should be cooked very slowly on low heat or else it would become very, very, hard and chewy.

# How to: steak



# Vegan Corner

If you are vegan or want to go vegan, learning about replacing certain ingredients in a recipe is a smart way to start.



## HEALTHY VEGAN FOOD PYRAMID

### WATER



8-10 Glasses a day.  
If you are active,  
drink more!

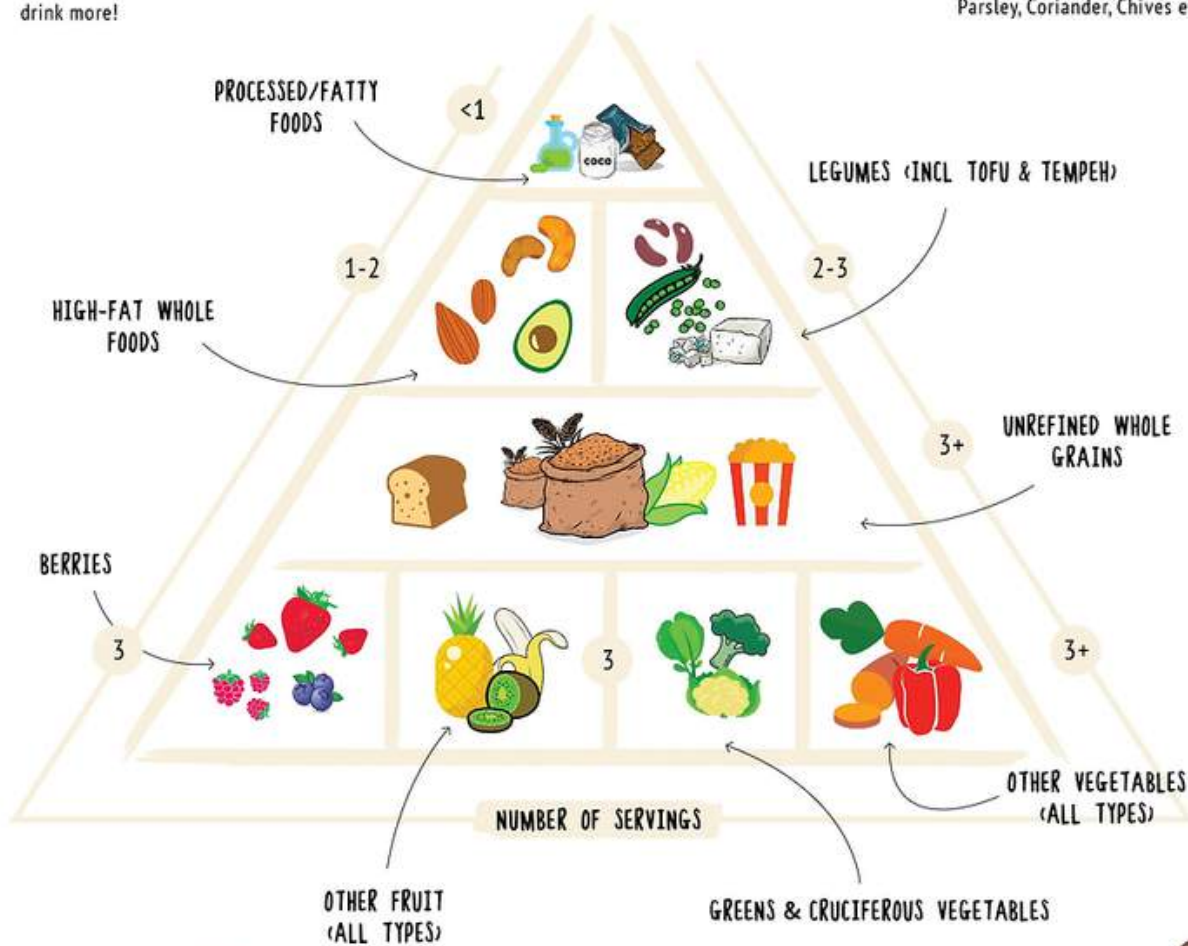
### OIL



Where possible cook with  
vegetable broth or water, or steam.

### SPICES, FRESH HERBS OR OTHER:

Dulse/Nori Flakes or Wakame (rich in iodine), Nutritional Yeast, Turmeric, Oregano, Parsley, Coriander, Chives etc



### SUPPLEMENTS



Daily Vitamin B12 (Cyanocobalamin) & Vitamin D3 (if you are not getting 20 mins of sun daily). Rest based on blood test results and advice from your health care professional.

### TRY NOT TO MISS:



Ground flaxseed x 2-3 tbsp per day and 1-2 brazil nuts (best source of selenium)

High-fat whole foods: 1 serving is 1/3 of a medium avocado or 30g of nuts/seeds.

Berries: 1 serve is a small handful (40g)

Other fruits: 1 serve is one whole standard fruit

Greens & cruciferous vegetables: 1 serve of cruciferous vegetables is 1/2 to 1 cup chopped.

Legumes: 1 serving is 1/2 a cup cooked or 100g tofu/tempeh.

Unrefined whole grains: 1 serve is 1/2 cup cooked or 1 slice of whole grain bread

Other vegetables: 1 serve is one whole standard medium vegetable

# Vegan Corner

## Vegan Replacements



### Eggs

Applesauce  
Bananas  
Purees  
Silken tofu  
Egg replacers  
Aquafaba  
water + chia/flax seeds



### Milk

soy milk  
hemp milk  
rice milk  
almond milk  
coconut milk

\*To substitute buttermilk,  
add about 1 tsp of vinegar  
for every cup of plant-based  
milk



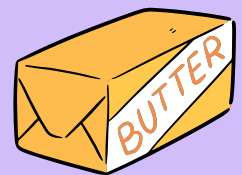
### Meat

tofu and tempeh  
beans  
eggplant  
mushrooms  
jackfruit



### Honey

agave nectar  
maple syrup  
coconut nectara



### Butter

Coconut oil  
vegetable oil  
plant-based butter

# Vegan Corner

## The Best VEGAN SOURCES OF IRON

### Fruits & Veggies mg/cup

● Apricot, dehydrated	7.51
● Heart of palm, canned	4.57
● Potatoes, baked, skin	4.08
● Swiss chard, cooked	3.95
● Peas	3.84
● Raisins	3.10
● Figs	3.02
● Mushrooms, white	2.71
● Spinach	2.70
● Avocado	1.04
● Kale	1.00

### Beans (cooked) mg/cup

● Soybeans	8.84
● Tofu	6.65
● White beans	6.62
● Lentils	6.59
● Black turtle	5.27
● Kidney	5.20
● Chickpeas	4.74
● Adzuki	4.60
● Lima	4.49
● Tempeh	4.48

### Nuts & Seeds mg/cup

● Pumpkin seeds	11.38
● Sunflower seeds	9.13
● Cashews	8.22
● Almonds	5.78
● Hazelnuts	5.40
● Chestnuts	5.24
● Pistachios	4.96
● Macadamia nuts	4.94
● Walnuts	3.40
● Brazil nuts	3.23
● Pecans	2.76

### Grains (cooked) mg/cup

● Amaranth	5.17
● Buckwheat	3.74
● White rice	2.77
● Quinoa	2.76
● Barley	2.09
● Oat bran	1.93
● Bulgur	1.75
● Wheat pasta	1.52
● Millet	1.10
● Brown rice	1.03

# Vegan Corner



4 tbsp chickpea flour  
+ 4 tbsp water



¼ cup applesauce



1 tbsp ground flaxseed or  
chia seed + 3 tbsp water



3 tbsp aquafaba  
(bean water)



3 tbsp  
nut butter



¼ cup vegan yogurt  
or blended silken tofu



2 tbsp arrowroot or potato starch  
or cornstarch + 2 tbsp water



¼ cup mashed  
banana or avocado



¼ cup pureed pumpkin  
or sweet potato  
or squash



1 tbsp vinegar or  
2 tbsp lemon juice  
+ 1 tsp baking soda



10  
Ways to  
Replace  
an Egg  
in Baking



# Tofu, Seitan, & Tempeh

Learn the difference between Tofu, Seitan and Tempeh so you are well aware of how to choose one for any dish you need.



## Tofu

Also known as bean or soya curd, tofu is a soft, cheese-like food made of condensed soy milk pressed into tight blocks and mixed with nigari. While this product can be rather bland, tofu easily absorbs flavors of other ingredients, such as spices. Tofu has been a staple in Asian countries for more than 2,000 years!

Because of its versatility, tofu can be used in a multitude of dishes to make vegan versions of omelets, desserts, cheeses, and smoothies! Today, you can buy tofu in the produce section of many stores, and a variety of companies use it to create delicious vegan alternatives.



## Seitan

Also known as wheat gluten, seitan first appeared during the sixth century as an ingredient in Asian cuisine and has been a common meat substitute for more than a thousand years. Traditionally, seitan was the product of rinsing and cooking wheat dough to remove the starch, leaving a protein-dense substance that turned out to be an excellent meat alternative. Today, you can buy ready-made seitan at the store, and a variety of companies, including Gardein, Tofurky, and Upton's, use it to create delicious mock meats. You can also buy "vital wheat gluten" at most natural food stores. This powder is easily transformed into a dense, delicious meat waiting to be added to your favorite recipes. Seitan easily takes on the flavors of your favorite seasonings. It's also protein-packed (60 grams per cup!), cholesterol-free, and low-carb.

And to sweeten the deal, it's super affordable and relatively easy to prepare!

### **How to Cook Seitan**

Seitan is the least plant-based protein that requires the least amount of prep of the three. You can usually substitute seitan for meat in recipes using a 1:1 substitution and unlike meat, you don't have to heat before eating. You can also crumple it in a pasta sauce."

# Tofu, Seitan, & Tempeh

Learn the difference between Tofu, Seitan and Tempeh so you are well aware of how to choose one for any dish you need.



## Tempeh

This Indonesian staple, made by fermenting soybeans in banana leaves until a firm, earthy patty forms, has been a common meat substitute since around the 12th century. Tempeh contains more protein (31 grams per cup!) and dietary fiber than tofu, and its mild nutty flavor works great in a wide array of recipes.

Today, tempeh is readily available in a variety of brands, and you can buy it unseasoned and season it to your liking! Ready to get started cooking with tempeh? These Chesapeake tempeh cakes are sure to please!

### **How to Cook Tempeh**

When it comes to tempeh is best marinating it. Marinade options can include soy sauce, lime or lemon juice, coconut milk, peanut butter, maple syrup, ginger, or spices. If you don't have hours to marinate your tempeh, you can steam it with water to soften it up and make it more porous.

## HOW TO COOK THEM

If you're looking to go for bold flavors in your recipes, tofu is your ideal protein choice out of the three. You should pay attention to the type of tofu. Firm and extra firm varieties are best for sautéing and grilling while the silken is best for soups or dips. To sauté tofu for a stir fry, you should drain and press out any excess water first, which keeps it from falling apart while cooking. You can even crisp your tofu by tossing it in cornstarch (no deep frying needed).

# Tofu, Seitan, & Tempeh



## How to choose the right tofu

TYPE OF TOFU	FIRMNESS 411	GOOD FOR...
--------------	--------------	-------------

<p><b>Premium or Organic Soft Tofu</b></p> 	<p>Can be blended into smoothies, or used to replace egg or dairy products in desserts and baked goods</p>	<ul style="list-style-type: none"> <li>• Soups</li> <li>• Smoothies</li> <li>• Baking</li> <li>• Desserts</li> </ul> 
--	--	--

<p><b>Premium or Organic Medium Firm Tofu</b></p> 	<p>A good choice for dishes that require braising or boiling.</p>	<ul style="list-style-type: none"> <li>• Soups</li> <li>• Dressings</li> <li>• Dips</li> <li>• Desserts</li> </ul> 
--	---	---

<p><b>Premium or Organic Firm Tofu</b></p> 	<p>A go-to choice for tofu beginners. It is the most versatile tofu of them all.</p>	<ul style="list-style-type: none"> <li>• Stir fries</li> <li>• Sandwiches</li> <li>• Plant protein option</li> </ul> 
--	--	--

<p><b>Premium or Organic Extra Firm Tofu</b></p> 	<p>The firmest of all tofu that contains the most amount of protein (8g per serving).</p>	<ul style="list-style-type: none"> <li>• Grilling</li> <li>• Burgers</li> <li>• Plant protein option</li> </ul> 
--	---	---

\*We also have Super Firm Tofu. It is available in select stores only.

NUTRITIONAL INFORMATION	Organic Soft		Organic Medium Firm		Organic Firm		Organic Extra Firm	
		%DV		%DV		%DV		%DV
Calories	60		60		70		70	
Total Fat	3g	4%	3g	4%	4g	6%	3.5g	5%
Sat Fat	0g	0%	0g	0%	0.5g	3%	0g	0%
Cholesterol	0mg	0%	0mg	0%	0mg	0%	0mg	0%
Sodium	10mg	0%	10mg	0%	10mg	0%	10mg	0%
Potassium	200mg	6%	150mg	4%	125mg	4%	115mg	4%
Total Carb.	3g	1%	2g	1%	2g	1%	2g	1%
Fiber	<1g	4%	1g	5%	1g	5%	2g	7%
Sugar	0g		0g		0g		0g	
Protein	5g	11%	6g	12%	7g	14%	8g	16%
Calcium		4%		10%		15%		15%

# Tofu, Seitan, & Tempeh



## REGULAR TOFU

vs.



## SILKEN TOFU

### Texture

- firm and chewy
- denser after pressing.
- Easily sliced and cubed

### Best for:

- crispy tofu
- vegan meat alternatives
- tacos
- curries
- stir fries

### Texture

- soft, unpressed form of tofu
- silky
- custard-like
- falls apart easily

### Best for:

- creamy sauces
- soft scrambles
- vegan desserts
- Japanese cuisine

# Tofu, Seitan, & Tempeh

## How to make tofu



### Step 1:

Wash and soak your soybeans



### Step 2:

Grind the soybeans into a pulp and then simmer.



### Step 3:

Strain the pulp to make the soy milk



### Step 4:

Heat the soy milk in a pan with a water-soluble coagulant over a low heat.



### Step 5:

Spoon the tofu mass into moulds and add pressure



### Step 6:

Drain and cut into desired shape

# Tofu, Seitan, & Tempeh

## SILKEN TOFU



Extra Firm

Firm

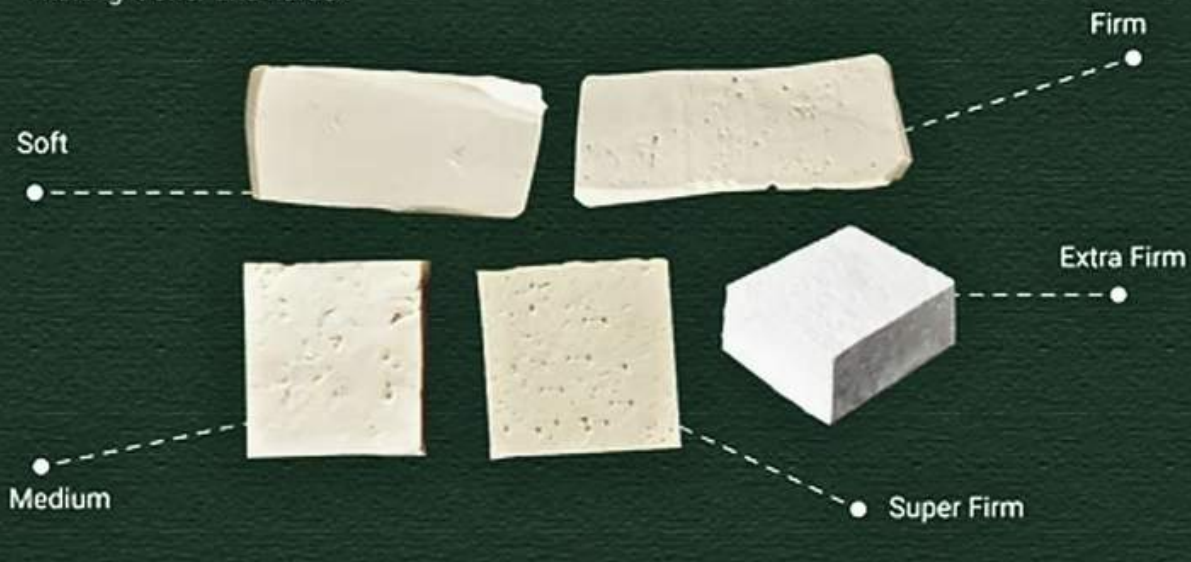
Soft

- You can flavor your tofu and make an excellent chip dip  *Dips*
- It makes a great yogurt substitute whenever you're trying to make a smoothie  *Smoothies*
- You can make tofu that tastes like whip and top your dessert with it  *Desserts*
- Make a hearty tofu sauce to top all your foods with  *Sauces*

When you bake, you'll no longer need an egg to do so. Add an egg substitute to your breads or cakes, and it'll come out just as good as an egg would.  *Egg Substitute*

## REGULAR TOFU

The firmer the tofu is, the less water content it will have, making it drier and harder.



Soft

Firm






















Extra Firm

Medium

Super Firm

# Tofu, Seitan, & Tempeh

## Trade up with tofu

 <p>3 ounces of extra firm tofu</p>	 <p><i>'In terms of nutritional value</i></p>	 <p>3 ounces of ground pork</p>
 <p>3 ounces of extra firm tofu</p>	 <p><i>'In terms of nutritional value</i></p>	 <p>3 ounces of ground beef</p>
 <p>3 ounces of extra firm tofu</p>	 <p><i>'In terms of nutritional value</i></p>	 <p>3 ounces of roasted chicken breast</p>
 <p>4.4 ounces of silken tofu</p>	 <p><i>'In terms of nutritional value</i></p>	 <p>1 large egg</p>
 <p>1 cup of silken tofu</p>	 <p><i>'In terms of nutritional value</i></p>	 <p>1 cup of whole milk</p>
 <p>1 cup of silken tofu</p>	 <p><i>'In terms of nutritional value</i></p>	 <p>1 cup of plain whole yogurt</p>
 <p>1 cup of firm tofu, blended</p>	 <p><i>'In terms of nutritional value</i></p>	 <p>1 cup of ricotta cheese</p>

# How to: Kimbap

Kimbap or easily remembered as Korean sushi is made from steamed white rice and other ingredients such as bulgogi, spinach, yellow pickled radish, eggs and more. It's rolled in kim with the kim on the outside and served in small, bite-sized pieces.

Kimbap = kim (roasted fried seaweed) bap (rice).

## HERE'S WHAT YOU NEED FOR BASIC KIMBAP ROLLS

- Sheets of roasted seaweed
- Cooked (short grain or sushi) white rice
- Vegetables – most traditional kimbap includes some combination of carrots, pickled yellow radish, cucumber, and spinach, but you can use whatever you prefer!
- Protein – classic kimbap includes bulgogi or are made vegetarian with eggs, but I also love making Korean sushi rolls with cooked crab!
- Sesame seeds

### Tools:

This recipe works best when you've got a bamboo rolling mat, disposable gloves, a wood cutting board (or other clean, strong surface), and a very sharp knife.



# How to: Kimbap

## TIPS:

- **How To Store:** Sliced kimbap in an airtight container can be refrigerated for several hours without compromising the flavor and the texture. However, if you store these kimbap overnight, the rice will most likely go dry. If planning on eating it the next day, store kimbap unsliced and keep them well packaged in the fridge
- **How To Seal Your Kimbap:** Dip your finger in water and moisten the edge of the seaweed to seal the roll. Wrap the entire bamboo mat around the roll and give it a firm but gentle squeeze. Using your hands or a pastry brush, lightly coat the outside of the roll with sesame oil to give it shine and prevent it from drying out. Set it aside.
- **How To Revive Your Kimbap:** The only way to revive a day's old kimbap is to dip the cut kimbap into beaten egg and pan-fry them – a trick I learned from Chef Julie Yoon. The egg acts as a sealant which helped steamed the rice during the pan-frying, making the rice soft again
- **Season the rice.**
- **Organize your workspace.** Arrange your ingredients and tools so that everything will be close at hand when needed. Place the bamboo rolling mat on a flat surface with the long side nearest you (the bamboo sticks should be horizontal). Lay out the seaweed sheets, a plate or tray with fillings, and a small bowl of warm water. Also designate a place to put your finished rolls.

# How to: kimbap



# How to: kimbap

## Ingredients for 5 rolls

3 cups cooked, short-grained white rice

1 tsp sesame seeds

5 sheets roasted seaweed (also called "kim" or nori)

sesame oil and soy sauce + 1/2 tsp sea salt

4 to 6 fillings of choice, julienned pencil-sized

## Filling ideas

1 carrot

spam

5 daikon radishes (called  
danmuji)

5 cups spinach

2 eggs

fresh cucumber

avocado slices

julienned and sauteed burdock  
root

portobello mushrooms  
kimchi

pickled vegetables

ham

imitation crab meat

baked or fried tofu

## *Equipment*

bamboo rolling mat

clean cloth or paper towel

cutting board

sharp chef's knife

# How to: kimbap

## How to cook kimbap:

**1**  Cook the rice.

**2**  julienne and cook meats

**3**  julienne and cook vegetables

**4**  Prepare danmuji

**5**  If adding spinach, blanch for 30 seconds and stir with a dash of sesame oil and soy sauce

**6**  Beat 2 eggs and cook then let cook and slice into strips.

**7**  Prepare your seaweed and rolling mat.

**8**  Roll and enjoy your meal!

## Kimbap versus Sushi

Rice usually seasoned with sesame oil

Always uses dried seaweed sheets

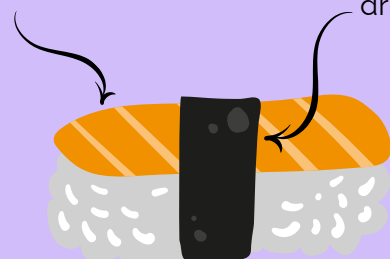
Typically rolls contain some kind of saw fish

Sometimes uses dried seaweed sheets

Usually contains fillings such as veggies, egg, ham, crab, and others

Does not contain raw fish

Rice is typically coated with vinegar



# How to: pork

## Learn your cuts



### Shoulder chop

**Other names:** Blade chops, blade steaks, blade-end pork loin chops, pork loin blade chops, pork shoulder steaks, pork shoulder blade steaks, pork steaks

**Where it's from:** The shoulder.

**What it looks like:** Shoulder chops have dark-colored meat, lots of fat and connective tissues, and some blade bone.

**What it tastes like:** While shoulder chops have loads of flavor, they also have a fair amount of tough gristle and bone. The meat has to be braised to be tender or tenderized before cooking.

**How to cook it:** While shoulder chops can be cooked over high heat if tenderized properly first, they have enough fat to withstand being braised in slow, moist heat to break down the connective tissues, and do well in the slow cooker.



### Rib chop

**Other names:** Center-cut rib chop, pork chop end cut, pork rib cut chop, rib end cut, rib pork chop

**Where it's from:** The rib section of the loin, from the shoulder to the middle of the loin (the rib bones attached to these chops are actually baby back ribs).

**What it looks like:** Large eye of lean loin meat and no tenderloin meat. There is a bone running along one side and sometimes a layer of fat on the outside. Rib chops from the blade end have more fat and connective tissue than chops from the shoulder end.

**What it tastes like:** The chops are very tender, have a little more fat than loin chops, and have a mild flavor.

**How to cook it:** Since the meat on these chops is lean, quick cooking like grilling, broiling, or sear-roasting are the best methods. Brining first will help keep these chops moist and tender.

# How to: pork

## Learn your cuts



### Loin chop

**Other names:** Center loin chop, center-cut loin chop, loin pork chop, pork loin end chop, porterhouse, top-loin chop

**Where it's from:** The hip and loin toward to the back of the animal. Depending on where they're cut from, the chops may have some pieces of tenderloin.

**What it looks like:** Loin chops cut toward the center of the loin will have a T-shaped bone that has loin on one side and tenderloin on the other. Sometimes the more tenderloin present, the higher the cost. Top loin chops will have no tenderloin.

**What it tastes like:** Very lean, very mild pork flavor.

**How to cook it:** Because tenderloin and loin cook at different rates, loin chops can be hard to cook properly since both are present. Like rib chops, they should be cooked quickly, so grill, broil, or sear-roast these chops, but be careful not to overcook them. Brining will also help with keeping the meat moist.



### Boneless chop

**Other names:** America's cut, pork loin filets

**Where it's from:** Usually toward the head of the loin above the loin chops, boneless pork chops are basically top loin or rib chops with the bones removed.

**What it looks like:** Lean meat, very little connective tissue or fat, no bones.

**What it tastes like:** The absence of bones to provide protection from overcooking and the lack of fat present usually around these bones means that these chops are less flavorful than their bone-in counterparts.

**How to cook it:** Cook boneless pork chops the same way as rib or loin chops — grilling, broiling, or sear-roasting. It is highly recommended that boneless pork chops are brined.

# How to: pork

## Learn your cuts



### Sirloin chop

**Other names:** Sirloin steak

**Where it's from:** This cheaper cut is from the hip area toward the back of the loin.

**What it looks like:** Contains some hip and backbone, with a higher percentage of bone than other chops; the meat is composed of various muscle groups.

**What it tastes like:** Lots of pork flavor, but tough unless braised.

**How to cook it:** Because of all the different muscles present, sirloin chops should be cooked over slow, moist heat, in the slow cooker, braises, or stews.

## Essential Tips for Perfectly Cooked Pork Chops

Thicker is better. Nowadays, pork is bred to be quite lean and can be very easy to overcook. Thicker pork chops are more forgiving, so try to purchase double-cut pork chops (which are cut twice as thick as thin ones) or ones that are at least 1 1/2 inches thick.

Brine. Brining helps to keep the meat moist and offer a bigger buffer against overcooking. Plus, it injects flavor into this mild-tasting meat!

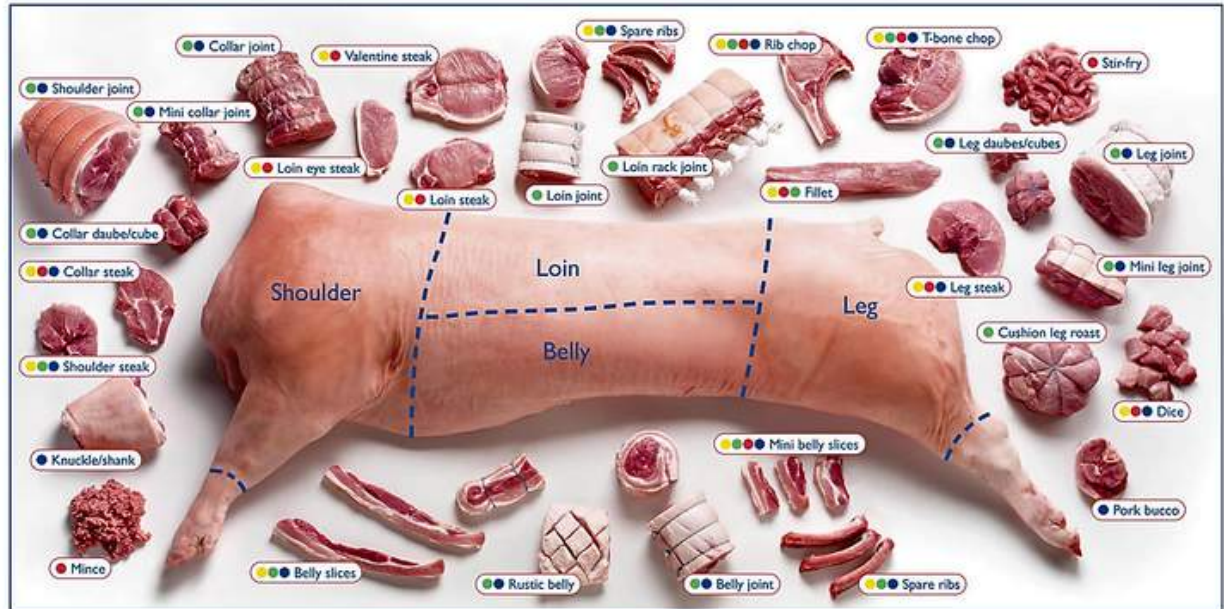
Don't overcook. For the quick-cooking loin and rib chops, be very careful not to overcook and dry out the meat. The USDA says to cook the chops between 145 and 160°F and let them rest a few minutes before serving.

Go for bone-in. The bone helps provide some protection from overcooking and also has some fat around it that keeps the pork juicier and tastier, so we prefer the bone-in chops.

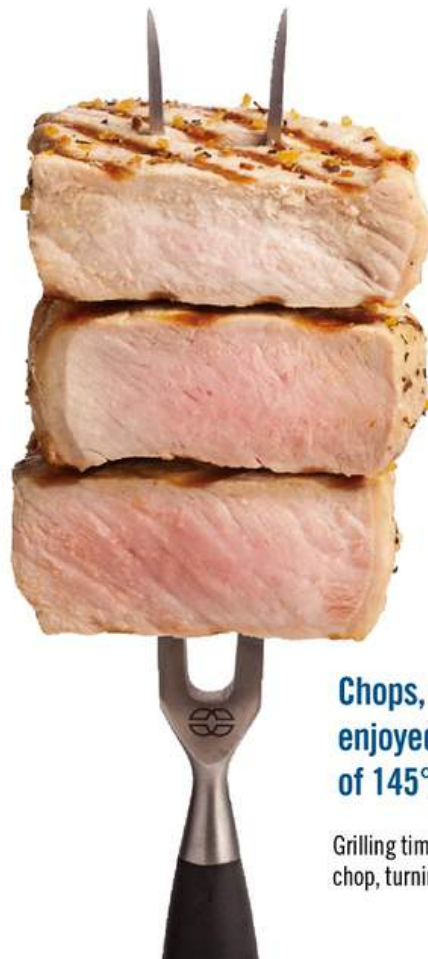
# How to: pork

## the **Pork Cuts** range

● Grilling & BBQ'ing  
 ● Roasting  
 ● Frying & Stir-frying  
 ● Slow Cooking



**ASK YOUR BUTCHER – THEY'RE THE EXPERTS!**



**160°F**

Grill for 11-12 minutes

**150-160°F**

Grill for 9-11 minutes

**145-150°F**

(recommended)

Grill for 8-9 minutes

**Chops, steaks and roasts are best enjoyed at an internal cooking temperature of 145°F with a 3-minute rest.**

Grilling times are based on a three-fourths to one-inch thick pork chop, turning once halfway through, and letting rest for 3 minutes.



# How to: seafood

## Composition and Structure

- The edible flesh of fish is like meat and poultry, consisting of water, protein, fats and a small amount of minerals, vitamins.
- Fish has very little connective tissue.

This is a very important difference between fish and meat. It means:

- Fish cooks quickly
- Fish is naturally tender

Moist-heat cooking is not used to tenderize but to provide moistness

- When cooked, fish tends to fall apart easily

## Special Problems in Cooking Fish

- Doneness and flaking

When fish is cooked it breaks apart into natural separations called "*flaking*".

Fish is often served overcooked, because of residual cooking after it is removed from the heats

- Observe these tests for doneness:
- If the fish just separates into flakes
- If there is bone, the flesh separates from the bone, and the bone is not pink
- The flesh has turned opaque or white (depending on the fish)

Do not overcook!

# How to: seafood

## **Cooking Fat and Lean Fish**

- Lean fish are low in fat (like flounder, sole, cod).
- Moist-heat methods
- Lean fish is well suited to poaching

**Dry-heat methods** - If broiled or baked, lean fish should be basted

**Dry-heat methods with fat** - Lean fish may be fried or sautéed. The fish gains added palatability from the added fat

- Fat fish are high in fat (like salmon, tuna, trout, and mackerel).

**Moist-heat methods** - Lean fish can be poached like lean fish

**Dry-heat methods** - Fat fish are well suited to broiling and baking. It removes excess oiliness.

**Dry-heat methods with fat** - Fat fish can be cooked in fat, but take care to drain before serving.

## **The most important concern with storage is temperature**

- All cooked fish should be stored at 300 to 340 F
- Keep moist

## **Prevent fish odors from transferring to other foods**

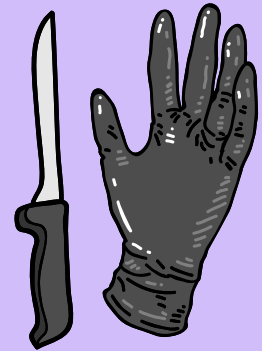
- Protect the delicate flesh from bruising and being crushed
- Storage time not to exceed 1 to 2 days, if fresh

# How to: seafood

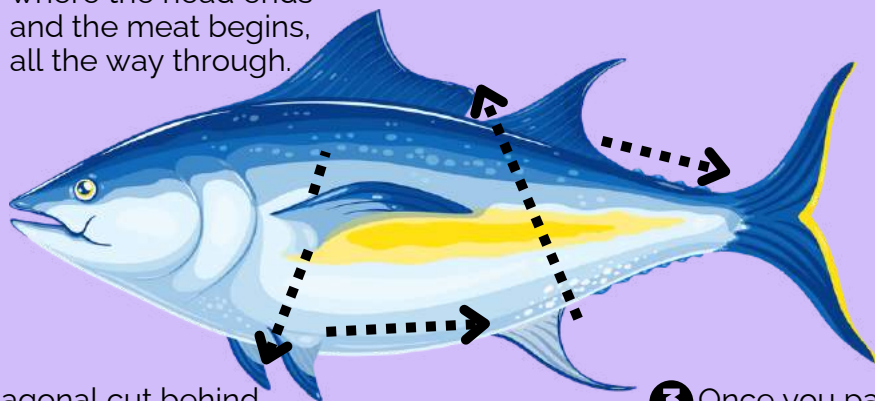
## Filleting a fish:

### Use the right tools for filleting a fish.

A fillet knife has a long, narrow blade, that thinly cuts and flexes for control. Fillet gloves protect your hands while dealing with a sharp knife and a slippery fish.



- 1 Make a single cut where the head ends and the meat begins, all the way through.

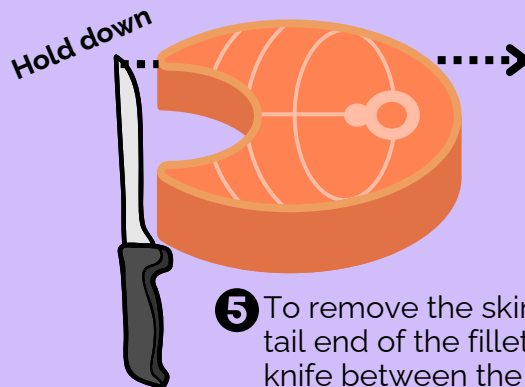


Diagonal cut behind the first fin

- 2 Insert the knife in about an inch, and run the knife down the side of the dorsal fin.

- 3 Once you pass the dorsal fin, push the knife all the way through. Use a downward pressure and cut all the way out to the tail.

## Repeat Steps 1-3 on the other side.



- 5 To remove the skin, hold down the tail end of the fillet, and run the knife between the skin and the meat towards the head (where it was, at least).

**Now your fish is ready!**

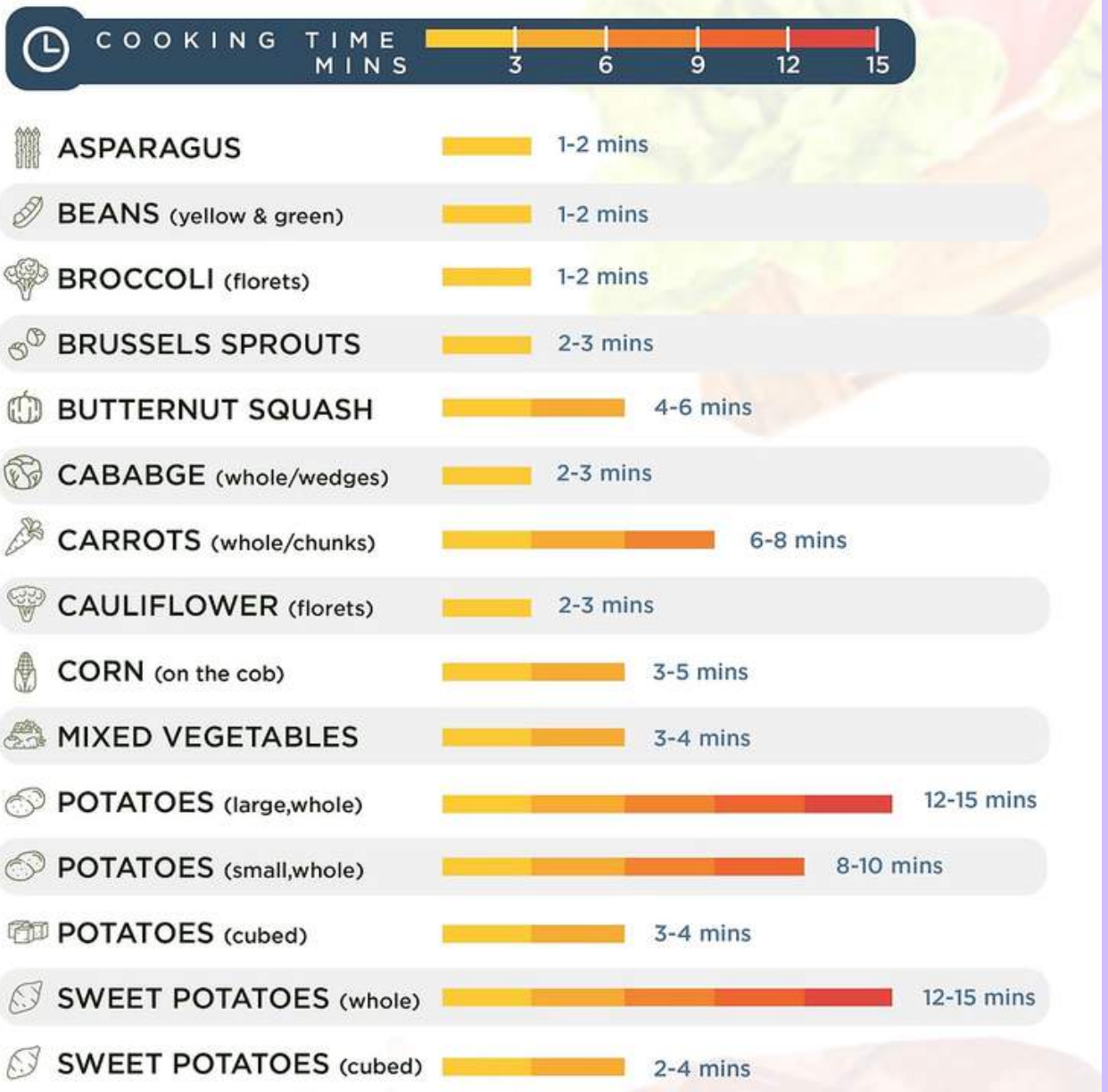


# How to: vegetables

## **Before we start:**

- Vegetables are full of nutrients that your body loves. Vegetables are bursting with antioxidants, vitamins, minerals, fiber, and phytonutrients. These nutrients help keep you healthy and avoid deficiencies (which make you feel really bad).
- Vegetables have a lot of volume, but not a lot of calories. So, they fill up your stomach without adding a lot of extra calories. This can help you control energy balance (calories in vs calories out), and help you maintain a healthy body weight, or lose body fat without feeling too hungry.
- Vegetables add fiber. Fiber not only helps us feel full, it feeds our intestinal bacteria, helps push things through our digestive tract, and helps to excrete unwanted waste products.
- Vegetables add water. Staying hydrated is good. The extra water also helps the fiber do its job.
- Vegetables add variety. With so many different kinds of veggies to try, learning to enjoy them can help you stick to healthy eating.

# How to: vegetables



# How to: stir-fry



## 1. Prepare all of the ingredients before turning on the heat.

Once the heat is on, things move quickly. Have your ingredients sliced and your liquids measured before you start and keep them close by. Be prepared to add things quickly, making sure each component is cooked properly.



## 2. Slice meat and vegetables for maximum surface area

The goal is to expose as much surface area as possible: vegetables are often sliced thinly on a sharp diagonal; aromatics like garlic and ginger are usually finely chopped; and meat is always sliced against the grain to increase tenderness. The greater surface area gives it all more contact with the heat and more flavour.



## 3. Use a wok or cast-iron pan

If you have a wok, always use it. A wok has a large surface area and retains heat very well, making it ideal for stir-fries. If you don't have a wok, opt for a cast-iron pan. As you add more ingredients, you want the pan to remain very hot and cast-iron pans will retain heat better than other materials. This makes it particularly important when cooking on an electric stove, because, compared to a gas flame, the element has more difficulty retaining heat.



## 4. The aromatics should be cooked low and slow

There is one exception to cooking at a high heat, and that's when you're using finely chopped aromatics such as ginger, garlic, lemongrass or green onions. They should be cooked first, at a lower heat. If added to a wok or pan on high heat, they will burn quickly and taint the flavour of the stir-fry. As these items are used to flavour the oil, heat the oil over medium heat and cook the aromatics gently. Make sure to spoon them out of the pan before increasing the heat. (They can be added again at the end if desired.)

# How to: stir-fry



## 5. But the stir fry needs to be cooked fast and hot

Your heat should be set to high—but it still needs to be controlled (you don't want it smoking). Heat your wok or pan before adding the oil, as this step will help prevent sticking. Once the oil is added, roll it around the pan to coat it well. Select oil with a high smoke point. (Peanut oil works very well for stir-fries.)



## 6. Add ingredients according to cook time

Make a plan and decide what order to add the ingredients into the pan, based on their cook time. (Some items will take as little as 30 seconds to cook.) Don't be afraid to cook the meat first and take it out of the pan, to be added again at the end. This will allow you to cook the vegetables without overcooking the meat. Don't expect the meat to appear browned—in stir-fries the meat is only just cooked through, so there's no time for caramelization



## 7. Stir your ingredients often

Your ingredients should cook fast, but to ensure that everything is cooked evenly, stir constantly (hence the name). It's important to move the food in and out of the centre of the pan quickly.



## 8. Thicken the stir-fry sauce

Some recipes will call for a mixture of cornstarch and water to thicken the sauce at the end of a stir-fry. If this is the case, make sure that they are mixed until smooth to prevent clumping when added.



## 9. Always add a garnish










Serve stir-fries with a steaming bowl of rice or noodles, but don't forget to add a fresh element: herbs, sprouts or fresh citrus wedges make a big difference.

# How to: stir-fry

## GUIDE TO STIR-FRYING

Our guide to stir-frying teaches you the basics of this quick and healthy cooking method. With this simple cooking formula, you'll be able to get creative and make a variety of stir-fried dishes in your own home kitchen without ever having to order take-out again!

### CHOOSE A PROTEIN 1 POUND

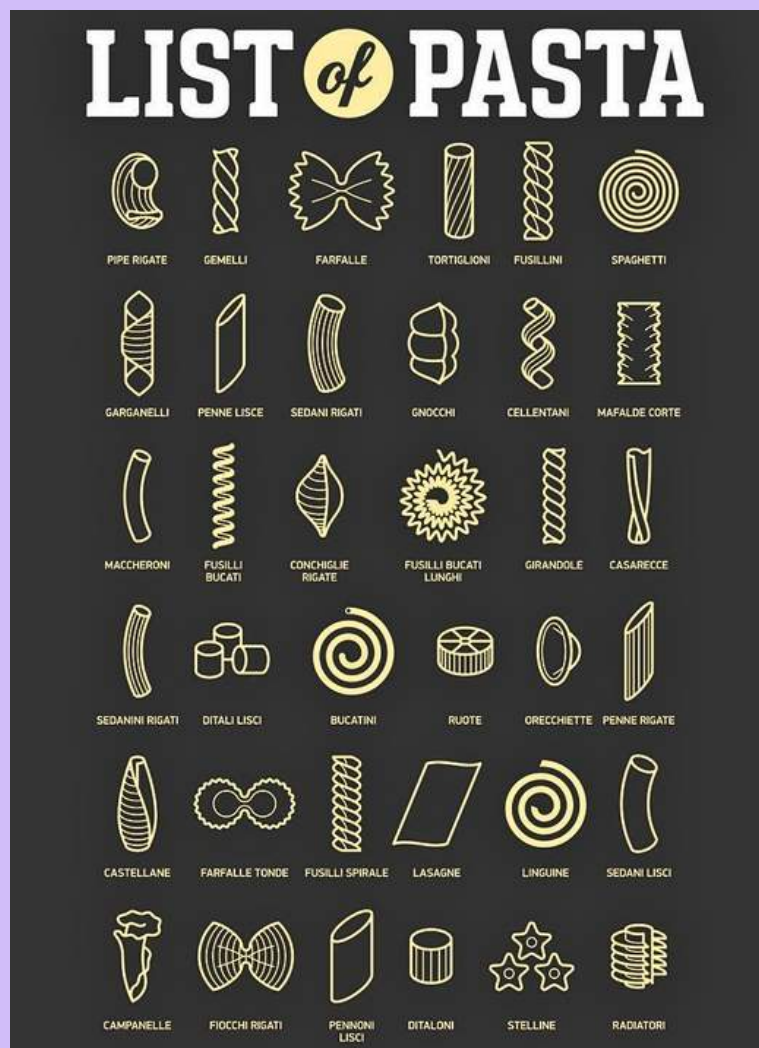
LAND	SEA	VEGETARIAN
 <p><b>Boneless, skinless chicken thighs or breasts</b> <i>Cubed</i></p>	 <p><b>Shrimp</b> <i>Defrosted, rinsed, and patted dry</i></p>	 <p><b>Extra-firm, vacuum-packed tofu</b> <i>Cubed or sliced</i></p>
 <p><b>Pork tenderloin</b> <i>Cubed</i></p>	 <p><b>Squid or calamari</b> <i>Sliced</i></p>	 <p><b>Seitan</b> <i>Chopped</i></p>
 <p><b>Flank or skirt steak</b> <i>Sliced against the grain</i></p>	 <p><b>Firm fish like tilapia, mahi mahi, or salmon</b> <i>Cubed or sliced</i></p>	 <p><b>Tempeh</b> <i>Chopped</i></p>

### MAKE STIR-FRY SAUCE

BASIC SAUCE	CURRY SAUCE	ORANGE-GINGER SAUCE
 <p>3 cloves garlic 3 Tbsp soy sauce 1 Tbsp rice vinegar 1 Tbsp brown sugar 1/2 cup stock/water 1 1/2 Tbsp cornstarch</p>	 <p>1 1/2 Tbsp curry paste 1 1/2 Tbsp fish sauce 2 tsp brown sugar 1/2 cup stock/water 2 tsp cornstarch</p>	 <p>1 inch ginger 3 Tbsp soy sauce 1 Tbsp rice vinegar 1/2 cup orange juice (1 large orange) 1 1/2 Tbsp cornstarch</p>
BLACK PEPPER SAUCE	SWEET & SOUR SAUCE	
 <p>3 Tbsp soy sauce 2 tsp rice vinegar 1 tsp brown sugar 1/2 cup stock/water 1 tsp to 1 1/2 tsp black pepper 1 Tbsp cornstarch</p>	 <p>1 Tbsp soy sauce 2 Tbsp ketchup 1 Tbsp rice vinegar 1 Tbsp brown sugar 2/3 cup stock/water 1 1/2 Tbsp cornstarch</p>	



# Know Your Pasta



# Know Your Pasta

## **Pasta with color and flavor**

Color is not all that is required.

In the view of many pasta lovers, pasta should taste of pasta. They prefer to use the sauce to add the flavor of tomatoes or mushrooms or whatever, rather than add it to the pasta itself, and they reject colored pasta on the same grounds. In fact, however, colored pasta offers the creative cook many new opportunities for variations on a theme.

## **Green pasta dough**

Green is most frequently used for coloring for pasta. This may be due to the fact that green is the color that best sets off a tomato or white sauce. The production process is far from simple, since the color has first to be taken from the spinach. That is the principal coloring agent. This is done by making a spinach pulp, which involves extracting chlorophyll from the spinach. Chlorophyll has virtually no taste and is therefore well-suited for use in sauces, stuffings, and even sweet dishes. Green pasta should not be confused with spinach pasta, which is also green and made with finely pureed spinach and has its own distinctive flavor.

### **For the spinach pulp**

1/2 lb. spinach + 2-3 tbsp water

### **For the pasta dough**

1 1/4 cups all-purpose flour

5-6 egg yolks

1 tbsp olive oil, 1/2 tsp salt

3 tbsp butter

freshly grated nutmeg and salt



# Know Your Pasta

1



Heat the spinach juice to about 150°F, but do not let boil. Skim off the pulp with a small strainer as it rises to the surface.

2



Pour the flour onto the wok surface, shape into a mound, and make a hollow in the middle. Add the egg yolks and the spinach pulp, pressing it through the strainer.

3



Using first a fork, and then your hands, mix all of the ingredients into a smooth dough.

4



Roll the dough into a ball, and cover it with plastic wrap, then let it rest for 1 hour.

# Know Your Pasta



## HERB PASTA DOUGH

This pasta has an intense herby flavor. A single herb, such as basil, can be used instead of a mixture.

*1/2 cup mixed fresh herbs: sage, thyme, parsley, chives*  
*2 cups all-purpose flour*  
*2 eggs, 1 egg yolk*  
*2 tablespoons olive oil*  
*1/2 teaspoon salt*  
*water as required*

Mince the herbs. Prepare the dough as described on page 41, adding the herbs to the ingredients in the hollow.



## GARLIC PASTA DOUGH

Garlic makes the most strongly flavored pasta of all.

*3 garlic cloves*  
*1/2 teaspoon salt*  
*2 tablespoons olive oil*  
*2 cups all-purpose flour*  
*2 eggs, 1 egg yolk*  
*2 tablespoons olive oil*  
*water as required*

Crush the garlic with the salt and oil in a mortar and pestle. Prepare the dough as described on page 41, adding the garlic paste to the ingredients in the hollow.



## TOMATO PASTA DOUGH

Pasta with a fresh aroma and striking color.

*2 cups all-purpose flour*  
*3 to 4 egg yolks, 3 tablespoons clarified butter*  
*1/2 teaspoon salt*  
*2 to 2 1/2 tablespoons tomato paste*  
*about 3 tablespoons water*

Prepare the dough as described on page 41, with the butter replacing the oil and the tomato paste added with the yolks.



# Know Your Pasta



## HOT-PEPPER PASTA DOUGH

This pasta has a hot, spicy flavor.

- 6 small dried hot red chili peppers
- 2 cups all-purpose flour
- 2 eggs, 1 egg yolk
- 2 tablespoons olive oil
- 1/2 teaspoon salt, water as required

Slit open the chilies, remove the seeds, and mince the pods or grind them in a mortar and pestle. Prepare the dough as described on page 41, adding the chilies to the hollow in the flour.

## SHRIMP PASTA DOUGH

Aromatic pasta, with a delicate, unmistakable flavor. The recipe uses dried shrimp, which should not be confused with the dried shrimp used as a seasoning in Asian cooking.

- 1 ounce dried shrimp
- 2 cups all-purpose flour
- 2 eggs, 1 egg yolk
- 2 tablespoons olive oil
- 1/2 teaspoon salt
- water as required

Mince the shrimp. Prepare the dough as described on page 41, adding the shrimp to the ingredients in the hollow.

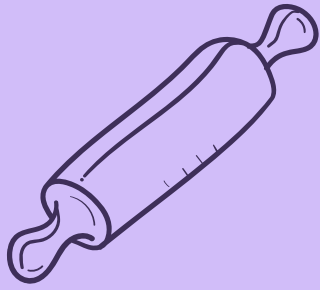
## BLACK PASTA DOUGH

The color is the focus of attention here, and can inspire cooks to create dishes full of visual contrast. None of the rich color is lost during cooking: the water remains completely clear. Squid ink, which has virtually no taste, can be bought in gourmet shops, or extracted from the ink sacs of fresh squid.

- 2 1/3 cups all-purpose flour
- 2 eggs
- 2 teaspoons olive oil
- 1/2 teaspoon salt
- 3/4 ounce squid ink

Prepare the dough as described on page 41, adding the squid ink with the eggs.





# Course Three

## Baking



# Baking Tips

- **STICK TO THE RECIPE.** The first and foremost thing you should be remembering, besides the basic ingredients to your recipe, is to always and no matter what blindly following the given recipe. If it asks you to preheat your oven to a 180°C, do that! If it asks you to sift your flour, do that! Follow each step and in the respective order the recipe is asking you to. Dessert recipes are actually simple to follow, and they have been tried and tested before being posted, so trust that the order holds a lot of significance. Sticking to recipes is a favor you'll be doing to your own self!
- Read through your recipe beforehand to allow time for chilling, baking, and cooling.
- Always test your oven temperature and bake time with a small batch before baking entire recipe to ensure perfectly baked goods
- Prepare your ingredients beforehand; allow time for cold or frozen ingredients to defrost to room temperature.
- Bring cold ingredients to room temperature before baking, including eggs unless otherwise stated.
- Measure ingredients correctly using appropriate wet and dry measuring cups or spoons.
- Always use real butter when called for in a recipe.

# 10 Tips for Beginner Bakers

1. Read the recipe in its entirety.
2. Pull out all of your needed ingredients and tools beforehand.
3. Bring the ingredients to room temperature.
4. Properly prepare cookie sheets or cake pans.
5. Preheat the oven.
6. Use liquid and dry measuring cups.
7. Sift dry ingredients.
8. Crack eggs in a separate bowl.
9. Combine ingredients according to the recipe.
10. Set a timer.

## Oops! Moments





# Baking Tips

## Baking Do's and Don'ts

**DO** ✓

use a set of proper measuring cups and spoons



**DON'T** ✗

ignore directions



1 cup sifted all-purpose flour  $\neq$  1 cup all-purpose flour, sifted

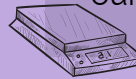
**DO** ✓

use liquid measuring cups for liquids and dry measuring cups for solid ingredients



**DON'T** ✗

confuse ounces (weight) with fluid ounces (volume)



**DO** ✓

spoon flour into the measuring cup and then level it off



**DON'T** ✗

use your measuring cup to scoop out flour



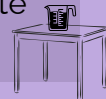
**DO** ✓

pack brown sugar into measuring cups and spoons



**DON'T** ✗

set measuring cups on a flat surface to get an accurate reading



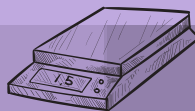
**DO** ✓

coat your cups and spoons with nonstick cooking spray before measuring sticky substances like honey, agave, and maple syrup



**DO** ✓

invest in a digital scale as it's the most accurate way to measure ingredients



**DON'T** ✗

forget to zero out the scale after adding a bowl to hold your ingredients and set it to the unit of measurement your recipe calls for

**DO** ✓

get busy baking!



**DON'T** ✗

be intimidated- it's supposed to be fun, after all



# Baking Tips

## High Elevation Adjustments



### for cake and cake-like baked goods

cupcakes, quick breads, muffins, coffee cakes, Bundt cakes & some brownies

	sea level	3k-5k	5k-6.5k	6.5k-8k	10k
<b>Oven Temp</b> ↑ as altitude ↑	Recipe Temp ex: 350°F	+10°F 360°F	+15°F 365°F	+20°F 370°F	+25°F 375°F
<b>Baking Time</b> ↓ as altitude ↑	per 30 min 30 mins	-1 to 2 mins 28 to 29 mins	-3 to 5 mins 25 to 27 mins	-6 to 8 mins 22 to 24 mins	-8 to 9 mins 21 to 22 mins
<b>Leavening</b> ↓ as altitude ↑	per 1 tsp 1t	- 1/8 t 7/8 t	- 1/2 t 1/2 t	- 3/4 t 1/4 t	- 3/4 t 1/4 t
<b>Flour</b> ↑ as altitude ↑	per 1 cup 1c	+ 2 T 1 1/8 c	+ 3 T 1c, 3T	+ 4 T 1 1/4 c	+ 4 T 1 1/4 c
<b>Liquid</b> ↑ as altitude ↑	per 1 cup 1c	+ 1 T 1c, 1T	+ 2 T 1 1/8 c	+ 3 T 1c, 3T	+ 3 T 1c, 3T
<b>Sugar</b> ↓ as altitude ↑	per 1 cup 1c	- 1 T 3/4 c, 3T	- 2 T 7/8 c	- 3 T 3/4 c, 1T	- 3 T 3/4 c, 1T

Identify your elevation and make the altitude adjustment noted in that column for the related ingredient. Do not add the columns together.

### Brenda's Tips:

- Don't assume sea level recipes won't work. If they don't, adjust as follows, trying 1 change each time you make the recipe. To retain the recipe's flavor, only make adjustments the are critical for success
- Oven Temp and Baking Time are inversely connected
- Leavening = baking power and/or baking soda. If a recipe has both, change both.

# 10 Common Mistakes Beginners do in Baking

## Baking In An Oven Not Yet Preheated

Most often people forget to pre-heat the oven. They straight away place the baked goods and preheat them while in there. No, this messes up with the chemistry of baking and can create a total disaster. Wait until the oven is completely preheated before baking.

## Not Measuring Ingredients Correctly

Your ingredient measurements have to be precise to get the chemical reactions you need and to score that perfect, consistent result every time. Be it using metric measures with a cup or spoon, or while using a weighing scale to weigh in grams.

## Opening The Oven Too Often

Opening the oven lets hot air flow out and decreases the temperature of the oven. It could even cause cakes to collapse if you open the oven too often. Unless you're rotating your baked goods or checking for doneness, it's best to observe the baked goods through the window to avoid letting outside air into the oven, which will affect the overall temperature.

## Your Cake Is Too Dry Or Too Wet

Baking for too long will result in a dry cake, while baking too little can result in a mushy center. If your cake comes out dry, poke some small holes in the top and brush the cake with simple sugar syrup, which will permeate the cake and give it some much-needed moisture. If the outside of your cake appears perfectly baked but the center still looks wobbly, decrease the oven temperature by 20-25 degrees celsius, cover the top of your cake with foil, and continue to cook for a few minutes until a toothpick through the middle comes out clean.

# 10 Common Mistakes Beginners do in Baking

## The Flour Isn't Incorporating Smoothly

If your batter or dough is taking on an odd texture (lumpy, uneven, too stiff, too runny), then you could have made either of these mistakes—using the wrong amount of flour (measuring it incorrectly) or not sifting the flour and thereby causing it to become lumpy or mix unevenly.

## Ingredients Are At Wrong Temperature

When a recipe calls for room-temperature butter, milk or eggs, it's important to not bypass the temperature step in order to save time. While it might be tempting to zap your ingredients in the microwave to speed up this process, ultimately that will just result in uneven heat levels and too-high temperatures.

## Egg Whites Aren't Getting Fluffy

If you've been whipping away at your eggs for some time and they're still not developing any kind of peak, there are a few possible issues to blame. Eggs for whipping should be as fresh as possible and at room temperature; cold eggs are unlikely to whip well. As for your whisk and bowl, both should be completely dry before whipping. Any added water can throw off the chemistry of the eggs and prevent them from hardening.

## Products Are Not Baking Evenly

The heat within your oven is unlikely to be perfectly distributed throughout, with certain parts of the oven containing hotter pockets of air. Because of this, if your baked goods remain in the same position throughout the baking process, they will most likely bake unevenly. To avoid this, make sure to rotate your goods at least once throughout the baking process to make sure they're being baked evenly.

# 10 Common Mistakes Beginners do in Baking

## Cakes Are Not Baking With A Flat Top

When making layered or decorated cakes, it's essential that each layer is flat and even. To avoid your cake rising in the center and taking on a domed shape during baking, wrap an even-bake strip or damp towel around the edge of your cake pan, which will prevent the top from rising, and leave you with a smooth, level cake.

## Cookies Aren't Getting Flat

The secret to a perfectly shaped cookie is the temperature. Cookie dough that's too cold will result in rounder, thicker cookies that won't have a satisfying crunch. However, cookie dough that's too warm can spread too much while baking. Allow your dough to rest at room temperature for about 30 minutes before baking, and cook on a tray that is at room temperature, not chilled.

# How to Read Recipes When Baking

Cooking and Baking are two different culinary skills, as we have stated often. When it comes to reading a baking recipe you have to know what you are doing. Step by step. Unlike with cooking, when it comes to baking, following the recipe step by step is a guaranteed success.

**Learn how to properly read the recipe first.**

**Let's go step by step:**

- *Respect the Order*

Did you know that a recipe's ingredient list is usually set up by order of use?

- *The Comma*

The comma is everything when it comes to baking measurements. Every cut, chop, or dice instruction after a comma in an ingredient list is to be done after the ingredient is measured.

For example: 4 ounces bittersweet chocolate, coarsely chopped. This means use a four ounce bars of chocolate, which it's already measure hence the weight. Then you chop it. Place it in a bowl and follow the rest of the instructions. The recipe instructions does not mean chop a bunch of chocolate and measure out 4 ounces.

**Aren't ounces the same before and after?**

Where this gets tricky: 1 cup sifted flour vs 1 cup flour, sifted.

*Respect the comma.*

**NOTE:** The absence of a comma is also important.

For example: 1 cup chopped walnuts.

This means get some walnuts. Chop them. Measure the chopped walnuts in a 1-cup measuring cup so you can add them to whatever you're creating. One cup of chopped walnuts is very different that one cup of walnuts, chopped.

# How to Read Recipes When Baking

## *Pack, Soften and Preheat*

- Recipe lists often request that brown sugar be 'packed'. Take the back of a spoon and firmly press the sugar into the measuring cup. Add more sugar and pack until sugar is flush with the top of the measuring cup.

## *Soften your butter*

- Soften butter by allowing it to rest at room temperature for about 1 hour. Don't cheat yourself or the butter by not allowing the butter to soften before combining it with sugar and eggs. Just DON'T.

## *Preheat the oven.*

- Don't just set it at 350 degrees. A lot of people do this. Go according to the temperature provided by the recipe. Certain bake goods do not do great at high temperature just like others don't do well at low temps!

## *Is it done?*

- When do you know if a recipe is done? In the recipe instructions doneness is usually described by a time range and visual characteristics.

*Example:* Bake brownies for 30 to 33 minutes, or until the top is dull and a toothpick inserted into the center comes out clean.

The time and description should give you confidence by providing you with an estimated time and appearance. Trust the process and trust yourself.

# Baking Terms



## Batter

A batter is an unbaked mixture that is thin enough to pour or scoop, but cannot be rolled out like a dough.

Baked goods that are made with batters: muffins, quick loaf breads, cakes, cupcakes, brownies.

Tips for Making a Batter: Take care not to over-mix batters or too much gluten will develop, creating a tough baked good. Mix just until all of the ingredients are incorporated.



## Caramelize

Caramelization refers to the change sugar goes through when it is heated and allowed to brown. When sugar is heated, it becomes liquid and then begins turning brown in color. This is called caramelization. Caramelization creates a more complex flavor and also becomes much less sweet than pure sugar.

When it's Used: Sugar is caramelized for making sugar decorations as well as for dessert sauces and candies.

Tips for Caramelizing Sugar: Extra caution should be taken when caramelizing sugar due to the extremely high temperatures.



## Cut in

Cutting in fat refers to when pieces of solid fat, typically butter, shortening, or lard, are worked into flour and other dry ingredients until the fat is starting to coat the flour and the pieces of fat are very small. This process is typically done by working a tool called a pastry cutter or pastry blender through the fat and flour.

When it's Used: Fat is cut into flour when making baked goods that result in a very flaky final product, such as for biscuits, scones, and pie crusts. The process of coating the flour in fat protects the proteins from forming too much gluten. This process also disperses small pieces of fat throughout the dough which will melt in the oven creating pockets of steam, aka flakiness.

Tips for Cutting in Fat: What a recipe calls for fat to be cut into the flour, it is essential that the fat is very cold. This will produce the most flakiness in the oven.



## Dough

A dough is a thick unbaked mixture that can be rolled out or shaped by hand. It is thicker than a batter and can be shaped.

Baked goods made with doughs: yeast breads, biscuits, scones, cookies, pie and tart crusts.



# Baking Terms



## Emulsion

An emulsion is a forced mixture of two ingredients that are normally unmixable (for instance, water and fat). When fat and water are emulsified particles from the two substances are suspended within each other instead of quickly separating.

**When it's Used:** Many common baking ingredients are already emulsions. Milk and butter are perfect examples of ingredients that are already emulsified. There are also many instances in baking where it is important not to break these emulsions such as when adding eggs into creamed butter. If the eggs are too cold it can cause the butter to break and the eggs will not emulsify into the butter. An emulsion is also created when making ganache or hollandaise sauce.

**Tips for Creating Emulsions:** It is important to slowly incorporate the two liquids together when making an emulsion.



## Folding

Folding is a technique used to incorporate two mixtures together in a very delicate way. This technique serves several functions: it reduces gluten development and also prevents whipped egg whites or whipped cream from deflating when being mixed into another component.

**When it's Used:** Folding is used particularly when folding a meringue or whipped cream into a batter or another ingredient.

**How to Properly Execute Folding:** When folding, a rubber spatula should be used. The delicate mixture should be added into the heavier mixture. Add about 1/4th of the delicate ingredient into the bowl and stir it in completely to lighten the batter. Then, add about 1/2 of the rest of the delicate mixture and use the spatula to cut down through the two mixtures to the bottom of the bowl, bringing the ingredients at the bottom of the bowl up. Turn the bowl 90 degrees and continue with this motion until the ingredients are incorporated.



## Knead

Kneading is the process where dough made with wheat flour is worked together. As the dough is kneaded, the gluten strands align and stretch, building strength and elasticity in the dough.

**When Kneading is Used:** This process is most commonly used when making yeast bread.

**Tips for Kneading:** Kneading can be done by hand or with a dough hook on a stand mixer.

# Baking Terms



## Leavening

In baking the word leaven refers to the process of a baked good rising.

Types of Leavening:

Chemical leavener (baking soda and baking powder)

Natural leavener (wild yeast and commercial yeast)

Forced leavener (when air is used in combination with an ingredient to rise a baked good)



## Gluten

When the proteins found in wheat flour are hydrated, they bond together forming what is referred to as gluten. As the hydrated flour is worked more, the gluten strands begin to align, becoming more and more elastic.

Why Gluten Development Matters: Gluten development is what holds traditional baked goods together and creates the main structure. In tender baked goods, such as cakes and flaky pastries, it is important to limit this process so that you don't end up with a tough end result. For chewy baked goods, such as a crusty bread, it is important to really develop the gluten structure.

Tips for Managing Gluten Development: Different varieties of flour contain varying levels of protein content. Lower protein flours, such as cake flour, are more desirable for delicate baked goods, while higher protein flours, such as bread flour, are more desirable for chewy baked goods.



## Peaks

What are Soft, Medium, and Stiff Peaks?: In baking, peaks refer to the stiffness of whipped cream or whipped egg whites. As cream or egg whites are whipped, more air is incorporated and the mixture becomes thicker. Soft peaks barely hold their shape. Medium peaks hold shape but the peaks curl at the tip. Stiff peaks stand straight up and do not curl over.

When Peaks Matter in Baking: When whipping egg whites or cream.

Tips for Whipping Cream and Egg Whites: Cream needs to be cold in order to hold a web of air and thicken while egg whites whip up much quicker when they are at room temperature or slightly warm.

# Baking Terms



## Proofing

Proofing refers to the final rise a yeast dough goes through before it is baked. Sometimes the word proof is used interchangeably with the word fermentation because it is a continuation of the fermentation process.

When Proofing is Used: When making a yeast bread or pastry.

Tips for Proofing: When proofing a yeast bread, find a warm spot in your kitchen. Next to a preheating oven can be the perfect spot.



## Score

Scoring refers to shallow cuts made on unbaked dough. Scoring is used to control where bread dough will split as well as to release steam out of filled pastries. It can also be decorative.

When Scoring is Used: In bread making and some filled pastries like double crust pies or hand pies.

Tips for Scoring: When scoring bread dough or pastries, a very sharp knife or bread lame is the best tool. This will allow you to cut the dough in clean lines and not tear it.



## Sift

Sifting is a process of forcing flour and other dry ingredients through a fine mesh (a sifter or sieve) to break up any lumps and to aerate the ingredients.

When Sifting is Used: Sifted flour is much lighter and incorporates into batter and dough more easily. Flour and other dry ingredients should be sifted when making light and tender baked goods such as cakes and delicate pastries. Ingredients that tend to clump, like powdered sugar and cocoa powder, should also be sifted.

Tips for Sifting: Ingredients should always be sifted after it is measured unless otherwise specified by a recipe. After dry ingredients are sifted together use a whisk to thoroughly combine them.

# Baking Terms



## Softened

When a recipe calls for butter to be “softened” the butter should be at a cool room temperature, somewhere between 68-72°F (20-22°C).

When Softened Butter is Used: Softened butter is used when it will be creamed with sugar in a recipe. The butter needs to be softened so that it will hold a web of air after being beaten with the sugar.

Tips for Softening Butter: Butter can easily be softened by being left to sit out at room temperature for 30-45 minutes. Butter will soften more quickly if it is cut up into small pieces.

# Baking Methods



## Creaming Method

This type of recipe will say things like “cream” the butter and sugar or “beat the butter and sugar till pale and creamy”. Cakes made using this method will first cream the butter together with the sugar, and then the eggs are added one by one, and finally the flour (which is usually added alternatively with a liquid).

To cream butter, start with softened butter. Literally beat the butter in your mixer until it changes colour and becomes lighter or pale. The butter will eventually lose its buttery taste and become creamier.

Why is this such an important baking technique? Creaming the butter with sugar not only helps the sugar to “dissolve” into the butter and be spread evenly through the batter; it also aerates (adds air) to the butter – giving a lighter texture to bakes.



## Rub In Method

This method is often used in bread and pastry making. The recipe will begin with the instruction to “run the butter into the flour”.

To do this, simply use your fingertips to rub the butter into the flour until it begins to look like crumbs. This rubbing in will coat the flour in a fine layer of butter, which helps give a pastry or bread the correct texture when baking



## Hot Milk Method

This type of recipe calls for the butter and liquid to be boiled together before being added to the flour. Cupcakes and old fashioned hot milk puddings are made using this method.



## All in one method

This one is as easy as, well, pie. All the recipe ingredients are mixed together in one go.



## Hot Stone Baking

A method of baking that uses a hot stone to evenly distribute high heat into breads and other baked goods.

# Baking Methods



## Blind Bake Method

Pies or tart recipes will ask you to “blind bake” your pastry. This means that you need to precook your pastry before adding the filling to prevent the pastry from becoming soggy.

To bake blind, follow the steps below:

Roll the pastry out slightly larger than the pan.

Use a rolling pin to lift the pastry and position it over the pan.

Leave an overhang of pastry around the sides of the pan.

Roll the rolling pin over the top to trim off the excess pastry.

Lightly press the pastry into the pan using your fingertips and prick the base of the pastry case all over with a fork.

Place a sheet of baking paper on top of the pastry and fill the middle with baking beans, dried pulses or rice. (The baking beans or rice are added to the baking paper to add weight to the pastry shell and help hold it in place as it bakes.)

Bake the pastry crust for about 15 minutes in a hot oven or until the pastry is firm.

Remove the beans and the paper and cook for another 5 minutes, or until the pastry is golden brown and crisp.



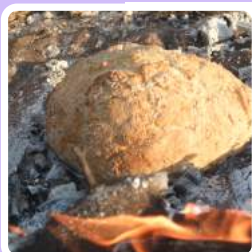
## Oven Baking

The most common form of baking, relying on an oven to trap heat in an enclosed space with the dough or batter.



## Steam Baking

A common form of baking in the UK, steaming entraps heat using a small amount of water in tight-fitting lid and pan to cook baked goods from crumpets to cakes.



## Hot Ash Baking

A primitive form of baking over a bed of fiery ash, typically used to cook flat breads and cakes.



## Grill Baking

A hybrid method of cooking that begins on the grill and is finished in the oven—or vice versa—to infuse baked goods with a slightly smoked or charred flavor.

# Measurements

When it comes to baking precise measurements is a must! We cannot advice this enough. Don't guess, estimate or half a measure unless you need to cut a recipe in half.

## KITCHEN CHEAT SHEET

THE HANDY REFERENCE GUIDE FOR ANYONE WHO LOVES TO COOK  
*for the uk*

---

### METRIC CONVERSION

°

#### OVEN TEMPS

Gas	°F	°C	
½	250	120	VERY SLOW
①	275	140	
②	300	150	SLOW
③	325	170	
④	350	180	MODERATE
⑤	375	190	
⑥	400	200	MOD. HOT
⑦	425	220	
⑧	450	230	HOT
⑨	475	240	VERY HOT

### Weights

g
oz

IMPERIAL	METRIC	IMPERIAL	METRIC
½ oz	15g	10oz	285g
¾ oz	20g	11oz	310g
1oz	30g	12oz (¾lb)	340g
2oz	60g	13oz	370g
3oz	85g	14oz	400g
4oz (½lb)	115g	15oz	425g
5oz	140g	16oz (1lb)	450g
6oz	170g	24oz	680g
7oz	200g	32oz (2lb)	0.9kg
8oz (½lb)	230g	48oz (3lb)	1.4kg
9oz	255g	64oz (4lb)	1.8kg

1kg = 35oz/2.2lbs

°C × 1.8 + 32 = °F

°F - 32 ÷ 1.8 = °C

1oz = 28.35g

1g = 0.035oz

## LIQUIDS

### Spoons

- 1 teaspoon = 5ml
- 1 dessertspoon = 10ml
- 1 tablespoon = 15ml

PINT	METRIC	CUPS	FLOZ.
	100ml		3½
	125ml	½	4½
¼	150ml		5
	200ml		7
	250ml	1	9
½	275ml		10
	300ml		11
	400ml		14
	500ml	2	18
1	570ml		20
	750ml	3	26
1½	1.0L	4	35
2	1.1L		40
	1.3L	5	46
3	1.7L		60
	2.0L	8	70

### CUPS

ONE CUP	IMP.	METRIC
Flour	5oz	140g
Caster Sugar	8oz	225g
Brown Sugar	6oz	170g
Butter	8oz	225g
Sultanas/Raisins	7oz	200g
Currants	5oz	140g
Golden Syrup	12oz	340g
Uncooked Rice	7oz	200g
Grated Cheese	4oz	110g

### Water

Boils at: 100°C 212°F

Freezes at: 0°C 32°F

1 Litre = 1.76 Pints

1 Pint UK = 568 ml

1 Pint US = 16 fl oz

1 fl oz = 28.41 ml

1 ml = 0.035 fl oz

1 Cup US = 250 ml

All metrics and conversions are for the UK. Conversions have been rounded for ease of use.

# Measurements

When it comes to baking precise measurements is a must! We cannot advice this enough. Don't guess, estimate or half a measure unless you need to cut a recipe in half.

**HANDY BAKING CONVERSIONS & EQUIVALENTS**

**BUTTER**  
 1 STICK OF BUTTER = 8 TABLESPOONS = 1/2 CUP

**BUTTER**  
 4 STICKS OF BUTTER = 32 TABLESPOONS = 2 CUPS

**EGGS**  
 1 LARGE EGG = 1 TABLESPOON YOLK = 2 TABLESPOONS WHITE

**EGGS**  
 1 CUP = 6 LARGE EGGS = 6-8 MEDIUM EGGS = 7 SMALL EGGS

**LEMONS**  
 1 LEMON = 1-3 TABLESPOONS JUICE = 1-1 1/2 TEASPOONS ZEST

**LEMONS**  
 4 LARGE LEMONS = 1 CUP JUICE = 1/4 CUP GRATED ZEST

**CHOCOLATE**  
 CHOCOLATE 1 OUNCE = 1/4 CUP GRATED

**CHOCOLATE CHIPS**  
 CHOCOLATE CHIPS 6 OUNCES = 1 CUP

**COCOA**  
 COCOA 1 POUND = 4 CUPS

**FLOUR**  
 1 CUP OF ALL PURPOSE FLOUR = 4.5 OUNCES OR 128 GRAMS

**FLOUR**  
 1 CUP OF BREAD FLOUR = 4.8 OUNCES OR 136 GRAMS

**ROLLED OATS**  
 1 CUP OF ROLLED OATS = 3 OUNCES OR 85 GRAMS

**SUGAR**  
 1 CUP OF WHITE SUGAR = 7.1 OUNCES OR 201 GRAMS

**SUGAR**  
 1 CUP OF BROWN SUGAR = 7.75 OUNCES OR 220 GRAMS

**HONEY**  
 1 CUP OF HONEY = 12 OUNCES OR 340 GRAMS

**TABLESPOONS TO CUPS**

1 TABLESPOON = 1/8 CUP  
 2 TABLESPOONS = 1/4 CUP  
 4 TABLESPOONS = 1/2 CUP  
 8 TABLESPOONS = 1 CUP

1/8 CUP = 2 TABLESPOONS  
 1/4 CUP = 4 TABLESPOONS  
 1/2 CUP = 8 TABLESPOONS  
 1 CUP = 16 TABLESPOONS

Currys PC World Sources: eating-for-english.com, allrecipes.co.uk Press Association Graphic



# Measurements

When it comes to baking precise measurements is a must! We cannot advice this enough. Don't guess, estimate or half a measure unless you need to cut a recipe in half.

## CONVERSION CHART

### MEASUREMENTS & TEMPERATURES

#### CUP TO TABLESPOON TO TEASPOON TO MILLILITERS (CUP TO ML)

1 cup	= 16 Tbsp	= 48 tsp	= 240 ml
3/4 cup	= 12 Tbsp	= 36 tsp	= 180 ml
2/3 cup	= 11 Tbsp	= 32 tsp	= 160 ml
1/2 cup	= 8 Tbsp	= 24 tsp	= 120 ml
1/3 cup	= 5 Tbsp	= 16 tsp	= 80 ml
1/4 cup	= 4 Tbsp	= 12 tsp	= 60 ml
1 Tablespoon	= 15 ml		
1 teaspoon	= 5 ml		

#### CUP TO FLUID OUNCES (CUP TO FL. OZ)

1 cup	= 8 fl oz
3/4 cup	= 6 fl oz
2/3 cup	= 5 fl oz
1/2 cup	= 4 fl oz
1/3 cup	= 3 fl oz
1/4 cup	= 2 fl oz

#### FAHRENHEIT TO CELCIUS (F TO C)

500 F	= 260 C
475 F	= 245 C
450 F	= 235 C
425 F	= 220 C
400 F	= 205 C
375 F	= 190 C
350 F	= 180 C
325 F	= 160 C
300 F	= 150 C
275 F	= 135 C
250 F	= 120 C
225 F	= 107 C

*Glitter & Bow* FOR *JAVACUPCAKE*  
glitterandbow.com javacupcake.com

# Baking Essentials: Ingredients

Whether you're a rookie baker just getting the hang of bread making or a seasoned pro looking to make sure your pantry's up to date, these are all of the essential ingredients every baker should have stocked in their pantry at all times.

Get to know about the types of flours, yeasts, and sugars you will encounter as well.

## Types of Baker's Yeast



### Active Dry Yeast

This is "normal" yeast. This yeast can be bloomed in water to jump-start activation. It will need 2 rise steps in a recipe



### Instant Yeast

This yeast is specially formulated to activate more quickly. This yeast does not need to be bloomed in water and can tolerate just one rise step in a recipe



### Rapid Rise Yeast or Bread Machine Yeast

Both of these yeasts are similar to Instant Yeast, The granules are usually smaller and more round to work better in a bread machine.



### Fresh Yeast

This is a wet, compressed yeast that is ideal for many baking applications. It is not very common because it is not shelf stable. It can be used in all recipes that call for dry yeast.

1 packet of dry yeast = 2 1/2 tsp of dry yeast = 2 oz. fresh yeast

# Baking Supplies: Ingredients

- Flour
  - gluten-free
  - regular all-purpose
  - pastry
  - whole wheat
  - bread flour
- Sugar
  - White sugar
  - Confectioner's sugar
  - light brown sugar
  - dark brown sugar
  - powdered sugar
- Honey
- Molasses
- Oatmeal
- Chocolate chips
- Cocoa powder
- Shortening
- vegetable or canola oil
- Butter
- Salt
- Baking powder
- Baking Soda
- Yeast
- Corn Meal
- Corn Syrup
- Milk
- Cream cheese
- Extracts
  - vanilla
  - almond
  - orange
  - peppermint
  - other
- Spices
  - Cinnamon
  - Allspice
  - Pumpkin Spice
  - Apple Spice
  - other
- Food Coloring

# Baking Supplies: Ingredients

## Baking Powder

- Sodium Bicarbonate
- Also contains an acidifying agent and a drying agent
- 2 types of baking powders are sold: single-acting and double-acting
  - Single-Acting: activates when in contact with moisture
  - Double-Acting: activates when in contact with moisture and again with heat



## Baking Soda

- Sodium Bicarbonate
- Produces CO<sub>2</sub> bubbles that expand under hot temperatures, causing products to rise.
- Occurs when the baking soda comes into contact with moisture or acid.
- Carefully measure for desired results
- Too much baking soda can ruin the cooking process.



---

### When to use:

The ingredients in a recipe will determine which product is needed.



**Baking soda:**  
Cookies and muffins



**Baking powder:**  
Cakes and breads

# Baking Supplies: Ingredients

## All-purpose flour:

- Soft wheat and hard wheat are ground together during milling process
- Can be used in almost any type of recipe
- Can be found bleached and unbleached
- Contains about 10-12% protein
- Nutrients are added back in to enrich the flour
- Has less gluten than bread flour
- Very versatile
- Terrific for baked goods, soups, sauces, or as a coating for fried foods



## Self-rising flour:

- Nutrients are added back in to enrich the flour
- Ideal for making muffins, pancakes, and biscuits
- Contains salt and baking powder
- Made from wheat that is low in protein
- Contains about 8.5% protein

---

## Helpful Tips

- Pay attention to what type of flour a recipe requires
- Self-rising flour has a shorter shelf-life than all-purpose flour
- Add leavening when substituting self-rising flour with all-purpose flour
- Do not add baking powder to self-rising flour.

## Create self-rising flour

Sift together:

- 1 teaspoon of baking powder
- 1/4 teaspoon of salt
- 1 cup of all-purpose flour

# Baking Supplies: Ingredients

## Different Flour Types and Uses



### Cake or Pastry Flour

For:  
Pastries, such as cakes and cookies, for thickening sauces



### All-Purpose Flour

For:  
Bread and bread rolls, as well as pizza and puff pastry



### Bread Flour

For dark wheat breads and mixed wheat and rye bread



### High-Gluten Flour

For brown bread, mixed wheat, or rye bread



### Italian 00 Flour

Perfect for baking pizza



### White Rye Flour

Ideal for baking bread and bread rolls

# Baking Supplies: Ingredients

## Different Sugar Types and Uses



### Confectioners/ Powdered Sugar

The finest white sugar that you can get. It is about 3% cornstarch to keep it from clumping. It is used for making icing or glazing baked goods.



### Granulated Sugar

The white table sugar that everyone is accustomed to. It's the one most commonly used in recipes.



### Coarse Sugar

White sugar that has a much larger crystal size. It's often used for decorating.



### Turbinado Sugar

This is raw cane sugar with the surface molasses removed. It has a coarse texture and a blonde color.



### Brown Sugar

The brown sugar that we purchase in the store is often granulated white sugar with molasses mixed back in. This can be done at home in a food processor by adding 1 tablespoon of molasses per cup.



### Muscovado Sugar

It is a very dark, natural brown sugar that has a higher concentration of molasses left in it. It has a stickier texture than most sugars and is used in strongly-flavored sweets such as gingerbread.



### Honey and Maple Syrup

You can replace granulated sugar with maple syrup or honey in most recipes. Use 3/4 cup of maple syrup or honey for every 1 cup of granulated sugar you would use. When baking with maple syrup or honey, reduce the liquid in the recipe by 3 tablespoons for every 1 cup used and reduce the oven temperature by 25°F to avoid burning. Maple syrup and honey can be used interchangeably.

# Baking Essentials: Equipment

The most essential bakeware you will need won't come cheap. It's great to invest in durable good brands that will take as much wear and tear as possible without completely breaking down.

These are the most common utensils and equipment you will need.

Learn about the different baking pans.



## Measuring cups & spoons

Baking is a science, so having the correct measurements is key! You'll want to have a set of measuring cups and spoons, plus a liquid measuring cup.

## Kitchen Scale

When baking, using precise measurements is essential. A kitchen scale will guarantee the weight of ingredients is just right



## Rolling Pin

A sturdy wooden rolling pin is necessary for rolling out a variety of doughs, from pie crust to yeasted dough for cinnamon rolls

## Nesting mixing bowls

Most recipes require multiple bowls—typically one for wet ingredients and one for dry.



## Stand mixer or handheld mixer

Obviously, a KitchenAid mixer is quite the investment, so a handheld mixer is a great alternative. Most recipes start by beating butter and sugar together, which is hard to do with just a spoon and some elbow grease.



# Baking Essentials: Equipment

## Cooling Racks

Once your baked goods come out of the oven, you typically let them cool for a few minutes in the pan and then transfer them to a cooling rack. If you leave them in the hot pan or on a hot baking sheet they will continue to cook and become overdone. A cooling rack allows air to get under the cookies, cake, etc., and helps cool them faster and evenly.



## Quality pans & baking sheets

The baking pans and sheets you use can have a big impact on how your treats turn out.

## Parchment paper or silicone baking mat

Parchment paper is perfect for lining cake pans and baking sheets so that your baked goods don't stick. Silicone baking mats, like this Silpat baking mat, also work well.



## Oven Thermometer

All ovens are different, so just because you set it to 350F doesn't mean it's actually 350F. It's important to understand your oven and adjust the digital temperature setting accordingly.

## Whisk

You'll need a whisk for all sorts of things!



## Rubber spatula

Basically, every recipe you make will require a rubber spatula. Typically, you use them for scraping down the sides and bottom of a standing mixer in between additions to make sure all ingredients are evenly incorporated. You'll also need it to get all of the batter out of the mixing bowl.

# Baking Essentials: Equipment



## Sifter

Sifting helps your batter and buttercream be free of lumps. Plus it makes measuring more accurate since there aren't any dense clumps. I find it especially necessary when using cocoa powder since it ends up getting packed down in the container. You could use a hand held sifter with the crank or a fine mesh sieve.

## Baking times and temperatures

When substituting a metal pan with a glass pan, reduce the baking temperature by 25°F and check for doneness at least 5 minutes early.

If you're using a deeper pan, increase the baking time by 1/4 and slightly lower the oven temperature.

If you're using a shallower pan, decrease the baking time by 1/4 and slightly raise the oven temperature.

For jumbo cupcakes, bake in a 350°F/177°C oven for approximately 25 minutes.

For miniature cupcakes, bake in a 350°F/ 177°C oven for approximately 10-15 minutes.

# How Much Cake Do I Need?

## Square Pans

6" X 6" makes approximately 15 servings

8" X 8" makes approximately 25 servings

10" X 10" makes approximately 40 servings

16" X 24" makes approximately 100 servings

## Circle Pans

6" makes approximately 12 servings

8" makes approximately 22 servings

10" makes approximately 35 servings


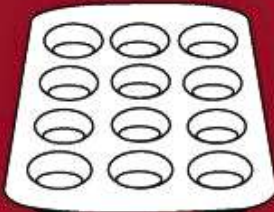

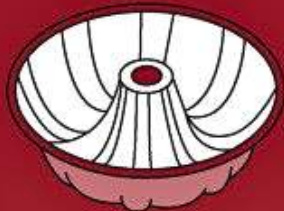
## Rectangle Pans

12" X 16" makes approximately 50 servings

8" X 12" makes approximately 40 servings

# Baking Essentials: Equipment

## PAN CONVERSION CHART

Recipe Calls For	Equivalent	Bake Time
 <p>9 x 13 cake pan (40-45 minutes)</p>	24 cupcakes	20-25
	2 nine-inch round	35-45
 <p>12 standard-size muffins (25-30 minutes)</p>	36 mini muffins	16-18
	6 jumbo muffins	25-30
 <p>1 nine-inch loaf (45-50 minutes)</p>	8 single mini-loaf pan	30-35
	12 standard muffins	25-30
 <p>1 bundt cake (60-70 minutes)</p>	2 nine-inch loaves	45-50
	2 nine-inch round pans	35-45

All baking times are based on 350° oven temperature.

**CLABBER  
GIRL.**

# Baking Substitutions

When it comes to baking, knowing how to substitute an ingredient will save you from leaving the ingredient out completely. Never take out an ingredient, every smart baker always has go to substitutes to add when lacking a necessary ingredient.

Take a look at the charts below for quick substitutions to essential ingredients.

**HOW TO:**  
Replace white/whole wheat flour with the suggested measurements in a recipe:

**1 Cup of white/whole wheat flour =**



 <b>AMARANTH</b> 1/4 cup	 <b>GARBANZO/ FAVA BEAN FLOUR</b> 1/4 cup	 <b>BARLEY FLOUR</b> 1/2 cup	 <b>BUCKWHEAT FLOUR</b> 3 tbsp
 <b>COCONUT FLOUR</b> 3 tbsp	 <b>CORN FLOUR</b> 1/4 cup	 <b>CORNMEAL</b> 3 tbsp	 <b>GARBANZO BEAN (CHICKPEA) FLOUR</b> 3 tbsp
 <b>KAMUT FLOUR</b> 1 cup	 <b>MILLET FLOUR</b> 1/3 cup	 <b>NUTS</b> (finely ground: almond, hazelnut) 1/4 cup	 <b>OAT FLOUR</b> 3 tbsp
 <b>POTATO FLOUR</b> 3 tbsp	 <b>POTATO STARCH</b> 3 tbsp	 <b>QUINOA FLOUR</b> 1/4 cup	 <b>RICE FLOUR (WHITE/BROWN)</b> 1/3 cup
 <b>RYE FLOUR</b> 1 cup	 <b>SORGHUM FLOUR</b> 1/4 cup	 <b>SPELT FLOUR</b> 1 cup	 <b>TEFF FLOUR</b> 3 tbsp

# Baking Substitutions

IF YOU DON'T HAVE	AMOUNT	TRY THIS
 BAKING POWDER	1 teaspoon	Combine ¼ teaspoon baking soda + ½ teaspoon cream of tartar and bake immediately
 BAKING SODA	¼ teaspoon	1 teaspoon baking powder
 BREAD CRUMBS	½ cup	½ cup ground rolled oats or crushed cereal
 BROWN SUGAR	1 cup	1 scant cup granulated sugar + 1 tablespoon molasses
 BUTTER	½ cup	½ cup coconut oil, margarine, or lard
 BUTTERMILK	1 cup	1 cup plain yogurt (not Greek) or 1 cup milk + 1 tablespoon cider vinegar or lemon juice
 CAKE FLOUR	1 cup	Add 2 tablespoons cornstarch to 1 cup measuring cup and fill with all-purpose flour
 CORNSTARCH	1 tablespoon	1½ tablespoons all-purpose flour
 CREAM OF TARTAR	¼ teaspoon	When beating egg whites, use ½ teaspoon lemon juice
 EGG	1 egg	For yeast breads, cookies, pancakes, or waffles, sub 2 tablespoons ground flax meal + 3 tablespoons cold water, let rest 10 minutes
 HALF AND HALF	½ cup	Sub ¼ cup milk and ¼ cup cream, or ½ cup non-dairy coffee creamer
 HONEY	½ cup	½ cup corn syrup, molasses, maple syrup, or agave nectar
 LEMON JUICE	2 tablespoons	2 tablespoons cider vinegar
 POWDERED SUGAR	½ cup	Grind ½ cup granulated sugar in a blender until fine
 SEMI-SWEET CHOCOLATE	1 ounce	1 ounce unsweetened chocolate + ½ teaspoon granulated sugar
 SOUR CREAM	½ cup	½ cup plain yogurt

# Baking Substitutions



**Peanut Butter**  =  **1**

3 TBL PEANUT BUTTER

**Ground Flax**  +  =  **1**

1 TBL

3 TBL WATER

WHISK UNTIL GELATINOUS & CREAMY

**Chia Seed**  +  =  **1**

1 TBL

3 TBL WATER

STIR & ALLOW TO REST FOR 15 MINUTES

**Soy Protein**  +  =  **1**

1 TBL

3 TBL WATER

MIX AND USE IMMEDIATELY

**Ripe Bananas**  =  **1**

1/2 MASHED BANANA

**Apple sauce**  =  **1**

1/4 CUP UNSWEETENED

**Agar Agar**  +  =  **1**

1 TBL

1 TBL WATER

MIX AND USE IMMEDIATELY



# Baking Substitutions

**THIS for THAT**  
A Guide to Cooking and Baking Substitutions

ORIGINAL	SUBSTITUTE
Baking Powder 1 tsp	Cream of Tartar ½ tsp OR Baking Soda ¼ tsp
Bread Crumbs, Dry	Rolled Oats as needed OR Crushed Bran Cereal as needed
Buttermilk 1 cup	Milk 1 cup + Vinegar 1 tbsp OR Milk 1 cup + Lemon Juice 1 tbsp OR Yogurt 1 cup
Cajun Seasoning 1 tsp	Cayenne Pepper ¼ tsp + Dried Thyme ¼ tsp + Dried Basil ¼ tsp + Minced Garlic 1 clove
Chocolate, Semi-sweet 1 square (1 ounce)	Unsweetened Chocolate 1 square + Sugar 1 tbsp OR Semisweet Chocolate Chips 3 tbsp
Chocolate 1 square (1 ounce)	Baking Cocoa 3 tbsp + Shortening 1 tbsp OR Baking Cocoa 3 tbsp + Vegetable Oil 1 tbsp
Cornstarch, Thickening Agent 1 tbsp	All-Purpose Flour 2 tbsp
Corn Syrup, Dark 1 cup	Light Corn Syrup ¾ cup + Molasses ¼ cup
Corn Syrup, Light 1 cup	Sugar 1 cup + Water ¼ cup
Cracker Crumbs 1 cup	Bread Crumbs, Dry 1 cup
Cream Half and Half 1 cup	Melted Butter 1 tbsp + Whole Milk 1 cup
Egg 1 whole	Mashed Potatoes ¼ cup OR Pumpkin, Canned ¼ cup OR Squash, Canned ¼ cup OR Prunes, Pureed ¼ cup Potato Starch 2 tbsp OR Egg Whites 2 OR Egg Yolks 2 OR Egg Substitute ¼ cup



# Baking Substitutions: Vegan & Gluten-Free

Here are many vegan ingredient substitutions you will definitely need when baking.

Learn the best Gluten-Free flours and substitutions.

Another egg substitute is aquafaba or chickpea water.

If you don't have flaxseeds, you can use chia seeds.



# Baking Substitutions: Vegan & Gluten-Free

## 9 TIPS FOR GLUTEN-FREE BAKING

**1 STRAIGHT SWAP**  
If there are less than 2-4 tablespoons of wheat flour in a recipe, do a straight swap with a nut or rice flour of your choice.

**2 WEIGHT CONVERSION**  
1 cup gluten flour = 140 grams of gluten-free all-purpose flour

**3 MAKE GLUTEN-FREE ALL-PURPOSE FLOUR BY USING A 40/60 RATIO**

MORE THAN 4 TBSP TO SWAP? CREATE YOUR OWN MIX.

**40% WHOLE GRAINS**  
brown rice flour, buckwheat flour, corn flour, mesquite flower, quinoa flour, or sorghum flour

**60% WHITE FLOURS/STARCHES**  
white rice flour, arrowroot flour, cornstarch, potato flour, or potato starch

**4 GUM**  
If you're making breads or cakes, add 1/2 to 1 teaspoon of guar gum or xanthan gum for every 140 grams of gluten-free all-purpose flour to give your baked goods a bit of volume.

**5 BAKING POWDER**  
Add 1-2 teaspoons of baking powder to every 140 grams of gluten-free all-purpose flour to help your product rise.

**6 EGG WHITE**  
Add extra egg white if your dough is too dry before baking.

**7 BUTTERMILK**  
Consider subbing buttermilk for milk for a richer texture.

**8 SUGAR SWAP**  
Consider swapping brown sugar for white sugar to help with moisture.

**9 THERE WILL BE FAILURES! JUST KEEP TRYING.**

background by subtenatures.com

# Baking Substitutions: Vegan & Gluten-Free

## Egg Substitutes

### Substitutes:

### Works best in:



1 overripe banana



- quick breads
- muffins
- cookies



1/4 cup silken tofu



- quick breads
- muffins
- pound cakes



1/4 cup vegan yogurt



- quick breads
- muffins



1 tbsp. flaxseed + 1 tbsp.  
water



- cakes
- brownies



1/4 cup fruit or veggie  
puree



- quick breads
- muffins
- cookies



1/4 cup chickpea brine



- meringues
- cakes
- cookies



2 tbsp. cornstarch + 3  
tbsp. water



- custards
- pies
- cheesecakes

# Baking Substitutions: Vegan & Gluten-Free

## Vegan

## Egg Substitutes



### Binding

#### Flax Meal

1 egg = 1 Tbsp + 3 Tbsp water - mix, let sit 10 mins  
Use it for: a nutty flavor

#### Ground Chia Seeds

1 egg = 1 Tbsp + 3 Tbsp water - mix, let sit 10 mins  
Use it for: a boost of Omega 3

#### Arrowroot Powder

1 egg = 2 Tbsp + 2 Tbsp water - mix  
Use it for: cakes

#### Instant Mashed Potatoes

1 egg = 2 Tbsp  
Use it for: vegan burgers, meatloaf, or meatballs

#### Agar Agar

1 egg = 1 Tbsp + 4 Tbsp boiling water - mix  
Use it for: binding with no added color or flavor

### Leavening

#### Bob's Red Mill Egg Replacer

1 egg = 1 Tbsp + 3 Tbsp water - mix  
Use it for: cookies, pancakes, waffles, cakes

#### Follow Your Heart Vegan Egg

1 egg = 2 Tbsp + 1/2 cup ice cold water - mix  
Use it for: scrambled eggs, cakes, muffins, cookies

#### Ener-G Egg Replacer

1 egg = 1 1/2 Tsp + 2 Tbsp water - mix  
Use it for: allergen-free baking

#### Baking Soda + Vinegar

1 egg = 1 tsp vinegar + 1 tsp baking soda  
Use it for: fluffier baked goods

#### Oil + Baking Powder

1 egg = 2 Tbsp water + 1 Tbsp oil + 2 tsp baking powder  
Use it for: cookies and other baked goods

### Moisture

#### Silken Tofu

1 egg = 1/4 cup - puree  
Use it for: adding a creamy texture

#### Mashed Banana

1 egg = 1/2 cup  
Use it for: chewy treats like cookies and brownies

#### Applesauce

1 egg = 1/4 cup  
Use it for: cakes, muffins, cookies and brownies

*Use these options in dense recipes like brownies that already call for baking soda and baking powder*



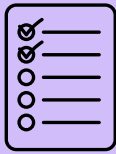
# Let's Get Baking

"It's all about a balancing act between time, temperature and ingredients: That's the art of baking." — Peter Reinhart

Before we begin baking let's learn about mise en place. "Mise en place" is a French phrase that translates to "everything in place" or "putting in place." It is a general concept for how everything operates in the kitchen, whether cooking or baking. In baking it's about having all of your ingredients prepped, softened, melted, sifted, and measured before you begin baking. It's a great opportunity to check your ingredients and make sure you have everything you need before you get started. Don't underestimate this step. There's nothing worse than running out of buttermilk mid-recipe.

# Let's Get Baking

## Essential Tips to Improve Your Baking



### **Plan Ahead**

Find the best recipe, read it carefully, get your tools and ingredients together.



### **Temperature Matters**

For the ingredients, for your oven, and for your final product



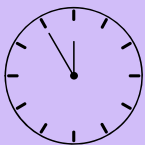
### **Know Your Ingredients**

Thickeners, chemical leaveners, sweeteners, shortening, and binders



### **Weight and Measure**

Measure by weight and measure by volume



### **Follow the Steps**

Don't rush. Don't skip ahead. Respect the times.

# Batter vs. Dough

What's the difference between batter and dough?

The difference between batter and dough is batters are thin and contain eggs, and doughs are thick and might not contain eggs. Because of their different consistencies and ingredients, you will mix and prepare batters and doughs differently.

## Types of Batters



### POUR BATTERS

Are fluid and pour easily; contain about 2/3 to 1 cup of water for every cup of flour.

Pancakes, waffles and crepes are some of humankind's oldest forms of bread. Popovers are closely related but are in a slightly different branch of the pancake family. They all pour, with waffle batters being the thickest, pancakes in the middle and crepes the thinnest. Crepe batter is thinned with eggs and is only as thick as heavy cream. Popovers are made from the thinnest of all quick-bread batters with a liquid to flour ratio of 1:1.

- Crepes
- Pancakes
- Popovers
- Waffles



### DROP BATTERS

Does not contain as much water as pour batters; contain about 1/2 to 3/4 cup water for every cup flour.

- Coffee Cakes
- Doughnuts or Donuts
- Biscuit Dumplings
- Loaves or Tea Breads
- Muffins

# Batter vs. Dough

## Types of Pastry Dough

All pastry doughs are made up of flour, water, and fat. Sometimes the fat is butter, sometimes it's shortening, sometimes it's lard, sometimes it's even oil. Regardless, every variety of pastry dough is made with these core ingredients, and the ratio of those ingredients, and the way in which they are combined to form a dough, determines the end result. Here are the five most common varieties of pastry dough and how they're used:



### Flaky Pastry

The most rustic and simple of all the pastry doughs, flaky pastry is used for sweet and savory pies, quiche, sausage rolls, and turnovers. It benefits from a hands-off attitude because the flakiest of doughs is the result of pea-sized chunks of butter and gentle hand work. Overworking this dough will yield tough and crumbly pastry, which is the last thing you want in a homemade pie.

### Short crust Pastry

A much more forgiving and foolproof variety of pastry, short crust pastry is resilient if overworked. This dough is much more cohesive than flaky pastry, because it's often used as the sturdy base for tarts. In fact, this dough is so sweet and sturdy, it's not too dissimilar to shortbread cookie dough.



### Puff Pastry

This is a flaky pastry characterised by fat and air being trapped between the layers of the dough to give a delicate, layered, and crisp finish. This time-consuming pastry is considered a go-to for pastry chefs, and worth the time to make. It is often used for pie crusts, as wrapping for meats, as well as vol-au-vents, cream horns and mille feuilles.

### Choux Pastry

Choux pastry, or pâte à choux, is made of flour, water, butter, and eggs and has a texture that is thick and sticky. Instead of using a rising agent, the batter is beaten together on the stovetop until it forms a thick mass. The process traps steam, which gets released in the oven, creating a puff pastry. This creates a crispy outer shell and hollow interior that can be filled with a variety of fillings and is used for eclairs and profiteroles.



### Filo Pastry

This type of pastry is made in very thin sheets and used as a casing for numerous delicate savory and sweet dishes such as baklava and börek in Middle Eastern and Balkan cuisine.



# Batter vs. Dough

What's the difference?



## Batter

- More liquid, less flour
- Thin enough to pour
- Cakes, pancakes, brownies
- Relies on the baking pan for shaping



## Dough

- More flour, less liquid
- Stiff enough to knead
- Cookies, pies, and donuts
- Can be shaped by hand



**Stage One**  
Mix



**Stage Two**  
Proof and shape  
the dough

## What is proofing?



**Stage Four**  
Eat and store



**Stage Three**  
Bake

# Batter vs. Dough

## What is proofing?



### Proofing

- Proofing is the rise process a dough must make before baking.
- This happens before and after the dough has been shaped.
- Other names for proofing include:
  - blooming
  - proving
  - bulk fermentation
  - first and second rise
  - Shaped proof

### Bulk fermentation or Bulk proofing

It's called bulk proofing because the entire batch of dough ferments in one large mass.

Fermentation allows the yeast to flavor the dough.

Gluten traps CO<sub>2</sub> bubbles and gives bread its structure.

The fermentation process takes 1.5-2.5 hours at room temperature.

2 hours of proofing, depending on what you're working on, ensures the best taste and texture.

# Batter vs. Dough

## Reasons to fold your dough

- Fold your dough about 1/2 an hour into the bulk proofing process.
- Helps to develop its gluten structure.
- Redistributes the yeast and its food, allowing the dough to rise properly.
- Helps to regulate dough temperature.

## Dividing and shaping your dough

1. Lightly flour your hands before separating dough into loaves.
2. Cut the mass of dough in half.
3. Once you shape the loaves, let them sit and rest.
4. Place the dough in a bowl or basket of desired shape.
5. Let the dough continue its proofing.
6. Once it is done proofing, carefully shape your dough to its final shape.
7. Place loaves into baskets, cover with a towel and put them in the refrigerator for the final fermentation process.
8. By now, the dough should have doubled in size.

**Make sure the dough has plenty of room to rise in its container.**

DOUGH & BATTER CONSISTENCIES			
© 2017 IMPERIAL SUGAR			
TYPE	LIQUID (cups)	FLOUR (cups)	EXAMPLE
Stiff Dough	1 	4 	Pastry
Soft Dough	1 	3 	Yeast Bread
Drop Batter	1 	2 	Muffins
Pour Batter	1 	1 	Waffles

# Science of Batter

Learn about the different batters

## **CAKE OR ALL-PURPOSE FLOUR: WHAT'S THE DIFFERENCE?**

Do you need cake flour to make a cake? It makes sense, but is it necessary? And what exactly is cake flour?

Well, there are many styles of flour: bread, cake, all-purpose, and durum, to name a few. You can learn even more about all of these different types in our guide to flour.

One of the main differences between types of flour is that the protein content level varies among different varieties of milled wheat.

The protein content determines the strength. Keep these simple equations in mind:

Higher protein content = stronger flour

Lower protein content = weaker flour

Baked goods that have a chewy, firmer texture need stronger flours that can produce stronger gluten networks. Bread, bagels, and pizza dough are all prime examples of products that often use stronger flours like bread flour. Items that have a softer and more tender texture need weaker flours, which will prevent the gluten network from developing too much strength and elasticity. Cakes, cookies, and biscuits are tender products that often use weaker flours like cake flour. Despite the crazy range of flours you could buy, there is one that is reliable for a variety of baking needs, and it remains true to its name.

# Science of Batter

The beautiful thing about all-purpose flour is that.. It's all-purpose!

Because its protein content is in the middle of the spectrum between strong and weak flours, it is purposefully milled for use in all common baking products, from hearty bread to tender cakes.

While cake flour can be substituted in equal weights for the all-purpose flour in this recipe, it is not necessary.

You can certainly experiment and taste for yourself the subtle difference of tenderness. But you have my blessing, love, and approval to use all-purpose flour to make your cakes.

It's totally fine. No one will yell at you.

Just be careful to avoid overmixing the final batter. While you want all of the ingredients to be fully incorporated, the cake can get tough if the proteins in the all-purpose flour are given an opportunity to develop a strong gluten structure when mixed too thoroughly.

Keep your dessert tender by mixing only until the ingredients are all incorporated into a uniform batter.

## **CREATE AN EMULSION**

A butter cake's soft, moist, fluffy texture relies on a successfully emulsified mixture – a smooth blend of fats with the other ingredients.



# Science of Batter

Everything needs to be combined in a way that makes a smooth and uniform final batter that has not separated or curdled.

Emulsions are best formed when all ingredients are close to the same temperature, so you want your ingredients to be at room temperature for best results.

Chilled milk products, butter, eggs, or any other liquid ingredient should not be added to your batter straight out of the fridge. Before starting your recipe, take these products out of the refrigerator and place them on the counter for about 20 to 30 minutes.

Another important factor for butter cakes is to gradually add the liquid ingredients to the batter.

The liquids must be added a little at a time – if added too quickly or all at once, they cannot be properly absorbed and will cause the batter to curdle.

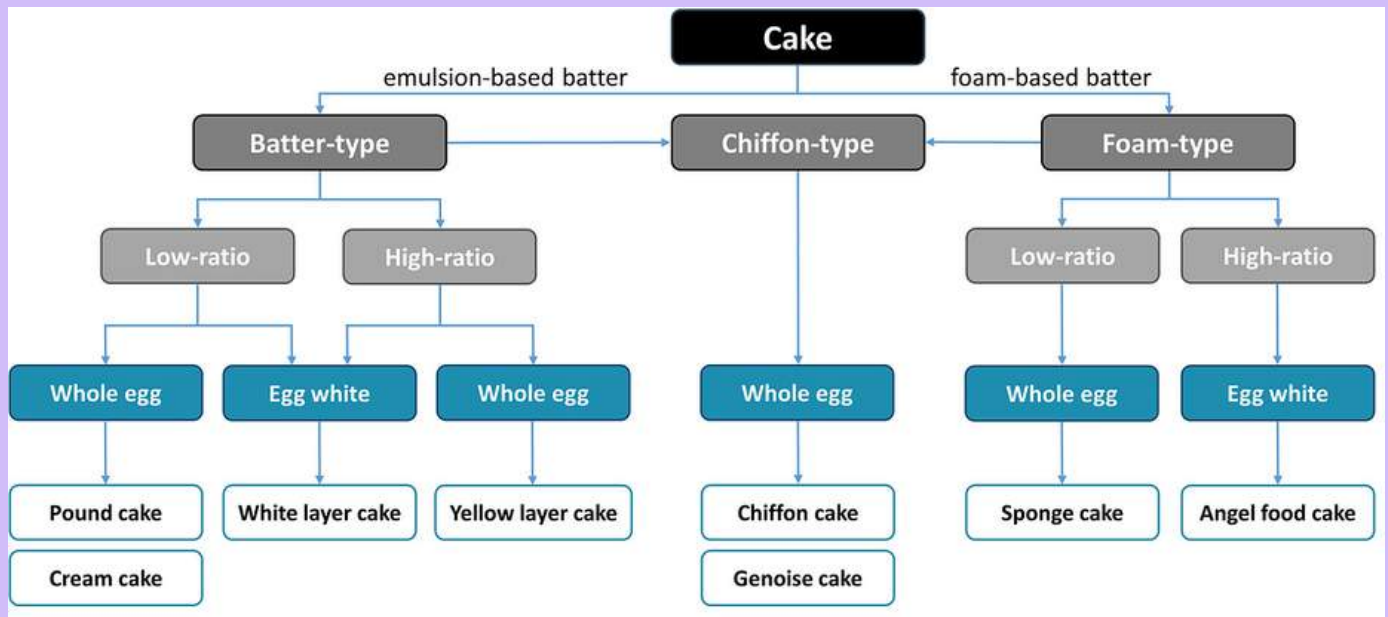
First, the eggs are added one at a time, and each one is thoroughly mixed before adding another.

Second, the other liquid ingredients are added gradually, alternating with the dry ingredients. Switching between liquid and dry slowly balances the batter and helps with the final emulsion.

Scrape the sides and bottom of the mixing bowl periodically as you stir the batter, to ensure that all of the ingredients are fully incorporated.

Remember, don't overmix!

# Science of Batter



# Know Your Yeast

## WHAT IS YEAST?

Yeast is a single-celled microorganism related to mushrooms. About 1,500 species exist but, in the kitchen, we use mostly just one - *Saccharomyces cerevisiae* (which means "sugar-eating fungi"). Used to make bread rise, it's available in various forms which differ mostly by moisture content.

Cake yeast (aka fresh yeast or compressed yeast) is made from a slurry of yeast and water with enough of its moisture removed so that the yeast can be compressed into blocks. Experienced bakers swear by its superior leavening and the nuanced slightly sweet flavor it gives baked goods. Cake yeast is highly perishable and lasts only about two weeks in the refrigerator.

Active dry yeast was developed by the Fleischmann's company during World War II so that the U.S. Army could make bread without keeping yeast refrigerated. Partially dehydrated and formed into granules, it contains dormant yeast cells that keep at room temperature for several months. To use active dry yeast, rehydrate it first in warm water (about 105°F) along with a pinch of sugar to feed the yeast. The resulting foam is the ingredient that helps to strengthen the gluten or soften the crumb.

Yeast should be checked before every recipe as a habit. Better to spend a few minutes to check the yeast before beginning than make bread that doesn't rise. If the yeast is active, it will dissolve completely into the water and the liquid will start bubbling.



# Know Your Yeast

## HOW DOES YEAST MAKE BREAD RISE?

As bread dough is mixed and kneaded millions of air bubbles are trapped and dispersed throughout the dough. Meanwhile, the yeast in the dough metabolizes the starches and sugars in the flour, turning them into alcohol and carbon dioxide gas. This gas inflates the network of air bubbles causing the bread to rise. During rising, the yeast divides and multiplies producing more carbon dioxide. As long as there is ample air and food (carbohydrates) in the dough, the yeast will multiply until its activity is stopped by the oven's heat.



**DRY, INSTANT AND FRESH YEAST EQUIVALENTS**

 1 teaspoon instant yeast	==	 1/2 block fresh yeast	==	 1 1/4 teaspoon active dry yeast
 1 teaspoon active dry yeast	==	 1/3 block fresh yeast	==	 3/4 teaspoon instant yeast



# Know Your Yeast

## BAKING POWDER VERSUS YEAST

### BAKING POWDER

Baking powder is a dry chemical leavening agent made up of sodium bicarbonate & cream of tartar

A synthetic ingredient

Can make a batter or dough rise immediately

Does not change the taste or consistency of the food

Releases carbon dioxide through an acid-base reaction, making the dough rise

### YEAST

Yeast is living microorganisms that act as leavening agents

A natural ingredient

Takes some hours to make a dough or batter rise

Changes the taste or consistency of the food

Releases carbon dioxide by fermentation from the sugars present in the dough

Visit [www.PEDIAA.com](http://www.PEDIAA.com)



# All About Butter

## **The Different Types of Butter**

Since butter is responsible for so many things — including not only tenderness and flakiness but also taste, leavening, and structure — it is important to know the difference between all those butters at the grocery store before picking up a few sticks and heading off to make a batch of cookies.

At the store, you will typically find sweet cream butter and unsalted butter. Both butters are made in the same way with the same cream, but sweet cream butter usually has salt added. Contrary to the name, sweet cream butter has not been sweetened. In general, sweet cream butter is better for spreading on toast, while unsalted butter is better for baking. This is so we can control the exact amount of salt we are adding to our recipes.

You may also see cultured butter at the store. The main difference here is that this butter is made from cream that has been cultured and allowed to slightly sour. It is the type of butter most traditionally found and used in Europe. “European-style” butter sold in North America, like Plugra, is cultured or sweet cream butter with cultured cream flavor added in.

## **Why We Use Unsalted Butter, but Still Add Salt?**

If you are going to be doing a lot of baking, it is best to keep unsalted butter on hand. But then why do so many recipes call for additional salt? The main reason: control.

Since different butter manufacturers add different amounts of salt to butter, using unsalted butter takes the guessing out of the equation. You get to control the overall salt content. Most recipes take this into consideration when being developed and call for unsalted butter in the ingredients, and this advice is worth heeding.

In addition, the salt in salted butter can end up making delicate, sweet pastries taste overly salty. Think about a buttercream, where butter is a major component and is responsible for much of the flavor — salty buttercream would probably taste very unpleasant piled high on a cupcake.

# All About Butter

## **Butterfat and Moisture Content in Butter**

Butter is made by churning cream until it separates into liquids (buttermilk) and solids (butterfat). In North America, commercially sold butter must contain at least 80 percent butterfat, while European butters typically contain at least 82 percent and up to about 85 percent. The remaining contents of the butter's makeup includes water and milk solids. The lower the butterfat content, the more liquid (and less fat) is being added to your recipe; the higher the butterfat content, the more fat (and less liquid).

So, what does this all mean when it comes to baking? If having less butterfat essentially means more liquid, then consider what adding a bit more liquid will do to your doughs and batters. This small increase might not be as noticeable in simple brownies or quick breads, but the additional liquid can weigh down doughs and leave pastries a bit too tough. Butter with more butterfat will also remain solid slightly longer in the oven. Want crisper, flakier croissants and puff pastry? Go for the butter with the higher butterfat content.

### **Note:**

Also, it is worth noting the difference between the moisture and moistness butter adds to a recipe. Moisture refers to the liquid content while moistness refers to the fat. Nearly all recipes call for both, but for different reasons. In general, fat (including that in butter) tenderizes baked goods. Liquids (again, including that in butter) help hydrate proteins (found in flours and starches), bind ingredients together, and also aid in moistening.

### **Is vegan butter good for baking?**

In recipes where they're the only vegan substitute, both vegan butters will produce baked goods with texture similar to that of dairy butter, with flavor being the main difference. When substituting additional vegan ingredients (mainly eggs), the recipe may not turn out the same, texture-wise, as originally intended.

# All About Butter

## **What's the best substitute?**

If the recipe calls for 1 cup butter, use  $\frac{3}{4}$  cup vegetable oil. The function of using butters and oils in baking is to keep the dessert moist, which is essential in any recipe, so vegetable oil is a great substitute for butter in most vegan recipes. You can also use applesauce, dairy-free yogurt, coconut oil, coconut butter, olive oil, nut butter, mashed banana and mashed avocado.

## **Butter in Recipes**

Moisture and flavor might be the most obvious reasons to use butter in baked goods, but there are several other roles butter is playing as well. In things like cakes, cookies, and muffins, butter coats the proteins and starches during the mixing step and results in a more delicate crumb.

In many of these types of pastries, the butter is creamed with the sugar before being mixed with other ingredients. Through this process, the sugar granules actually cut into the softened butter and air is forced into the mixture, which ultimately helps to leaven the pastry.

Even in recipes that do not call for the creaming method, butter assists in leavening by creating steam when placed in a hot oven. Recall what makes up butter other than butterfat? The liquid portion of butter adds moisture (as opposed to the moistness added from the fat), and in baked goods like puff pastry and croissants the liquid in the butter begins to evaporate and create steam, which lifts the pastry as it bakes.

# All About Butter

## **Why Butter Temperature Matters**

Temperature is a key factor in how butter behaves within a recipe and how it mixes with other ingredients in a batter or dough. Rarely does a recipe list butter without noting if it should be cold from the fridge, softened to room temperature, or even melted. With softened butter, the fat can be easily creamed together with sugar, or used to coat flour particles. This creates a more even distribution of fat throughout the dough or batter, yielding a tender final product. Like using room-temperature eggs, room-temperature butter creates a more homogenous batter and prevents buttercream from “breaking”.

Softened butter should still be cool, but malleable. It should be able to hold its shape and still firm enough that if you press your finger into it, the impression is clean. It should not be squishy, oily, or appear melted. Too warm or melted butter loses its ability to cream and hold air when beaten.

## **Is ghee vegan butter?**

No, commercial ghee is not dairy-free and is definitely not vegan. But there's vegan options out there.

# All About Butter




## Types of Butter

BUTTER TYPE	KEY ATTRIBUTES	BEST FOR
Sweet Cream	Made from pasteurized cream; American style	Cooking, baking, sautéing
Unsalted	Contains no added salt	Most cooking, but especially baking, frostings
Salted	Contains added salt	Finishing vegetables, spreading on toast, making compound butter
Clarified	Milk solids separated from the butterfat; high smoke point	Searing and other high-heat cooking; dipping sauce for seafood
Ghee	Type of clarified butter; butter solids toasted and browned	Cooking, sautéing, pan-frying, roasting
Cultured	Subtle tangy flavor; high butterfat content	Butter-forward baked goods; spreading on toast
European	82% butterfat; creamier texture and richer flavor	Spreading on toast; butter-forward baked goods
Irish	82% butterfat; rich flavor and color	Butter-forward baked goods; spreading on breads; finishing dishes
Compound	Butter with added seasonings, spices, and herbs	Topping cooked meat and seafood
Plant-Based	Produced from oils in plants; vegan	Cooking and baking vegan dishes
Brown	Dark brown color; toasted flavor	Cooking, baking, sauces, vegetables
Amish	Shaped into cylinders; high butterfat	Cooking and baking; like salted and unsalted butter



# Baking Troubleshooting

We all have faced difficulties while baking so here are some tips to help you avoid baking catastrophes.

TYPE OF BAKED FOOD	WHAT MIGHT GO WRONG	POSSIBLE SOLUTIONS
<p><b>Quick bread</b></p> 	<p><i>Quick breads may include: banana bread, coffee cake, and gingerbread.</i></p> <ul style="list-style-type: none"><li>• May expand too much</li><li>• Sticky or tacky to the touch</li><li>• May have a dip in the center</li></ul>	<ul style="list-style-type: none"><li>• Decrease baking soda or powder by 1/8 to 1/4 tsp.</li><li>• Decrease the sugar by 1-2 tbsp.</li><li>• Decrease the fat by 2 tbsp. - 1/4 cup.</li><li>• Increase the water by 1-4 tbsp.</li><li>• Increase the flour by 2-4 tbsp.</li><li>• Increase the oven temperature by 15°-25°F.</li></ul>
<p><b>Yeast bread</b></p> 	<ul style="list-style-type: none"><li>• May expand too much during rising.</li><li>• May have a drier texture.</li><li>• Bread may have large holes.</li></ul>	<ul style="list-style-type: none"><li>• Decrease the flour and/or increase the liquid until the dough is soft and elastic</li><li>• Allow the dough to rise only until it has doubled in size (rising time may be shorter)</li><li>• Punch down (deflate) the dough and allow it to rise twice.</li></ul>
<p><b>Bars and Brownies</b></p> 	<ul style="list-style-type: none"><li>• Overbaked sizes, underbaked center</li><li>• May have a sunken center</li><li>• Greasy appearance or touch</li></ul>	<ul style="list-style-type: none"><li>• Decrease the oven temperature by 25°F.</li><li>• Decrease the oil by 1 tbsp. - 1/2 cup.</li><li>• Increase the flour by 1 tbsp. - 1/3 cup.</li><li>• Increase the water by 1 tbsp. - 1/3 cup.</li><li>• Increase the baking time up to 10 minutes.</li></ul>



# Baking Troubleshooting

## Angel food cake



- Over-rising and spills over the pan sizes.
- Cake may have a coarse texture.
- Falls out of the pan when cooled upside down

- Decrease oil and/or sugar by 1 tbsp. - 1/3 cup.
- Beat egg whites to soft-peak stage.
- Increase the flour by 1 tbsp. - 1/3 cup.
- Increase the water up to 1/3 cup.
- Increase the oven temperature by 15°-25°F.

## Layer and sheet cakes



- Too dry, crumbly, pasty or dense
- May have a sunken center
- Overbaked sides, underbaked center
- Overly moist later at top or bottom
- Cake "falls" (not enough structure)

- Decrease the baking soda or powder by 1/8 to 1/4 tsp.
- Increase the liquid by 1 - 4 tbsp. or add an extra egg to the batter.
- Increase the flour by 1 tbsp. - 1/2 cup.
- Increase the baking time

## Cookies



- Cookies have a drier texture.
- May spread too much.
- May brown too quickly.
- May be underdone.

- Decrease butter or shortening by 2 tbsp. to 1/4 cup if cookies spread too much
- Decrease sugar slightly if cookies spread too much, 1 tbsp. per cup.
- Increase the liquid by 1-2 tbsp. only if the dough is too dry and cookies don't spread.
- Increase the flour, starting with 1-2 tbsp., if cookies spread too much

## Fried dough



- Cooks too fast
- Overcooked outside, undercooked inside.

- Increase the cooking time
- Decrease the oil temperature 3°F per 1,000 feet of altitude.

# Baking Troubleshooting

## Muffins, biscuits, and scones



*Muffins, biscuits and scones usually bake well at high altitudes, but you may notice:*

- May have a drier texture
- Muffins don't rise properly and have flat tops that flow together
- Overbaked exterior

- Decrease the baking soda or powder by 1/8 - 1/4 tsp.
- Decrease the sugar slightly if the batter is too thin and flows out of muffin cups
- Increase the liquid by 1-2 if the batter is too thick.
- Increase the flour, starting with 1 tbsp., if the batter is too thin and flows out of the muffin cups.
- Increase the baking time by 1-3 minutes.

## Pie crust



*Pie crusts usually turn out well at high altitudes, but you might notice:*

- Drier texture when forming.

- Increase the water slightly, starting with 1 tbsp. increments, until the dough holds together well and is flexible.

# Baking Troubleshooting

## Tips for baking at high altitudes

If you live in high altitude area (3,000 + feet above sea level) you may have experienced one or more baking disasters.

Here are some knowledgeable tips to help you find success.



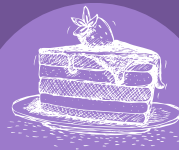
### Ingredient Changes

**Baking Powder:** Reduce each tsp by 1/8 to 1/4

**Baking Soda:** Reduce each tsp by 1/8 to 1/4

**Fats:** Minimal adjustments needed

**Liquids:** increase slightly



### Baking Changes

**Oven temperature:** increase by 20°F

**Cooking time:** slightly increase

**Mixing:** do not over mix or over-beat eggs

**Cakes:** reduce fat by 1-2 tbsp and increase the amount of eggs in enriched cakes for better structure

**Cookies:** increase baking temperature, liquids, and flour; a slight decrease in leaven, fat, and sugar

Pie crusts: increase the liquid slightly and bake closer to the heat element

Yeasted breads: decrease the yeast by 1/4 tsp. Use less flour per cup of liquid. Bake at a higher temperature for less time.

# Baking Troubleshooting

## Cutting A Recipe In Half and Third

RECIPE CALLS FOR...

CUT IN HALF

CUT IN THIRD



1 Cup



1/2 Cup



1/3 Cup



3/4 Cup



6 Tablespoons



1/4 Cup



2/3 Cup



1/3 Cup



3 Tablespoons  
1 1/2 Teaspoons



1/2 Cup



1/4 Cup



2 Tablespoons  
2 Teaspoons



1/3 Cup



2 Tablespoons  
2 Teaspoons



1 Tablespoons  
1 1/4 Teaspoons



1/4 Cup



2 Tablespoons



1 Tablespoons  
1 Teaspoons



1 Tablespoon



1 1/2 Teaspoons



1 Teaspoons



1 Teaspoons



1/2 Teaspoons



1/4 Teaspoons



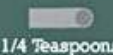
1/2 Teaspoons



1/4 Teaspoons



1/8 Teaspoons



1/4 Teaspoons



1/8 Teaspoons



Dash

# Baking Troubleshooting



## Why A Cake Fails

### Has A Hump

- The oven was overly hot when baking started
- Too much flour used

### Dark Bottom

- Pan too deep or large, keeps top from browning
- Dark pans absorb more heat, place on higher oven rack (same with pyrex)
- Pan was warped which caused uneven browning

### Has Deep Cracks

- Temperature too high
- Too much: flour or baking powder

### Has Fallen

- Temperature too low
- Peeked while baking
- Removed from oven early
- Too much: shortening or sugar or bicarb or baking powder
- Not enough flour

### Coarse Texture

- Temperature not high enough
- Batter over mixed
- Too much baking powder or flour

### It's Running-Over

- Temperature not high enough
- Pan not large enough
- Too much baking powder or sugar

### It's Tough

- Temperature too hot
- Not enough shortening or sugar
- Too much flour

### It's Doughy

- Temperature too low
- Left in pan too long after removing from oven

### Light In Color

- Temperature too low
- Another pan too close while baking

### Browned Edges

- Oven too full
- Tin touching another one or oven wall

### Not Large Enough

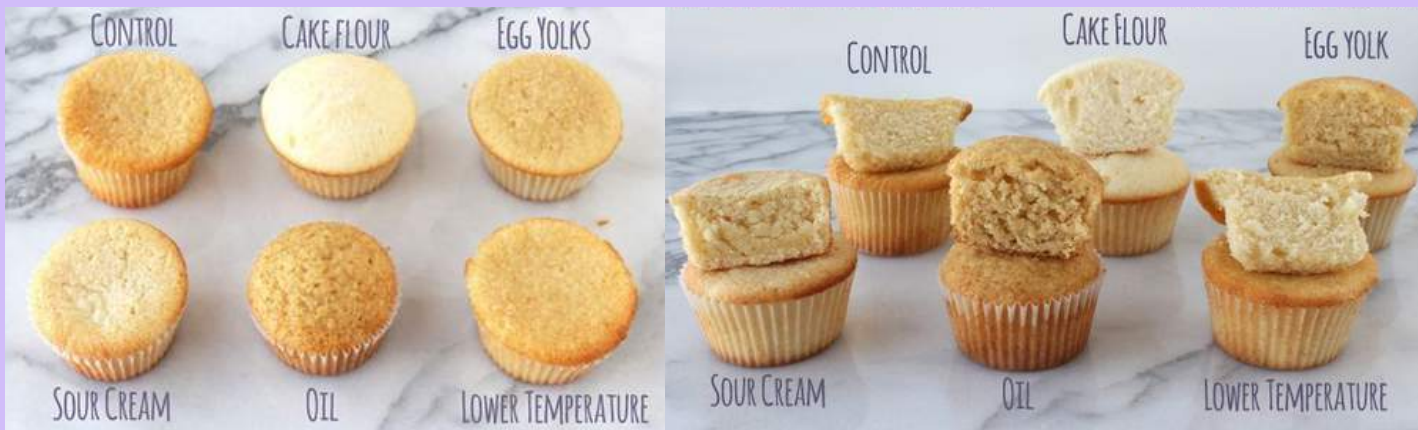
- Temperature too high
- Not enough baking powder
- Over mixed batter
- Oversized pan

# Baking Troubleshooting

## Brownie Fails



## Cupcake Guide



# The Anatomy of a Cookie

Here's what makes a cookie:

## Flour

Depending on its ratio to other ingredients in the dough, flour makes cookies chewy or crisp or crumbly. In dry cookie dough, like shortbread, a high proportion of flour to the small amount of liquid in the butter produces a tender, crumbly texture. Cookies that need to hold their shape during baking, like biscotti or pinwheel cookies, also have a high ratio of flour. In fluid-batter cookies like brownies, a lower proportion of flour to the amount of liquid or egg results in a cakey or chewy texture. Drop cookies tend to fall in the middle, with the exact ratio depending on whether the cookie is to be thick or thin, chewy or crumbly, or soft or crisp.

Bleached and unbleached flours are basically interchangeable in cookie recipes, but the bleaching process alters protein structures, resulting in less gluten formation in doughs and batters made with bleached flour. For this reason, unbleached flour is a better choice where a slightly chewier texture is desired, as in drop cookies and nut bars.

Another option for baking is whole-grain flour, such as whole wheat. Substituting no more than 30 percent of the flour in the recipe with whole-grain flour imparts a nuttier, heartier flavor. At higher ratios, whole-grain flours will make cookies denser, less chewy, and slightly gritty.

## SUGAR

Aside from adding sweetness, granulated white sugar makes cookies browner (by caramelizing) and crisper (by absorbing moisture in the dough). It also encourages spreading as the sugar melts. The proportion of sugar in most cookie dough recipes is so high that only about half of the sugar dissolves during mixing. During baking more of the sugar dissolves, which causes the dough to soften and spread. For the best results, use pure cane sugar because products that contain both beet and cane sugars tend to be less consistent in quality.

Brown sugar makes cookies moister and chewier than does white sugar. That's because it contains molasses (about 10 percent molasses for light brown sugar and 20 percent for dark brown sugar). The molasses adds moisture and because it's slightly acidic causes the proteins in cookie dough to firm up faster, creating a chewier texture.

# The Anatomy of a Cookie

Here's what makes a cookie:

## FAT

Shortening and butter make cookies tender. When mixed into flour, fat coats some of the flour and protects it from the liquid in some recipes. This prevents gluten from developing, making the cookies more tender and less chewy.

Butter contributes significant flavor, so substituting shortening or margarine for butter (or vice versa) changes the taste. It can also affect the texture of a cookie. Butter has a lower melting point than shortening or margarine, causing it to spread more during baking, so a cookie made with butter will be thinner and crisper than the same cookie made with shortening or margarine.

Changing the type of butter can also make a difference. Premium European-style butter is higher in butter fat and lower in moisture than regular butter, making cookies a little thinner, crumblier, crisper, and more buttery tasting. As for salted vs. unsalted butter, the amount of salt added to salted butter varies widely, so it's best to bake with unsalted butter to better control the amount of salt.

## EGGS

These are a major source of moisture and protein in cookie dough. The liquid in eggs gives a cookie structure by bonding with the starch and protein in the flour, and their protein helps to make cookies chewy. Most cookie recipes call for large eggs. If you want to substitute a different size, note that the weight difference between each size is only about 1/4 ounce per egg. This isn't enough to make a big difference unless you're using more than six eggs in a recipe, so for most recipes you can use egg sizes interchangeably.

## LEAVENERS

In most baked goods, baking soda (bicarbonate of soda) acts as a rising agent, but in cookies it's much more important for encouraging browning. It does so by neutralizing acidic ingredients in dough, such as brown sugar, honey, vanilla, and butter, which would normally inhibit browning. Sometimes baking powder, which is a mixture of baking soda and an acidic ingredient, most commonly calcium phosphate, is added instead of baking soda to give cookies a light, cakey texture. When moistened and heated the alkali and acid in baking powder react, neutralizing each other and giving off carbon dioxide gas which aerates the dough, making the finished cookie puffier.



# The Anatomy of a Cookie

Here's what makes a cookie:

## SALT

Without this flavor enhancer, the secondary flavors in a cookie fall flat as the sweetness takes over. Salt also strengthens the protein in a dough, making cookies chewier.

Kosher salt and table salt are identical in flavor, so you can use them interchangeably if you adjust for volume differences. Kosher salt is coarse and table salt is fine, so the same weight of kosher salt takes up more space. To substitute kosher salt for table salt, use double the volume to match the saltiness of the table salt. Conversely, if you're substituting table salt for kosher, use half the volume.

Since sea salt is harvested from the ocean, it has micro nutrients and other subtle flavors that aren't present in kosher or table salt. Kosher salt is pure salt and has a clean flavor. For cooking purposes, there is no difference between kosher salt and flaky sea salt. We recommend cooking with kosher salt because it is more consistent. If you're using a rough, chunky sea salt, it will taste crunchy. Rough sea salt is better used as a finishing salt, like sprinkling over a salad or vegetables.

Fine sea salt can be used as a kosher salt substitute because it is not iodized but should be used in the same proportion as table salt.

Understanding how all of these ingredients work together can help you improve or even fix a cookie recipe when things go wrong.

# The Anatomy of a Cookie

## **MORE THAN JUST THE INGREDIENTS**

A number of other key elements can affect the way your cookies bake.

Mixing develops gluten in the dough, giving cookies a chewy consistency. Beware of overmixing, which can turn chewy into tough, especially in dough that contains less than 50 percent fat by weight. Fat inhibits gluten development, so high-fat dough doesn't have the same toughening problem.

Round dough balls take longer to bake, resulting in softer, thicker cookies. Flattening the balls yields thinner, crisper cookies.

High fat dough or cookies baked at low temperatures spread more during baking and need about 2 inches of space between them. High flour cookies or those that bake for a shorter time need only an inch of space between them.

Time and temperature work together in baking. A low temperature and longer baking time yields crisper, thinner cookies; a higher temperature and shorter baking time makes softer, thicker cookies.

Ovens can vary, so for accurate temperatures, check yours with a thermometer. For even heating, use heavy-gauge aluminum baking sheets, and line the pans with parchment or silicone to minimize hot spots, prevent sticking, and speed cleanup.



# The Anatomy of a Cookie

For best results, bake a single sheet of cookies on the center rack. If baking more than one sheet, set racks in the upper and lower thirds of the oven and rotate sheets from top to bottom and back to front once during baking. This advice applies to convection baking as well.

Cool cookies completely before storing or trapped steam can turn them from crisp to soggy.

# The Anatomy of a Cookie

## the SCIENCE behind the PERFECT COOKIES

by kitchennostalgia.com



IF YOU USE

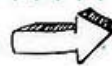
YOUR COOKIES WILL BE



Brown Sugar

Chewy, Moist

White Sugar



Crisp, Spread More

Powdered Sugar

Reduces Spread



All-purpose, Bread Flour

Chewy

Cake Flour



Tender

Pastry Flour

Crumbly Texture



Melted Butter

Chewy, Spread More

Creamed Butter



Spongy, Cakey Texture



Egg Whites

Dry, Cakey

Egg Yolks



Smooth Texture



Honey  
Corn Syrup  
+ Molasses



Moist, Chewy



Chilled Dough



Reduces Spread



High Heat

Crisp, Rubbery, Dry

Gentle Heat, Underbaking



Soft, Moist, Chewy



Large Cookies

Chewy

Small Cookies



Crispy

# The Anatomy of a Cookie

## How Temperature, Butter & Sugar Affect Your Chocolate Chip Cookies



### CONTROL

- softened butter
- white & brown sugar
- eggs
- vanilla
- baking soda
- cooked at 350°



### 325°

- cookies will bake evenly
- more structured crumb



### 375°

- golden and crisp on the outside
- slightly doughy in the center



### BAKING POWDER + BAKING SODA

- cookies rise in the center and
- stay flat around the edges



### BROWN SUGAR

- cookies will be denser
- strong caramel flavor



### WHITE SUGAR

- cookies will spread more
- less chewy
- less caramel flavor



### VEGETABLE OIL

- cookies will be crinkly
- won't have buttery flavor



### MELTED BUTTER

- fudgier texture

## Types of Cookies

### [The Most Popular Types of Cookies](#)

^ Link ^

# Types of Bread

## Yeast Breads



**Whole Wheat Bread**  
Loaf for sandwiches



**Multigrain Bread**  
Loaf for toasts, & sandwiches



**White Bread**  
Loaf for toasts, & sandwiches



**Brown Bread**  
Loaf for sandwiches



**Baguette**  
Loaf for sandwiches



**Grissini**  
Breadsticks to eat with toppings & dips



**Brioche**  
Sweet pastry bread for breakfast



**Challah**  
Braided rolls for sandwich & stuffed items



**Ciabatta**  
Loaf for sandwiches & toasts



**Focaccia**  
Flat, round bread for appetizers



**Croissant**  
Crescent rolls to eat with jam, cream etc.



**Bagel**  
Ring-shaped buns for toasts & sandwiches



**Banana Bread**  
Loaf for sandwiches & dessert items

## Sourdough



**Sourdough bread**  
Loaf for toasts & sandwiches



**Pumpernickel**  
Sliced bread for sandwiches & appetizers



**Cornbread**  
Quick bread for breakfast, side dish, & stuffing



**Rye bread**  
Loaf for sandwiches & toasts

## Flatbreads



**Pita Bread**  
Round flatbread to serve with hummus



**Naan**  
Fluffy flatbread to serve with curries & dips



**Tortilla**  
Flatbread for burritos, tacos, & fajitas

# Science of Sourdough

A homemade sourdough starter is a bread baker's pantry staple – though it does take some tending. Here our method for getting one going from scratch; though it'll take a few days longer to get to "bread time" than if you'd stolen some starter from a friend, the result will just be that much more satisfying. Once your starter is mature, it will add a tangy flavor and aroma to all your homemade bread.

## **INGREDIENTS:**

- 1 cup (4 ounces) whole-wheat or rye flour
- Warm water between 65 - 80°F / 18-27°C.
- Unbleached all-purpose or bread flour, for feeding

## **Supplies:**

- One 1-quart glass jar, very clean
- Rubber spatula
- Kitchen scale or dry and liquid measuring cups

## **NOTES:**

Water: If you know your tap water to be high in chlorine, fill a vessel and let it sit uncovered overnight to release the chlorine before using it to mix a starter. Alternately, you may use filtered water. Aim to keep your starter at 75°F / 24°C. If your environment is much colder, you might want to start with warmer water.

# Science of Sourdough

<b>Flour</b>	After the initial mix, you will feed your starter white flour — both all-purpose and bread flour work — just make sure it is unbleached and look for one that has a protein content between 11 to 12 percent for best results.
<b>Jar</b>	To ensure you don't bring unwanted mold or bacteria into your starter, sterilize your jar by running it through a hot dishwasher wash cycle, or for canning jars, boil for 10 minutes.
<b>Scale</b>	A kitchen scale is optional but if you plan on keeping up your sourdough starter for a long period of time, it will make the feedings a bit easier, less messy, and faster.
<b>Day 1: Initial Mix</b>	Add 1 cup (4 ounces) whole-wheat or rye flour into a very clean 1-quart jar along with 1/2 cup (4 ounces) warm tap or filtered water between 65 to 80°F/ 18-27°C . Stir well until all the flour is moistened and the dough resembles a thick paste. Cover loosely with the lid or plastic wrap. Set out at warm room temperature (75 to 80°F/ 24-27°C) for 24 hours.
<b>Day 2: First Feeding</b>	You will not likely notice much of a difference in appearance in the starter after the first 24 hours other than some condensation and a wheat-like aroma. You will need to begin feeding it to encourage growth. Use a rubber spatula to measure out 2/3 cup (5.5 ounces) of the starter and add it to a stainless steel or glass mixing bowl; discard any remaining starter. Add 1 cup (4 ounces) all-purpose or bread flour along with 1/2 cup (4 ounces) warm tap or filtered water between 65 to 80°F/18-27°C to a stainless steel or glass mixing bowl. Stir well to combine all ingredients, making sure all the flour has been incorporated and the starter is well mixed. Return the starter to the jar. Cover again loosely with the lid or plastic wrap. Set out at warm room temperature (75 to 80°F/ 24-27°C) for 24 hours.



# Science of Sourdough

## **Days 3 to 5: Two Feedings Per Day**

On day 3 you should notice some activity in your starter. The mixture should look bubbly and it will probably have risen some. It will have a fresh, slightly tangy aroma. Now you'll feed the starter twice a day. It's best to arrange the times to conveniently work with your schedule. Keep them as evenly spaced apart as possible — every 12 hours is the goal. To feed the starter, give it a couple of good stirs to release any bubbles. Measure out a heaping 1/2 cup (4 ounces) starter and place it into a stainless steel or glass mixing bowl; discard any remaining starter. Add 1 cup (4 ounces) all-purpose or bread flour along with 1/2 cup (4 ounces) warm tap or filtered water between 65 - 80°F/ 18-27°C to a stainless steel or glass mixing bowl. Stir well to combine all the ingredients, making sure all the dry flour has been incorporated and the starter is well mixed. Return the starter to the jar. Cover again loosely with the lid or plastic wrap. Set out at warm room temperature (75 to 80°F/ 24-27°C). Repeat the process 12 hours later and every 12 hours for the next 2 days.

## **Days 4 and 5: Checking In**

You may notice the activity in your starter will vary between feedings over the next 2 days. It should consistently look bubbly and sometimes foamy before each feeding. By day 5 it will have nearly doubled in size before you feed it. The aroma should be pleasantly sour and slightly yeasty.

## **Day 5 or 6: Ready to Go!**

By day 5 or 6, your sourdough starter should be strong enough to use in your first loaf of bread. Check the signs: The starter should be nearly doubling in volume between feedings and look very bubbly and slightly foamy at the surface. It should also have a strong, but pleasant acidic aroma. If you don't feel your starter is ready, continue feeding it in 12-hour increments for another day or two.

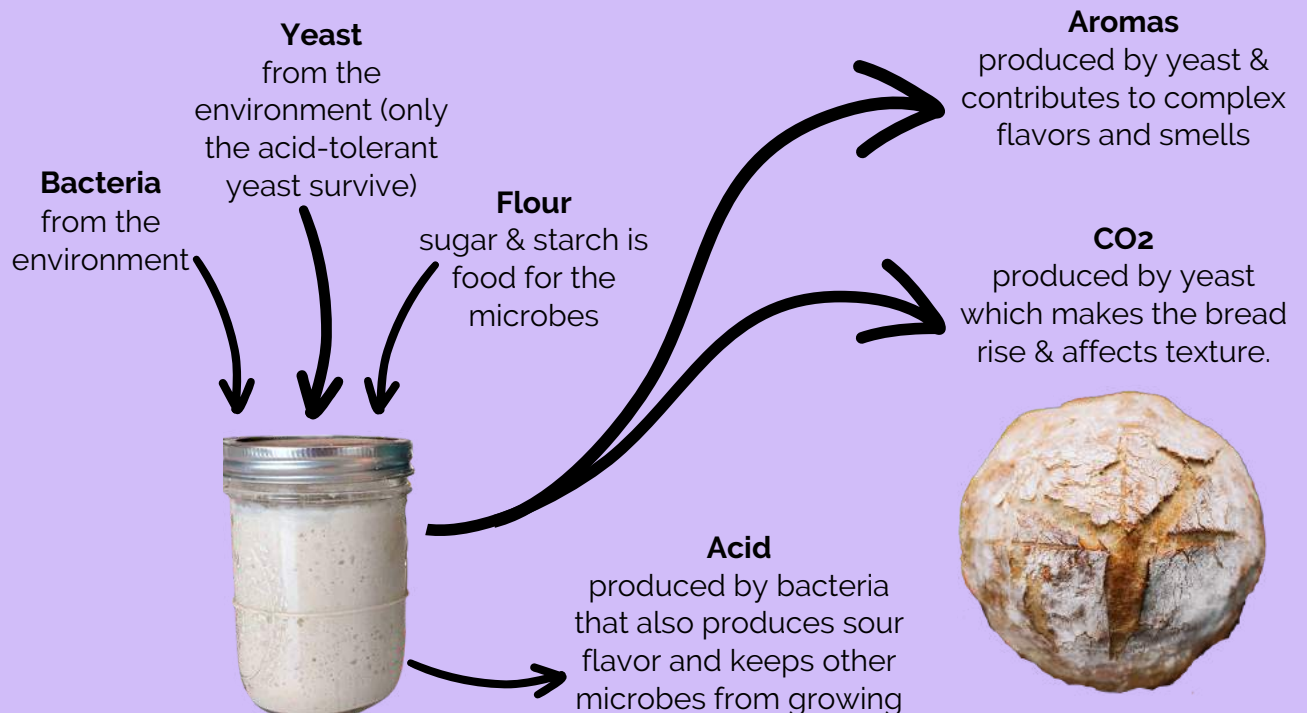
## **Maintenance and Storage:**

For frequent bakers: If you are baking with your starter more than once a week, keep it at cool room temperature (65 to 50°F) and feed it once a day as instructed above.

For occasional bakers: If you are baking once a week or less, you want to slow the starter's growth by storing it in the refrigerator. To prep your starter for cold storage, give it a regular feeding then let it ripen at warm room temperature until you see a good amount of activity, 3 to 4 hours. Then store in the refrigerator. Check the starter at least every other day and feed it weekly as instructed above, making sure to let it ripen at warm room temperature before you refrigerate it again. A refrigerated starter should smell pleasant and sour, and you'll see some bubbles on the surface. You should NOT see watery liquid on the surface or smell alcohol. If you do see liquid, try feeding it more frequently.

# Science of Sourdough

QUESTION	ANSWER
<b>I missed a feeding. Now what?</b>	Feed your starter every 12 hours at room temperature for a day or two to bring it back to life. I left a starter in the fridge for two months when I fled my apartment at the start of the pandemic — when I came back, I fed it three times and baked a lovely loaf of bread!
<b>Does the type of flour matter?</b>	Yes! Use whole-wheat flour to create the starter — the extra nutrients will help kick-start the process. I use unbleached all-purpose flour for feedings. The fresher the flour, the better the results; you want to capture the wild yeasts that exist on the flour.
<b>Do I have to discard some of the starters?</b>	You need to keep the amount of starter in the jar consistent or it will grow exponentially and take up space. You don't have to discard it though: You can give some away, or you can add some to pancakes or waffle batter for sourdough flavor (you'll still need a leavener).
<b>How do I know if my starter is dead?</b>	If the starter doesn't rise when you feed it, it is likely inactive. You can probably bring it back to life after a few feedings; if it takes many feedings, you are basically just growing a new starter, which is fine, too!



# Tips if Your Cake is Too Dense

## USE CAKE FLOUR

Reach for cake flour instead of all-purpose flour. Cake flour is a low protein flour that's milled into a superfine consistency. This soft, tender texture directly translates into your cake. However, this isn't an ALL or NOTHING rule. Some recipes simply cannot withstand cake flour's fine consistency. Chocolate cake, for example, already has cocoa powder— which is a soft dry ingredient and takes the place of some flour in the recipe. More often than not, the combination of cake flour and cocoa powder results in a flimsy cake. Likewise, carrot cake and banana cake contain additional wet ingredients, so cake flour isn't ideal because it's not strong enough. However, when making vanilla cake, white cake, red velvet cake, vanilla cupcakes, and other cakes/cupcakes where a fluffy texture is favorable, try using cake flour. I've also been successful substituting cake flour for all-purpose flour to create softer pineapple upside-down cake and funfetti cake. Make a 1:1 substitution with no other changes to the recipe.

## ADD SOUR CREAM

To help prevent a dry, dense cake, add a creamy and light wet ingredient. Milk is usually required in a cake recipe to thin out the batter and lighten up the crumb, but sour cream is often overlooked. In addition to milk, add a spoonful or 2 of sour cream. Of course, this depends on the recipe, but you'll find that a lot of my cake recipes call for sour cream. Don't underestimate the power of this ingredient. Plain yogurt is a fine substitution, vegan works too.

## ADD A TOUCH OF BAKING POWDER OR BAKING SODA

When a cake is too dense, one might think that adding extra flour will soak up more moisture and lighten up the crumb. However, that's not usually the case. The cake likely needs more leavening support from baking powder or baking soda. This tip isn't exactly a cakewalk (ha!) because these two ingredients are scientifically particular. If a recipe includes a lot of acid such as lemon juice and buttermilk and isn't lifted with enough baking powder, the cake will taste dense. In that case, you may need the addition of baking soda which will react with the acid and create a fluffier crumb. Depending on the recipe, adding more baking powder or soda could leave a bitter aftertaste. Don't go overboard.

# Tips if Your Cake is Too Dense

## ADD OIL

The ratio of wet to dry ingredients determines a cake's moisture level. If there's simply too much flour and not enough butter, a cake will taste dry. On the other hand, if there's too much milk and not enough flour, a cake will taste too wet. Finding the right balance between wet and dry ingredients is key. If you notice that a cake tastes too dry, add a little oil the next time you make it.

Some cakes use oil instead of butter. This is because there's another flavorful ingredient in the recipe and butter's flavor isn't necessary.

## DON'T OVER-MIX

As mentioned in tip #3, over-mixing cake batter produces too much air. That trapped air expands then deflates in the oven. A deflated cake is a dense cake! Only mix the wet and dry ingredients together JUST until combined. I usually run a whisk or spatula through the batter a couple times at the very end to ensure there are no large lumps at the bottom of the bowl. Whether you're using a mixer or mixing by hand, don't over-mix.

## DON'T OVER-BAKE

If you're looking for a dry cake, simply over-bake it!

In all seriousness though, over-baking cakes dry them out. It could only be a 30 second window between perfectly baked and over-baked, so make sure you're keeping an eye on the cake. Begin checking it 1-2 minutes before the recipe instructs.

Use these as indicators that your cake is done:

- Cake should be very slightly pulling away from the side of the pan.
- A toothpick inserted in the center of the cake will come out clean or with a couple
- lightly moist crumbs.
- Gently press down on the cake. If the cake bounces back completely, it's done. If
- your finger left a dent in the cake, it needs more time.

# Tips if Your Cake is Too Dense

## **ROOM TEMPERATURE BUTTER / DON'T OVER-CREAM**

I sound like a broken record on this one, especially if you're a regular SBA reader. But when a recipe calls for room temperature butter, use room temperature butter. Most cakes begin with creaming butter and sugar together. Butter is capable of holding air and the creaming process is when butter traps that air. While baking, that trapped air expands and produces a fluffy cake. No properly creamed butter = no air = no fluffiness. Aka a dense cake.

But let's say your butter was at the proper room temperature. You began creaming it with sugar, but then left the mixer running. There's a big chance your butter and sugar will over-cream, meaning the butter will trap more air than it should. As the batter bakes, that extra air will deflate and leave you with an overly dense cake. It's all science!

For best results, cream butter and sugar together for about 1-2 minutes.

Additionally, the cake recipe may call for room temperature sour cream, milk, and/or eggs. Make sure they're each at room temperature. Room temperature ingredients bond together easier and quicker since they're warmer— thus reducing over-mixing. Over-mixing = dense cake.

## **DON'T DOUBLE THE RECIPE**

For absolute BEST taste and texture, never double a cake recipe. Make the batter twice instead. Doubling the recipe risks over-creaming (tip #3), over-mixing (tip #6), or under-mixing. And the baking powder and/or soda may not completely distribute which could leave bitter aftertastes in sections of the cake.

Only work with the amount of batter the recipe instructs. When you need extra cake batter, make the batter twice— separately.

# Tips if Your Cake is Too Dense

## **BRUSH WITH SIMPLE SYRUP/OTHER LIQUID**

When things go totally awry and you have a dry cake on your hands, all is not lost. A quick brush of simple syrup adds moisture. When the cake has completely cooled, brush a thin layer of simple syrup on top. Instead of simple syrup, you can even use Sprite (Hope Right Here).

### **To make simple syrup:**

Boil equal parts granulated sugar and water together until the sugar dissolves, then let it cool before brushing it onto your cake. Use a pastry brush. You can flavor the syrup, too. When the simple syrup comes off the stove, stir in a touch of vanilla extract, prepared coffee, lemon juice, Amaretto, or other liqueur. Let it cool before using. You could even place some vanilla bean, lemon peel, or culinary lavender in the cooling syrup. Once cool, strain out the chunks/add-ins using a fine mesh sieve. It's a very thin layer of syrup, so it won't make your cake too sweet.

# Types of Cakes

Before we start, always remember read through the entire recipe beforehand, so you know exactly what you are doing. Make sure you have all of the tools needed, as well as all of the ingredients for the recipe. Check your refrigerator. You may need to make a quick grocery trip! Don't forget to preheat the oven before you start! Once baking soda or powder mingle with any liquids in the batter, their leavening power is immediately triggered. And this continues after heat is applied.

First choose the right type of pan: Consider the type of pan you should use. Above all else, you should use light-colored metal pans for baking. Dark-colored varieties absorb a greater amount of heat than light-colored types. As a result, the batter will develop a dark crust on the bottom very quickly and may burn.

**Properly prep the pans:** There are a variety of ways to prep these, but I'm partial to a certain method.

Follow our favorite technique below to ensure that your treats come out cleanly with no issues, every time:

1. Make paper liners for the bottom of the pans. To get the right size, outline the bottom of the pan on the parchment paper, cut out, and set aside.
2. Lightly coat the bottom and edges of the pan with nonstick cooking spray.
3. Line the bottom of each pan with one parchment paper liner.
4. Lightly spray the parchment with more nonstick cooking spray. Your pans are now nonstick, and ready to go!

# Types of Cakes

Being able to bake a cake from scratch is an essential skill for a baker when learning the science of baking. Being able to understand and master the fundamental types of cakes ensures a greater foundation of knowledge, making more complex and intricate recipes easier to master in the future.

There are hundreds of styles of cakes, however getting to know about the following types can give you a good start in building your recipe repertoire

## **POUND CAKE**

As the name suggests, this traditional and classic cake got its name by originally being made by using one pound each of butter, sugar, eggs and flour. This cake is dense and delicious and lends itself to be a great base recipe for many variations.

## **BUTTER CAKE**

Similar to pound cake, this cake calls for roughly equal parts butter, sugar, eggs and flour, however due to the inclusion of a leavening agent it means for a lighter texture. The content of butter in this cake allows for the cake to remain moist when baking and can also lend itself to be a great foundation for variations.

## **LAYER CAKE**

This involves the layering of cake which is held together by icing/frosting, preserves or filling. The essential thing to remember when making a layer cake is to ensure that the filling/frosting being used is suitable for the cake. For example, a lighter and airy cake would not be suitable to use with a heavier frosting or filling as it can lead to compromising the structural integrity of the cake and also lead to the cake sinking. However, the combinations and variations when making a layer cake are endless, and when done right can make for amazing results!

## **SPONGE CAKE**

Like its name, this cake is light and airy like a sponge and is great at absorbing syrups, drizzles and creams. This cake originated before leavening agents had been discovered, and it's texture and height is achieved by whipping the eggs for up to 15 minutes. But be careful! This cake can be quite fiddly to master and has a great room for error, which means you need to ensure that you're following the recipe very closely.



# Types of Cakes

## ANGEL FOOD CAKE

This cake is super light and fluffy, almost like it could float like an angel! The secret behind its height is omitting egg yolks and instead the whites are whipped into the batter. Once it has finished baking, it is cooled upside down in its mold, which helps prevent the cake from collapsing. This cake is ideal to serve with fresh berries and cream, making it a delicious and light dessert!

## CHEESECAKE

This is a more rich and creamier cake, usually involving layers that includes a crust made from cookies or biscuits and the main filling commonly consists of cream cheese, eggs and sugar. The filling can be adapted to suit many different tastes and can range from dense and decadent to more light and fluffy like mousse. The versatility of this cake also allows for baked and non-baked versions.

## CHIFFON CAKE

This light and airy cake is different in that it calls for vegetable oil instead of butter or shortening. It has a spongy texture and unlike other cakes that use leavening agents it involves beating the egg whites into a meringue and then folding it into the mixture. This cake is similar to the Angel Food Cake, but instead includes egg yolks and oil. This cake also calls for it to be cooled upside down in its pan in order to prevent collapsing. This cake is also not overly sweet, allowing for any frosting or fillings to make up for the flavor and sweetness.

## FLOURLESS CAKE

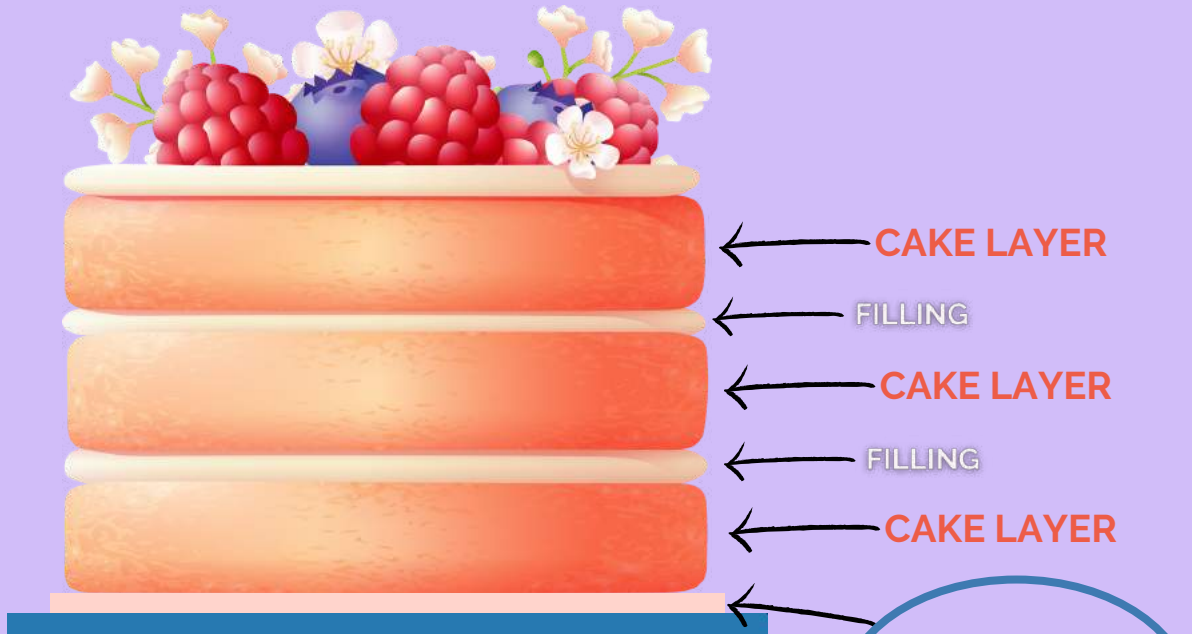
As the name would entail, this cake is made without flour and makes for a decadent and rich cake. This cake is normally ideal for those suffering with gluten allergies, and can be adapted to suit many tastes.

## MUDCAKE

This type of cake is super rich and dense and involves a few more steps and more ingredients with a lower cooking temperature. This cake normally is covered in a rich frosting and is a favourite in cakes for celebrations like weddings and birthdays.

# Types of Cakes

## The Basic Tiered cake



CAKE BASE  
(AT LEAST 2  
INCHES LARGER  
THAN THE CAKE)

CAKE BOARD  
(THE SAME SIZE  
AS THE CAKE)

**TIP #2:**  
ATTACH THE CAKE  
BOARD TO THE  
CAKE BASE WITH  
CANY MELTS OR  
HOT GLUE.

**TIP #1:**  
YOU CAN USE  
ANY TINY  
AMOUNT OF  
CANDY MELTS  
TO ATTACH THE  
CAKE LAYER TO  
THE BOARD.

# Types of Cakes



Esterházy torte



Faworki



Fig



Karpatka



Financier



Fruit



Funnel



Kiev



Garash



Genoa



Genoise



King



Ice cream



Jaffa



Joffre



Kolaczki



Kue cubit



Chestnut



Lamington



Lemon

# Types of Cakes



Pound



Cupcake



Foam



Angel



Strawberry



Banana



Sachertorte



Date square



Paczki



Battenberg



Jelly roll



Šakotis



Baumkuken



Panpepato



Streuselkuchen



Devil's food



Pudding



Moon



Tiramisu



Krantz

# Pastries

While pastries are a part of a baker's offerings, surprisingly enough they don't necessarily have to be sweet. In fact, pastries come in a variety of sizes, shapes, flavors and textures. What's more, they're made from ingredients such as flour, sugar, milk, butter, shortening, baking powder and eggs.

## **Fat content:**

Pastries are different from bread in that they have higher fat content, which gives them a flakier, more crumbly texture.

The perfect pastry is light and airy, but firm enough to be able to support any filling it might have.

**The pros:** Oil combines with flour and water very easily to create a dough. More flavorful oils like olive can add a rich, unique flavor to crusts, especially those meant for savory quiches or tarts.

**The cons:** Using oil creates a mealy, breakable dough that is more difficult to roll out and transfer into a pie pan. The resulting crust will be crumbly and tender, and not as flaky as crusts made of other fats.

# Pastries

**What is the full meaning of pastries?** Pastry is a food made from flour, fat, and water that is mixed together, rolled flat, and baked in the oven. What are the types of pastries?

**There are five basic types of pastry (a food that combines flour and fat);** these are short crust pastry, filo pastry, choux pastry, flaky pastry and puff pastry. How are pastries made? Pastry is a type of dough made with flour, water and shortening. Baked pastry dough can be sweet or savory and consumed alone or with fillings. Pastry is characterized by its flaky and crumbly texture, and rich buttery flavor.

# THE FIVE BASIC TYPES OF PASTRIES

The five basic types of pastries are short crust pastry, filo pastry, choux pastry, flaky pastry, and puff pastry.

These pastry types are combined with various ingredients and flavors around the world to create such cultural staples as samosas in India, empanadas in Spain, pain au chocolat in France and spanakopita in Greece.

In North America, however, the word "pastry" has a slightly different connotation. Here are our top 10 versions of what it means:

<b>Croissants</b>	<p>A type of puff pastry from France, croissants are a rich, flaky roll named for their distinct crescent shape. Typically eaten at breakfast, croissants can be made by layering yeast-leavened dough with butter and combined with cheese or chocolate.</p>
<b>Pies</b>	<p>A pie is a baked dish of fruit, meat, or vegetables, typically made of a pastry-dough crust and often topped with pastry.</p> <p>While apple pie is a fixture in North American culture, other popular pie flavours include cherry, peach, pecan, and blueberry.</p>
<b>Danishes</b>	<p>A sweet pastry and speciality of Denmark, danishes are a popular breakfast buffet item, available in flavours like apple, cherry, chocolate and cheese. When baked correctly, they are fluffy and crispy on the outside, and buttery and flaky on the inside.</p>
<b>Macarons</b>	<p>Macarons (not to be confused with macaroons) are a sweet French meringue-based confection made with egg whites, sugar and almonds, sandwiched around a layer of ganache or buttercream. They are round and bite-sized and come in a wide variety of colors and flavours, like pistachio, rose, and salted caramel.</p>

# THE FIVE BASIC TYPES OF PASTRIES

## Éclairs

An oblong, hollow pastry made with choux dough and filled with custard or chocolate-flavoured cream, éclairs are a staple at any gourmet bakery or French pâtisserie. They are topped with fondant icing — the same type of icing that is commonly used on profiteroles.

## Strudels

A German type of layered pastry, strudels are made with filo pastry and a filling that is usually sweet. Popular varieties include apple, cheese, and sour cherry. They are often served with cream.

## Cannoli

Cannoli originate from Italy and are made with a tube-like shell of fried pastry dough filled with a creamy, sweet filling usually made with ricotta cheese. They can range in size no bigger than a finger to as large as a fist.

## Pretzels

Unmistakeable with their unique knotted shape, pretzels are made with the baked dough in both soft and hard varieties. Originating in Europe, pretzels can be made with both sweet and savoury flavours and a variety of toppings and coatings.

## Tarts

A baked dish made with a filling over a pastry base, tarts (unlike pies) has an open-top. Traditionally baked with shortcrust pastry, tarts can be made with sweet ingredients like custard and fruit, or savoury ingredients (often called quiches).

## Profiteroles

Called cream puffs in the United States, profiteroles are a French dessert made with choux pastry balls filled with whipped cream, pastry cream, custard, or ice cream. The puffs may be left plain or topped with powdered sugar, fondant icing, or chocolate ganache.



# Pastries

## Brisée

This is the most basic of our three crusts and contains only flour, butter, salt, and cold water making it great for savory bakes. Think of it as the standard French crust. The ingredients are very similar to our American flaky pie dough but the incorporation of ingredients are slightly different. With American pastry, we emphasize the “rubbing in” of cold butter into flour which gives us that irregular flaky texture. While the French also mix their butter into flour while it’s still cold, they generally rely on the use of a standing mixer. Sometimes going as far as adding an egg yolk (in which case the crust is then referred to as a *pâte à foncer*). These slight alterations yield a crust with a finer, stronger, crumb, which is much more uniform but lacks the flaky quality of its American counterpart.

Great for: Savory meat pies and quiche

## Sucrée

Think sugar when making a *paté sucrée*, its name even means “sweet dough” in French. Very similar to the *paté brisée* ingredient-wise, the *sucrée* differs slightly when it comes to method. When making the *sucrée* you cream together the butter and sugar, then add the egg and flour. What you get is a light, crisp dough. With a tight cookie-like crumb that’s strong enough to hold liquid fillings without the worry of leakage.

Great for: Cream pies, chocolate ganache pies, and fruit curd tarts.

## Sablée

The richest of our three doughs the *sablée* is one of the most delicious and one of the most difficult crusts to work with. *Sablée* is reminiscent of a good shortbread, both in flavor and in its rough-on-the-tongue texture. Like the *sucrée*, it is a sweet dough and generally utilized for a lot of the same dishes. The method is also similar to the *sucrée* as it too uses the creaming method. However, the end result could not be less similar. *Sablée* is named after the French verb “*sabler*” meaning to “make sandy” and its texture is truly a crumbly “sandy” product. The addition of almond flour in many *sablée* recipes undermines gluten formation even further and adds to that delicate texture, making *sablée* sometimes difficult to roll out. When lining a tart tin we actually suggest pressing the dough in, instead of rolling the dough and transferring it as you might with other doughs.

Great for: Fruit Tarts

# Pastries

## *Tout de Suite!*

~ a downloadable guide to french pastries ~



crepe  
(krep)



croissant  
(kraw-san)



eclair  
(e-clare)



financier  
(fi-nans-ier)



fraisier  
(fra-zee)



gâteau de rois  
(gah-toe-de-rwa)



macaron  
(mack-a-rohn)



madeleine  
(maddle-en)



millefeuille  
(mill-fulle)



mont-blanc  
(mon-blahn)



mousse au chocolat  
(moose ah shock-ah-lot)



pain au chocolat  
(pahn ah shock-ah-lot)



palmier  
(paul-meer)



petit four  
(puh-tee-four)



pot de crème  
(poh duh crehm)



profiterole  
(pro-fit-eh-roll)



religieuse  
(ruh-lee-joos)



saint honore  
(sant honor-ay)



tarte citron  
(tart see-tron)



tarte tartin  
(tart tar-tan)

# Intro to Cake Decorating

After making a cake you need to make it all nice and pretty, right? That's where decorating comes in.

You have many choices from naked cakes to royal icing, buttercream frostings, even fondant. Along with these you also have a plethora of toppers like candies or ganache's. Take your time to learn slowly and step by step the basics of decorating cakes and more!

Let's learn about the necessary tools, techniques and tips to decorate cakes like pros.

To start here's a very basic tip:

## COOL CAKE COMPLETELY

It really is tempting to decorate as soon as your baked items come out of the oven.

### **Here's our advice:**

Don't do it.

With just a few tools, you can get started on your cake decorating journey. In fact, you may already have a few of these items lying around the kitchen.

A **cake turntable** is a raised stand that rotates 360-degrees. This will let you spin the cake so the right side is always facing you. If you don't have one, a Lazy Susan can also work in a pinch. But the extra height from the turntable lets you stand up straighter, which can make decorating easier on your back.

# Intro to Cake Decorating

You'll need a **serrated knife to "level" your cake**. Most cakes come out of the oven with a slight dome at the top, so you need to cut that extra height off for a nice flat surface. You'll also want an offset spatula. This will let you keep your fingers back from the frosting, so you won't accidentally ruin the finish.

For specialty tools, a **cake scraper** is handy for creating a smooth finish with your frosting. This simple tool is just a flat piece of metal that you can hold against your cake while rotating it on the turntable. They usually have one straight side and one patterned side for textured designs.

Finally, every new cake decorator will need **pastry bags and tips**. There is a wide variety of tips that let you pipe your icing into words, flowers, dots, basket weave patterns, and more.

## **Freeze The Cake.**

After you have cooked your cake, a short freeze will make the layers easier to level and frost. Frozen cakes are less crumbly, meaning it's easier to get them flat and to keep your frosting lump-free.

To level your cake, place it on the turntable. Hold your serrated knife straight out in front of you, with your elbow tucked into your side. Place the knife against the edge of your cake and rotate the turntable slowly while holding the knife still. Just score the edge of the cake with the knife as you rotate it.

# Intro to Cake Decorating

Once you have your shallow mark around the whole cake, repeat the process. This time, press the knife gently into the cake while you rotate it, letting the turntable do the work. When you're done, you'll have a perfectly flat cake for layering or decorating.

## **Use Homemade Frosting!!**

If you want a smooth texture on your cake, you need to DIY the frosting. Canned frostings are thinner and don't adhere to the cake as well. They can look lumpy and even slide off your cake!

Make your own buttercream instead. It's simple, delicious, and you can add food coloring for custom colors.

A great deal of cake decorations come out of the pastry bag. With a little practice, this simple tool will let you create a wide variety of shapes and designs.

To get started, fold down the edges of the piping bag to keep them clean. Cut just the pointed tip off of the bag and insert your metal piping tip. Push it down so the metal tip just extends out of the small hole you cut.

Now it's time to fill the bag. You can either hold the bag in one hand and fill it with the other or set the bag into an empty water glass to hold it upright while you fill it. Use a rubber spatula to add frosting to the bag. Then flip the folded edges back up and twist them together to create an airtight seal.



# Intro to Cake Decorating

## Ready to pipe!

If you're planning to **pipe a message**, write it out on wax paper and trace it to get a feel for the motion. You can also practice dots, swags, and flowers on wax paper before moving to your cake.

For a simple — but impressive — **rosette**, use a star tip. Just squeeze the bag and lift straight up to make the star. Then make a circle around the star, squeezing gently the whole time.

And FINALLY, **Practice Makes Perfect**. Don't be discouraged if your first few attempts don't turn out perfectly. They'll still taste delicious!

Be warned — once you start to make beautiful cakes, all your friends and family will want one for their birthdays and parties!

# Equipment & Tools

When building your cake decorating supplies, you need to consider what type of decorating you're planning on doing. Do you plan on just occasionally whipping up some cupcakes or a layer cake, or do you plan on making a frosted and tiered masterpiece? The former would only require just a few basic supplies, however the latter would most definitely require a larger number of supplies.

A great way to get yourself familiarized with supplies out there is to venture to your local craft chain store, or supermarket and have a look at the supplies they offer.

Here is a list of equipment and tools that you can start from in order to build up your cake decorating toolbox:

## Basic Toolbox essentials

### **Long serrated knife**

(a bread knife will do) for levelling and cutting the cakes. You can also purchase a proper cake leveler if you wish to, however its perfectly fine to start by levelling and cutting cakes using a serrated knife.

### **Spatula or spreader**

When smoothing down frosting or icing, a regular rubber spatula will not be precise and efficient to complete the task, however this can be done with a specialize cake spatula. An angled spatula allows for you to spread the frosting and then smooth it out without your fingers getting in the way. A larger size (13inch) is great for standard cakes, whilst a smaller one (9 inch) is ideal for topping cupcakes and desserts

### **Piping nozzle**

In order to create borders and extra details, piping tips of various shapes and sizes can be used. There are hundreds of varieties out there, and the possibilities for decorating techniques are also endless. However, when first building your toolbox there are only a few tips that are suggested. This includes a star and a round tip, and you should go for stainless steel instead of plastic as it allows for a smoother and more precise finish.

# Equipment & Tools

## Basic Toolbox essentials

### **Piping bags**

These are vital for ensuring that you achieve a more precise finish when piping, and come in a variety of styles and sizes. The most popular and widely available are disposable plastic which normally come in a bulk pack. However, if you'd like to be a bit more environmentally conscious there are reusable options such as silicone or plastic-coated cloth versions. These are then paired with a coupler, which allows you to easily interchange the piping nozzle, whilst also ensuring that the nozzle is fastened securely to the piping bag.

### **Food colors**

When cake decorating it is always recommended to use gel colors as they do not make icing or frosting separate like water-based colors do. Whilst you can use powder-based food colourings, they contain more additives and require a significant amount in order to reach the same desired colour compared to gel coloring. Start with the primary secondary colors and get used to mixing colours, and then if you're aiming to broaden your toolkit, then you should consider investing in different colors.

### **Hand mixer/ stand mixer**

Beating butter or cream for a variety of frostings and icings can become time consuming and energy draining especially if doing by hand. Furthermore, it is highly unlikely you will be able to achieve the same consistency and smoothness, when making with a hand or stand mixer. With a wide variety of mixers available, it is all dependent on personal preference and budget when choosing the right one for you.



# Equipment & Tools

## Not essentials, but still handy to have:

<b>Scraper/ smoother</b>	<p>This tool is ideal in that it will help you achieve the smoothest finish with your frosting on cakes. This tool is also considered to be a multi tool as it can be used to scrape and spilt bread doughs, but also chop ingredients. Definitely a worthwhile investment if you're planning on taking your cake decorating to the next level.</p>
<b>Turntable</b>	<p>this is more of a luxury item but can make the process of decorating so much easier. Whilst you can just use a plate or board to decorate your cake, it can impact on your range of motion when icing your cake. A turntable is ideal in that it can increase the ease, effectiveness and speed of decorating, and you can control the speed at which you turn it. The smooth turning movement will allow for a smoother and even spread when frosting a cake.</p>
<b>Cake board</b>	<p>(these can come in a variety of sizes) and provides a great flat and supportive surface for you to both work on the cake and then display it when finished. It is highly recommended to use a surface, rather than working directly on a turntable or display plate, as it will allow for freedom of movement when decorating. Use a cake board that is slightly larger than your cake if you want room available for piping a border around the cake, or use a board that is slightly smaller than the cake if you don't want to see the board. This will still ensure that there is a decent support structure underneath.</p>

# Types of Frostings

Buttercream is by far the most common type of frosting, and it's made by combining a type of fat—usually, but not always butter—with sugar. Buttercream sometimes uses eggs to impart a smooth and airy consistency and the possibilities for adding flavor and color are nearly endless. There are at least five distinct types of buttercream frosting, although it can get confusing since one or two of them are known by multiple names:

## **Simple Buttercream**

Also known as American buttercream, this one is essentially a combination of fat (i.e. butter) and confectioners' sugar (aka powdered sugar). Optional ingredients include eggs (either whole eggs, just the yolks or just the whites), milk, half and half or nonfat milk solids. Note that cream cheese frosting is merely simple buttercream which uses cream cheese instead of butter as the fat.

## **Decorator's Buttercream**

Because butter tends to melt at room temperature (or at least become very soft), buttercream frosting is not ideal for producing the decorative flowers and curlicues you see on fancy wedding cakes. The solution is to so-called decorator's buttercream, which—instead of butter—is made with vegetable shortening. In addition, decorator's buttercream is whipped considerably less than ordinary buttercream. What it lacks in lightness, it makes up for in stability, making it ideal for producing those decorative flourishes. Unfortunately, it lacks flavor, so it's not uncommon for a small amount of butter to be included.

## **Meringue Buttercream**

Sometimes called Swiss or Italian meringue buttercream, this variation is made by beating a hot syrup of sugar and water into a basic egg white foam, then whipping softened butter into the resulting meringue to make the frosting. Heating the meringue gives it extra stability, which means this frosting is extremely light and airy.

## **French Buttercream**

This is probably the richest buttercream and yet it's also extremely light in texture. It's made by adding boiling syrup into beaten egg yolks and then whipping into a foamy consistency, to which softened butter is then added and beaten some more until light and creamy.

# Types of Frostings

## **Pastry-Cream Buttercream**

Also known as German buttercream, this variation is made by combining pastry cream (which is a custard with some sort of added starch, such as flour or cornstarch) with butter, and possibly additional confectioner's sugar.

## **CAKED FROSTING**

Seven-minute frosting is the classically cooked frosting and it's made by heating sugar, water, and corn syrup to a boil, then pouring this boiling syrup into a bowl of stiff-peak meringue with the beater going. The trick is adding the hot liquid slowly, aiming for the side of the bowl rather than directly into the meringue. Heating the meringue through the addition of this hot liquid coagulates the proteins in the egg whites, which stabilizes the meringue and helps the frosting hold its shape. Seven-minute frostings are delicate and can be absorbed into the cake if not eaten the first day. You can use meringue powder to make seven-minute frosting but note that pasteurized eggs (including liquid egg whites you buy in a carton) will not form as foamy a meringue.

## **WHIPPED CREAM FROSTING**

Whipped cream frostings consist of whipped cream, powdered sugar, and flavorings—what could be simpler? As with buttercream, the cornstarch in the powdered sugar helps stabilize the frosting. It's possible to overbeat this type of frosting, which can cause it to turn grainy, so beat just until firm peaks appear. Cakes, cupcakes, shortcakes, and cookies with this type of frosting must be refrigerated.

## **ROYAL ICING**

Royal icing is a hard, brittle icing used for decorating cakes and cookies. You can make it from scratch, using powdered sugar, egg whites, and liquid, but many bakers prefer using meringue powder, which is available at bakery supply stores and even some grocery stores. The meringue powder is combined with a liquid, then usually tinted with food coloring.

## **GANACHE**

Ganache is simply chocolate melted with heavy cream. This frosting makes a beautiful shiny coating on cakes and cookies. Here's an easy dessert trick to pull off with homemade ganache: If you chill and beat the ganache until it's fluffy and stiff, then form the mixture into balls, you'll end up with truffles. You can also chill and beat a ganache and use the fluffy result to quickly frost a layer cake.

# Types of Frostings

## **GLAZE**

Glazes are the simplest frostings. Powdered sugar is combined with a liquid to form a thin consistency. Glazes are usually poured or drizzled over the tops of cakes and cookies. This forms a shiny hard crust when the glaze sets. Melted chocolate can be used as a glaze on its own.

## **Fondant**

Fondant icing is a sugar paste and a classic choice for decorating cakes because it provides a smooth and professional look. There are three types of fondant: rolled fondant, marshmallow fondant, and poured fondant. They are all used for coating sponges and pastries but will provide slightly different results. We will be focusing on rolled fondant below.

Flavor of Fondant: Sugary and sweet; can be flavored in the cooking process  
Color of Fondant: White; can be easily colored  
Texture of Fondant: Smooth and marshmallow-like consistency; slightly chewy  
Stiffness of Fondant: Stiff and malleable, can be rolled out into sheets and shaped  
Uses of Fondant: Creates a clean and smooth cover on cakes; molded and cut into shapes for cake decorations  
Fondant Recipe  
Difficulty: Hard; requires a variety of ingredients, equipment, and physical effort

# Types of Frostings

## BAKER'S GUIDE TO Frosting Types

### Buttercream

**COLOR:** Ivory  
**FLAVOR:** Very Sweet  
**USE:** Sheet cakes and Cupcakes  
**DISTINGUISHING FEATURE:** Made by combining butter and sugar



### Swiss Meringue Buttercream

**COLOR:** White  
**FLAVOR:** Subtle Buttery Sweetness  
**USE:** Wedding Cake Frosting  
**DISTINGUISHING FEATURE:** Pure white color is achieved by making meringue from egg whites



### Italian Meringue Buttercream

**COLOR:** White  
**FLAVOR:** Mild Buttery Sweetness  
**USE:** Birthday Cakes and Pies  
**DISTINGUISHING FEATURE:** Combines hot sugar syrup with egg whites; Stable for outdoor events



### French Buttercream

**COLOR:** Yellow  
**FLAVOR:** Rich and Buttery  
**USE:** Cupcakes and Fruit Tarts  
**DISTINGUISHING FEATURE:** Made by combining hot sugar syrup with egg yolks



### German Buttercream

**COLOR:** Pale Yellow  
**FLAVOR:** Rich and Custard-like  
**USE:** Pastry Filling and Cupcakes  
**DISTINGUISHING FEATURE:** Has a custard base made from whole egg



### Ermine Buttercream

**COLOR:** Ivory  
**FLAVOR:** Mild Sweetness  
**USE:** Red-velvet cakes and Twinkies  
**DISTINGUISHING FEATURE:** Does not contain eggs; Cooked before mixing



### Cream Cheese Frosting

**COLOR:** White  
**FLAVOR:** Tangy and Sweet  
**USE:** Carrot Cake and Hummingbird Cake  
**DISTINGUISHING FEATURE:** A buttercream frosting made with cream cheese instead of butter



### Whipped Cream Frosting

**COLOR:** Ivory to Pale Yellow  
**FLAVOR:** Light and Mild  
**USE:** Strawberry Shortcakes and Berry Cakes  
**DISTINGUISHING FEATURE:** Combines whipped cream and mascarpone



### Seven Minute Frosting

**COLOR:** Ivory  
**FLAVOR:** Sweet and Marshmallow-like  
**USE:** Cupcakes and Coconut Cakes  
**DISTINGUISHING FEATURE:** Meringue-like frosting is mixed for approximately 7 minutes



### Ganache

**COLOR:** Glossy Dark Brown  
**FLAVOR:** Rich and Chocolatey  
**USE:** Cheesecakes and Eclairs  
**DISTINGUISHING FEATURE:** Made by melting chocolate with any hot liquid



### Fudge Frosting

**COLOR:** Light Brown to Brown  
**FLAVOR:** Sweet and Chocolatey  
**USE:** Yellow Cakes and Cupcakes  
**DISTINGUISHING FEATURE:** Made by combining chocolate, butter, milk, and sugar



### Fondant

**COLOR:** White  
**FLAVOR:** Sugary and Sweet  
**USE:** Decorative Birthday Cakes  
**DISTINGUISHING FEATURE:** Dough-like consistency can be rolled and shaped



# Types of Cake Decorations

Here are some techniques that are very popular when decorating cakes

## **PRESSED FLOWERS**

The pressed flower trend is so simple yet so striking. Simply decorate a plain white buttercream cake with either fresh or pressed edible flowers for a look that is perfect for a garden wedding!

## **PIPED SIDE FLOWERS**

This delicate style of piping thin, towering flowers up the sides of cakes has been gaining traction thanks to the likes of Alice and Rosa. This minimalist approach to buttercream flowers will transform a blank white cake into a beautiful English garden

## **BUTTERCREAM PALETTE KNIFE FLOWERS**

Similar to the spring style piped flowers, palette knife flowers are also made with buttercream but on a bigger scale. They are a great way to add texture to your cake, either in the flatter, oil painting style, or the 3D sculptural style Monica Cavallaro prefers which almost look like they were formed out of clay.

## **SPATULA CAKE**

Continuing on with the palette knife painting style, the spatula or palette knife style of cake decorating uses colored butter buttercream like big blobs of paint. The best thing about this technique is that you can put your own spin on it. Go for a minimal effect with just a section of small strokes or cover your entire cake like an oil painting!

## **FAUX VELVET**

After he made the fault line cake world famous, By Aletoso has moved onto faux velvet cakes, but with one twist - his aren't made with sprayed cocoa. To be honest, we're not exactly sure how he creates his faux velvet effect.

# Types of Cake Decorations

Here are some techniques that are very popular when decorating cakes

## **STENCILLED CAKES**

Our favourite thing about stencil cakes is that they can be used to create a striking pattern when contrasting colours are used, or a subtle texture effect when used with the same colour icing for the perfect minimalist cake. Try out some of our new Caking It Up stencils for a quick and easy way to elevate your cakes to that next level.

## **SHEET CAKES**

Sheet cakes used to be hidden in the back of the kitchen, sliced up and served after the pretty cake had been cut, but no more! These sheet cakes are too pretty to be hidden away and they are perfect for relaxed parties where you don't want to fuss around slicing up a multi-tiered creation.

## **SPRINKLES**

Sprinkles have been reinvented in the last few years with brands like Sprinkle Pop and Sprinks coming out with gorgeous sprinkle mixes. Challenge yourself this year by getting creative with your sprinkles - whether you use them in a fault line cake or painstakingly place them perfectly around your cake in a sprinkle ombre effect.

## **DECKLED EDGES**

Once a term reserved for the fancy stationery effect or rough and uncut paper edges the 'Deckle' effect has been making its way into the caking world for some time now. We think this year is the perfect year to give it a go. Think of it as the fault line's more elegant cousin - it uses a similar technique when done with buttercream and also looks stunning with the edges painted lightly with metallic paint. You can also achieve this look with wafer paper or roughly cut fondant.

## **WATERCOLOR**

Whether it's just a splash of color around the bottom of an all white fondant cake, or an ombre watercolor effect made from the buttercream itself, the hand-painted strokes of airy colors will make your cake look like a masterpiece too pretty to cut!

# Decorating Techniques

Cake decorating can involve a number of steps, but if you ensure that you've done some prior preparation you can end up with a delicious and eye pleasing result!

The following steps are vital in order to understand and master how to successfully decorate your baked goods.

## **Planning the cake**

This is when you make the most of the important decisions like what type of cake you're planning on making, what shape and flavors, along with how you plan on decorating it. You need to ensure that you also have the right amount of cake and icing, and by planning you can ensure that you also minimize wastage. Drawing a quick sketch of your cake can also help you envision what you hope to achieve.

## **Levelling a cake**

as mentioned, preparation is key when making cakes. And in order to have a good finished product you need to ensure that you have a good base to work on. This means you will have to ensure that your cake surface is nice and flat and smooth. You can do this by levelling it with a serrated knife, like a bread knife or a cake leveller. But first you should ensure that your cake has fully cooled, and even storing in the refrigerator can prevent the cake from crumbling less. To level the cake, and cut layers use your knife by sawing through the cake in a gentle back and forward motion, with your hand resting flat on the top of the cake. You should only punt a little bit of pressure and allow for the sharp edge of the blade to do the work. You can hide any gaps or unevenness with frosting, but as long as you have a relatively smooth cake base, these flaws will be hidden by frosting and icing.

## **Choosing the right frosting/icing**

When choosing a frosting, you not only need to consider the taste, but also the texture and the consistency. You also need to ensure that the weight of the frosting will ensure stability of the cake. For example using a heavy frosting like cream cheese frosting on a light cake like and angel food cake or a sponge will not work, and ultimately will lead to the cake collapsing.



# Decorating Techniques

## Mixing colors for frosting/icing

Now this stage can be tricky and is also when having a basic understanding color theory can also come into play.

*Gel food colors* are very concentrated and the most recommended for coloring frosting, unlike water based colorings it does not separate the frosting and powder based colors tend to use a significant amount in order to achieve the same vivid results.

In order to achieve these results, you should use a toothpick and dip it into the gel color and transfer it to the icing that way. This prevents from contaminating the icing and also the color. Use a fresh toothpick for each color added and ensure that you have fully incorporated the color by scraping along the sides and bottom. Also remember that a little bit goes a long way, so it is best to start by only adding a small amount of coloring and slowly working it to the desired color rather than adding a heap at one stage. Once you've made an icing a vivid color, it is very difficult and sometimes impossible to lighten it or add extra colors without turning it into a grey/brownish mess. Also, if you want to really intensify the color of your buttercream, mix the color until a couple shades lighter than the desired color, and allow for the buttercream to sit for a couple of hours. This allows for the color to truly develop and intensify, and if you want to create an even deeper and richer color, put the buttercream in the fridge overnight.

If you're wanting to make darker colors in buttercream like black or brown, you should start with a darker base like a chocolate buttercream. This means you're also not using as much gel coloring to also achieve the consistency. However, in order to make a true red color you need to ensure that you're starting with a pure white base, as a slightly yellow base can turn the final color result into a warmer toned red and sometimes even make it look orange. Also, as red uses quite a considerable amount of coloring to achieve a vibrant and deep cooler which can affect both the consistency and taste of the buttercream, it is recommended to let red colored buttercream sit for a couple hours before using.

# Decorating Techniques

## Making a Layer Cake

This step can be where you choose to finish decorating your cake, for example if you're making a naked layer cake or a simple layer cake without frosting around the outside. However if you're planning on decorating on the outside, by completing this step successfully will ensure that your cake is not lopsided and will stay in place.

In order to ensure that the cake does not move around on the plate or board, place a small dab of frosting directly onto the center of surface which the cake will be displayed on. Then layer your first cake layer directly on top of that and press down lightly on the cake with a flat hand. This small amount of frosting will adhere the cake to the surface and prevent it from moving during the decorating process.

Next you can layer with a layer of frosting or glaze on the top of the first cake layer. You can spoon it directly on with your offset spatula, working from the center to the outer edge moving the spatula back and forward whilst turning the cake board on the turntable. This will ensure an even spread of frosting.

To get an even more consistent spread of frosting pipe it on with a large round piping tip. First start by piping a large circle on the outer edge of the cake. This will give a great border should you wish to include another filling such as jam or glaze. Then pipe in a circular motion from the outside, moving inwards keeping the pressure on the piping bag the same in order to allow for the same amount of icing to be dispersed.

This can then be completed for each additional layer, and for the top of the cake also. So that your cake stays nice and straight, check the sides of the cake against a straight edge such as a ruler after applying each layer, and slightly adjust as you need.

# Decorating Techniques

## **WHICH FRESH FLOWERS CAN BE USED TO DECORATE CAKES?**

Not all flowers are safe to be used on a cake. Beauty is, in this case, not the most important factor. Some flowers can be toxic or contain pesticides. The best thing would be to use home-grown flowers from your garden, this way you can be sure they are pesticide free or ask your local florist what flowers are safe to use.

You can also use all the flowers that are considered edible, such as nasturtium or borage flowers, cornflower, artichoke flower, lavender, daylilies, mallow flowers (malva), oxeye daisies, chrysanthemums, marigolds, dahlias, edible roses, wild roses, zinnia, common daisies (in small quantities, otherwise toxic), sweet geranium, gerbera daisies, hibiscus, rose hip, wild strawberry blossoms, edible pansies, violets, carnation, chamomile, forget-me-nots, apple and cherry blossoms, and eucalyptus globulus (considered to be slightly toxic so use sparingly).

## **WHAT'S THE BEST WAY TO APPLY FROSTING ON A CAKE?**

I usually begin with a big dollop of frosting in the center and then spread it toward the edges. The sides should also be fully covered. You'll notice that, at first, it'll seem like a lot of frosting at once, but with an offset spatula you can control that. Use the spatula to move the frosting over the edges and the sides until it's completely even. This way you should be able to obtain a straight surface and sides and edges that are even. If it's a bit hard in the beginning, remember: Practice makes you perfect!

# Decorating Techniques

## Beginner's Guide



**Cake pan:**  
A size 8" is a good starting point.



**Turntable:**  
Makes it easy to spin cakes and smooth out edges or finicky borders



**Fondant rollers:**  
rollers come in 2 sizes: large, for smoothing out decorations; small for rolling out what will cover the cake.



**Fondant smoothers:**  
This is an added extra if you want a completely smooth effect as fondant tends to show all fingerprints & imperfections



**Cake boards/drums:**  
These come in different sizes & shapes & are usually made of cardboard, but can come in different colors, especially for wedding cakes. Most are disposable and can handle lighter weight cakes. For heavier cakes, more boards are needed.



**Piping tips:**  
Get a starter set that comes with an assortment. Once you've established which you use more, you can focus on getting variations of that style.



**Piping bags**  
Whether you choose disposable or reusable ones, 10-16-inch bags are usually best for different types of icing.



**Offset spatula**  
This is used to spread frosting on a cake. The flat metal blade at the end does not cut through cake. They come in a variety of sizes.



**Food dye**  
There are many options, such as gel, natural, powder, and liquid.



**Pastry brush**  
Use it to spread butter, dust, flakes, or even to coat preserves on fruit.



**Serrated knife**  
For cake cutting, you want a thin knife with serrated edges for cleaner cutting.

# Decorating Techniques

## Types of Fondant



### Rolled fondant

The most common. This is usually rolled out like cookie dough and can be used to cover entire cakes. Tools are key in making sure this has a smooth finish.



### Pourable fondant

Has the consistency of ganache. Rather than rolled, it is poured as liquid over cakes and there is usually no smoothing required.



### Sculpting fondant

thickest and most durable fondant. Usually used when making figures, such as flowers, ropes, and borders.

## Popular Decorating Tips



Round



Closed Star



Drop Flowers



Star



Petal



U-tip



Open Star



Basket Weave



leaf

# Decorating Techniques

## Basic Steps for Decorating a Cake



### Step One

After the cake is out of the oven, cut off any crown tops with a serrated knife to create an even level.



### Step Two

Take the biggest layer and set it on the turntable.



### Step Three

Choose what kind of frosting you will be using and, if you choose, add your coloring into it.



### Step Four

Prepare your piping bag.



### Step Five

Add filling to the bottom layer to keep the upper layer steady.



### Step Six

Cover it with frosting or fondant, smooth it out with a roller or spatula.



### Step Seven

Choose a piping tip and start piping away, turning the cake slightly to get every corner.



### Step Eight

Add toppings

# Decorating Techniques

## Quick go-to topping ideas



Fresh flowers



Fresh fruit



Candies



Cookies



Coconut shavings



Colorful cereal



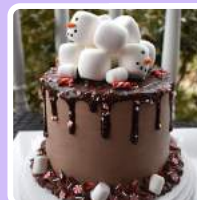
Chocolate drizzle and shavings



Sprinkles



Nuts



Marshmallows



# Frosting Tips

- Expand your creativity by using larger piping tips to pipe dough, fillings, mashed potatoes, batter, meringue and more.
- If your tip becomes blocked, use a toothpick to loosen the lump, then squeeze carefully to remove the block. To prevent lumpy icing, be sure to sift your confectioners' sugar before mixing.
- For easy piping, don't overfill your bag. It's best to work with about  $\frac{1}{2}$  cup of icing at a time.
- Pipe two colors at once by filling two 12 in. decorating bags, separately, with different colors



# Frosting Tips

## **INVEST IN AN OFFSET SPATULA**

Without a doubt, an offset spatula is the most useful frosting tool you can have in your decorating kit. These flat spatulas are perfect for scooping, smoothing and swirling frosting onto cakes

## **BUMP UP BUTTERCREAM FLAVOR**

When it comes to frosting, we tend to think either chocolate or vanilla. But you really don't need to limit yourself! Adding flavor to a simple buttercream is easy. Peanut butter can be added in alongside butter. And berries can be pressed through a sieve and stirred right in with this tasty blackberry buttercream.

## **KEEP YOUR CAKE FROM MOVING**

When you're stacking layer cakes, it's crucial that the cake stays in place. To keep the cake planted where you put it, first put down a small dollop of frosting on your cake plate, then set down your first layer. The frosting here will act like glue to keep that cake still.

## **CHILLED CAKES FOR EASIER FROSTING**

First and foremost: Never frost a warm cake! The cake will melt the icing. Now, you can frost room temperature cakes, but chilled cakes are easier to frost. Cold cakes are firmer and hold their shape, meaning they won't budge or break as you go to work. If you're working with frozen cakes, let the cake thaw halfway or so, then frost. No need to wait for it to come all the way to room temp.

## **ADJUST THE FROSTING CONSISTENCY**

Sometimes, despite our best efforts, our classic buttercreams turn out too stiff or too thin. If you find that your buttercream is just too stiff, add a bit of milk or cream—just a teaspoon at a time. Too thin? Add in confectioners' sugar a quarter cup at a time until you get the right thickness.

## **GET A PERFECT DRIP CAKE WITH GANACHE**

Add an extra layer of decadence with a rich ganache dripping over your cake. Making ganache is simple—you just need chocolate and cream. When combined and cooled, spoon over the top of your cake and let it drip elegantly down the sides.

## **GIVE LAYER CAKES A CRUMB COAT**

No one likes crumbly frosting. To prevent crumbs from infiltrating your frosting layer, give the cake a crumb coat. To do this, give the cake a very, very thin coating of frosting using an offset spatula, then pop it in the fridge to set for about a half-hour. This will help trap any crumbs. Once you remove it from the fridge, frost as normal.

# Frosting Tips

## **SIFT COCOA POWDER**

Looking to turn your vanilla buttercream into a chocolate buttercream? All you have to do is add a bit of baking cocoa. Before you mix this ingredient in, though, be sure to sift it. Cocoa has a tendency to clump and can clog your piping tips if not sifted.

## **KEEP MERINGUE-, CREAM CHEESE- AND WHIPPED CREAM-BASED FROSTINGS COOL**

First and foremost: Never frost a warm cake! The cake will melt the icing. Now, you can frost room temperature cakes, but chilled cakes are easier to frost. Cold cakes are firmer and hold their shape, meaning they won't budge or break as you go to work. If you're working with frozen cakes, let the cake thaw halfway or so, then frost. No need to wait for it to come all the way to room temp.

## **USE A BENCH SCRAPER FOR SMOOTH SIDES**

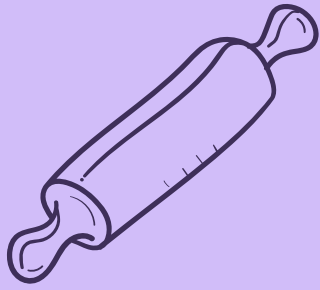
If you want absolutely smooth sides on your cake, use a bench scraper to get that perfect look. The flat, dull blade will keep everything smooth. You can also use this tool for the crumb coating or making naked cakes.

## **GIVE SHEET CAKES A PRETTY FINISH**

Not baking a layer cake? No problem. You can still make cakes made in sheet pans and 13×9 pans look pretty. Grab your offset spatula and give the cake a coat of frosting. When you're done, use the spatula and move it across the frosting in an S pattern. This will give you a pretty swirl. You can top it off with sprinkles, chocolate curls, crushed candies or any other tasty tidbit.

## **DECORATE THE SIDES OF THE CAKE WITH SPRINKLES OR NUTS**

No one likes crumbly frosting. To prevent crumbs from infiltrating your frosting layer, give the cake a crumb coat. To do this, give the cake a very, very thin coating of frosting using an offset spatula, then pop it in the fridge to set for about a half-hour. This will help trap any crumbs. Once you remove it from the fridge, frost as normal.



# Course Three

## Mixology



# Terminology

## **What's the difference between ABV and proof?**

Both "ABV" and "proof" are terms that refer to the amount of pure alcohol in a spirit. ABV stands for "alcohol by volume," which measures the amount of ethanol in a specific bottle of alcohol by percentage. The proof refers to the spirit's alcohol content on a 0 to 200 scale. To calculate the "proof" of a spirit, simply double the ABV. For example, if a rum is 50% ABV it would be 100-proof.

## **WHAT IS A MOCKTAIL?**

Let's start with the basics. Simply put, a mocktail is a cocktail without alcohol. It goes by many other names, like "non-alcoholic cocktail", "non-alcoholic mixed drink", "spirit free" drink, or simply calling a drink "virgin." All of these names work interchangeably.

### **Remember when making a mocktail:**

- watch your water
- watch your sugar
- experiment

# Terminology

This is a glossary of the most common terms use in bartending:

<b>BACK</b>	<p>a 'back' is a small glass of something (like water or cola) which accompanies a drink. E.g.: "Scotch on the rocks with a water back."</p>
<b>BITTERS</b>	<p>a herbal alcoholic blend which is meant to be added to other cocktails to enhance flavor (e.g a Manhattan is rye, sweet vermouth and a couple dashes of bitters). Angostura Bitters is one of the most popular brands and was first invented by a German physician for stomach maladies in 1824. "Bitters are like a bartender's spice rack. They add different flavors to a cocktail. There are two main kinds: dashable bitters and amari. Dashable bitters are like your salt and pepper, made by combining a strong liquor with different herbs. Amari are bitter liquors drunk as aperitifs and digestives before and after a meal."</p>
<b>BLEND</b>	<p>To mix up ingredients and ice in an electric blender. Depending on where you live, these could be called frozen drinks or blended drinks.</p>
<b>BUILD</b>	<p>A bar term meaning to make a drink – starting with ice and then 'building' the drink by adding the other ingredients (e.g., alcohol, juice, garnish, etc...).</p>
<b>CALL DRINK</b>	<p>Refers to when the customer orders a drink by giving both the specific name of the liquor and the name of the mixer. E.g.,: Tanqueray Ten and Tonic, Bacardi and Coke.</p>
<b>CHASER</b>	<p>In bar terms, anything that is consumed quickly after a shooter or straight (neat) shot of alcohol. Meant to ease the strength of the original shooter and / or to mask its taste. (e.g., ginger bear, soda, energy drinks, water, fruit juices, or beer/ hard seltzers, etc...)</p>
<b>CHILL</b>	<p>To chill a glass, add ice and then water to any glass and let sit for a minute or two (while mixing the drink in a shaker). Pour out the contents of the glass and strain the drink into the chilled glass. This bar terminology is often used for martinis.</p>

# Terminology

This is a glossary of the most common terms use in bartending:

<b>COCKTAIL</b>	A mix of alcohol and / or liqueurs combined with a mixer (like soda or juice) and often shaken
<b>COOLER</b>	An alcoholic-based bottled beverage offered in a variety of different alcohols – vodka, rum, wine – which comes in a variety of flavors. E.g.,: Smirnoff Ice, wildberry cooler, Mike's Hard Lemonade
<b>DASH</b>	A few drops or a very small amount of an ingredient
<b>DIRTY</b>	Adding olive juice to a martini which makes it a Dirty Martini. The more olive juice, the dirtier the martini.
<b>DUST</b>	Garnishing by sprinkling ground nutmeg, grated cinnamon stick, or chocolate powder on top of a drink
<b>DRY</b>	Very little vermouth added to a martini. Extra dry martini is a drop of scotch swirled around the martini glass and then poured out before adding the gin.
<b>EXPRESS</b>	Expressing an orange peel is squeezing the rind so all the oils kind of shoot out to the top. It adds a little extra flavor over your cocktail. I usually wipe a lemon peel around the edge of the rim and on the stem so you can smell the citrus oil while you drink. (Because a good cocktail should not only taste good, it should smell good.)
<b>FLAME</b>	Setting a drink on fire. Sambuca is often lit on fire to heat it up before putting the flame out and drinking it. Another common method is to use 151-proof rum which is very flammable. It's not recommended to flame drinks unless you are VERY skilled. Bad things can happen! (Also called 'Flambe').

# Terminology

This is a glossary of the most common terms use in bartending:

<b>FLAMED ZEST</b>	This very eye-catching garnish consists of igniting the flammable, aromatic oils found in the rind of citrus fruit. Hold the cut zest with the peel facing the surface of the drink. Using your thumb and forefinger gently squeeze the zest to release the oils over a match flame. Stay at least 3-4 inches away from the drink; otherwise, a smoky film will appear on the glass rim. In order to avoid a “burnt rubber” smell, discard the burnt peel and replace it with a fresh one.
<b>GARNISH</b>	A garnish is something added to a drink after the ingredients to enhance the presentation. Common garnishes are lemon slices or lime wedges, cherries, olives etc. Some garnishes are purely for looks and some are to add to the flavor of the drink.
<b>HIGHBALL</b>	Any liquor mixed with soda, served in a tall glass (often called a highball).
<b>JIGGER</b>	A jigger is an hour-glass shaped steel measuring device – where one side measures 1 ounce (30ml) and the other measures 1½ ounces (45ml). However, jiggers come in many different sizes.
<b>LAYER</b>	Layering a shot or drink is done the same way as floating. The heavier alcohol goes on the bottom and the next, lighter alcohol gets floated on top using a careful pour down the side of the glass or a pour over an inverted spoon.
<b>MIXER</b>	To crush up ingredients with a special tool called a muddler. This is done for drinks such as the Mojito – where the muddling process extracts essential oils and flavors (from the mint leaves in case of the Mojito)
<b>NEAT</b>	This one’s important to know in bar terms. If someone asks for a whiskey neat, they are asking for a shot straight out of the bottle. Neat means no ice. Of course, that shot must be in a whiskey glass. Whiskey drinkers are picky!

# Terminology

This is a glossary of the most common terms use in bartending:

<b>OPEN UP</b>	Some bourbons needs ice or water to enhance and 'open them up.' For example, some bourbons are aged for a long time in barrels, and water or cold temperature will relax them a bit.
<b>PONY</b>	A pony or pony shot is equal to 1 ounce.
<b>PREMIUM</b>	Premium refers to premium alcohol or top-shelf liquor (E.g.,: the well or bar rail gin is Beefeater, and the premium is Tanqueray).
<b>RIM</b>	To rim a glass, first wet the rim with a lime, or the lime juice in a rimmer, then gently press the rim of the glass into a saucer of salt (for margaritas and Bloody Marys), celery salt (for Bloody Caesars) or sugar (for specialty coffees and cocktails). Be creative with your rims – try to look for alternatives like crushed candy cane, flavored salts or other more exotic spices that match well with your drink ingredients.
<b>RINSING A GLASS</b>	Rinsing is the act of swirling alcohol in a glass — just to get the aroma of it and not so much its flavor — and then discarding that alcohol. You usually do it when you want to add an aromatic effect without overwhelming the drink. So, an In and Out Martini is a good example of that technique. When someone orders an In and Out Martini, it means they want you to just take the vermouth and rinse the glass with it, filling the glass mostly with gin. (Also called 'Coating')
<b>(ON THE) ROCKS</b>	On the rocks simply refers to a drink with ice. E.g.,: Scotch on the rocks
<b>SANGRIA</b>	A wine-based cocktail that contains wine, triple sec, orange juice and fruit. Many variations exist and some recipes may call for the addition of a different juice or may not contain triple sec but the basis of this drink is wine and juice.



# Terminology

This is a glossary of the most common terms use in bartending:

<b>SHAKER TIN</b>	A shaker tin is usually metal while the mixing glass is made from, well, glass. Used to mix cocktails, first ice and ingredients are added to the shaker tin, then the mixing glass placed on top (creating a seal) and shaken.
<b>SHAKE</b>	Fill a glass with ice, build the ingredients, then pour everything into a shaker tin and shake. Pour everything back into the original glass. Or, if you are an experienced bartender then you will be able to fill the shaker with ice and ingredients in perfect proportions.
<b>SHAKE AND STRAIN</b>	Put ice and ingredients into a shaker tin, shake and strain into a glass. Often used for shooters and martinis.
<b>SHOOTER</b>	a shooter or shot is a 1-2 ounce serving of either straight liquor (like Tequila) or a mixture of alcohol (like a B-52 Shooter – Irish Cream, Kahlua and Grand Marnier) that is meant to be drank (or shot) in one gulp
<b>SOUR</b>	the term 'sour' refers to the sourness of sour bar mix, bar lime mix, lime bar mix or margarita mix (all different names for what are essentially the same thing), which are used in many cocktails (such as a Margarita). If someone orders a Vodka Sour, they want vodka and bar lime mix.
<b>SPEED RAIL</b>	This bar terminology typically means the long stainless-steel shelf connected to the front of the sinks and ice well at bartender stations behind the bar. It holds the most commonly ordered liquor eg. rum, vodka, gin and whiskey, and possibly other popular liqueurs or mixes.
<b>STRAIGHT UP</b>	Refers to a drink, like a martini, which is shaken in a shaker and strained into a glass. In some areas, straight up is used interchangeably with 'neat'.

# Terminology

This is a glossary of the most common terms use in bartending:

<b>STRAIN</b>	To drain the liquid out of a shaker tin.
<b>TODDY</b>	A sweetened drink of liquor and hot water, often with spices and served in a tall glass.
<b>TWIST</b>	The rind of a lemon which is peeled using a special peeler called a zester or lemon zester. The resulting lemon twist is thin and long.

# Terminology

## HOW TO PAIR MIXERS WITH ALCOHOL

- Tonic gives a hint of bitterness to either gin or vodka.
- Seltzer water adds sparkle to a heavy drink and body to flavored vodkas for a light, low-key sipper.
- Cola is a classic and goes equally well with whiskey as it does with rum. (If you want to be fancy, squeeze a wedge of lime into your rum and cola and call it a Cuba Libre.)
- Ginger ale and ginger beer go well with bourbon and blended whiskey. If you like it sweet, use ginger ale--for more spice, use ginger beer.
- Lemon-lime soda, though a little sweet, is a good beginner's introduction to whiskey drinks and works well in fruity punches.
- Grapefruit soda mixes perfectly with tequila and a pinch of salt.
- Orange juice works with gin, vodka and rum — freshly-squeezed adds another layer of texture and flavor.
- Grapefruit juice is better with gin than vodka, as the florals of gin and the sharpness of the juice complement each other nicely and is always a great match with rum and tequila.
- Lime juice is the prime ingredient in sour mix; bottled, sweetened lime juice is perfect with gin.
- Cranberry juice works well with vodka and orange liqueur — it also gives the cosmopolitan its signature red color.

## HOW TO PAIR MIXERS WITH ALCOHOL

Try a non-alcoholic spirit.

If you want to closely replicate an actual cocktail, reach for a non-alcoholic spirit. Seedlip was one of the first distilled non-alcoholic spirits, and many more have followed suit. You can also get vinegar-base non-alcoholic spirits or make them at home to avoid sugar bombs. The key here is learning to craft your own mocktail. Creating it and refining it can help you experience a cocktail without the alcohol

# Terminology

## Mixology Q&A

### WHAT'S THE DIFFERENCE BETWEEN MEZCAL AND TEQUILA?

Contrary to popular belief, mezcal is not a type of tequila. In fact, it's the other way around. Tequila is a type of mezcal that can only be made in Jalisco, Mexico from the blue agave plant. Mezcal, on the other hand, can be made anywhere in Mexico from various types of agave. Mezcal is smokier than tequila since the agave piñas are roasted, instead of steamed, before they are crushed.

### WHAT ARE APERITIFS AND DIGESTIFS?

Aperitifs and digestifs are fancy names for liquors meant to stimulate the appetite or digestive system, respectively. They're designed to be slowly sipped before or after a big meal and are particularly popular in Italian culture. Popular aperitifs include bitter Campari and dry vermouth, while brandies and Sambuca are go-to digestifs.

### WHAT ARE BITTERS?

Bitters are highly concentrated, potent flavoring agents made from steeping herbs, roots, citrus peels, seeds, spices, flowers and barks in high-proof alcohol. You only need to use a few dashes in a cocktail, but it will hugely affect the taste of your cocktail for the better. Contrary to the name, bitters do not actually make your drink taste bitter. When used in the right quantities, they can spice up a drink in all the right ways, especially if you use flavored ones like Tiki or orange bitters to compliment the flavors of your drink. You can use bitters to add complexity to a cocktail, as an aromatic garnish, or even as a curative elixir to help alleviate digestive issues and hiccups. You can even make your own bitters.

### WHAT'S IN SIMPLE SYRUP?

It's all in the name: Simple syrup is a simple mix of water and sugar, usually in a 1:1 ratio. Simple syrup is used to sweeten drinks, and it is easily customizable with other flavors. Increasing the ratio of sugar to water will yield a sweeter, rich simple syrup, while using demerara sugar will give it a more caramely flavor. Honey can be swapped in for the sugar for a honey syrup, and endless other ingredients can be added to make flavored simple syrups.

# Terminology

## Mixology Q&A

### **HOW LONG SHOULD YOU SHAKE OR STIR A COCKTAIL?**

Shaking a cocktail isn't just about flair bartending, it serves a purpose—as does stirring. Shaking and stirring a cocktail is meant to incorporate all of the ingredients, chill down the cocktail and slightly dilute the drink to create balance. In order to achieve this, you should be shaking and stirring for at least a full 10 seconds unless otherwise noted. Drinks with eggs require longer shaking sessions.

### **SHOULD I DECANT WINE BEFORE I DRINK IT?**

Decanting serves two main purposes: First, it separates the wine from any sediment that may have formed over time. Most red wines will throw a sediment as they age. This is nothing to fear, just a natural by-product of aging and is actually desirable. What you don't want, however, is for that sediment to get stirred up before serving your wine. It will make the wine cloudy and can leave a gritty, bitter aftertaste. The second reason for decanting would be to aerate the wine, opening up aromas and flavors. Many age-worthy wines such as Bordeaux, Barolo and Napa Cabernet will benefit from some time in a decanter even before they begin to form any sediment. The exposure to oxygen will soften the tannins and enhance the aromatics.

# Mixology Equipment

## Most common equipment and tools used by bartenders:

### BAR SPOONS

Stirring is one way to mix a cocktail, such as a gin or whiskey cocktail, gently mixing the distilled spirit to maintain a balance of flavor.

For this bar spoons are essential, with their long-twisted handles that make it easy to stir in a smooth circular motion. Bar spoons gently stir the ingredients to just the right dilution without breaking down the ice. They also help bartenders to layer drinks, pouring a second liquor or mix down along the stem of the bar spoon to create a layered drink that's visually appealing.

### BOTTLE OPENER

One tool that no bar can do without is a bottle opener. For beer on tap, you won't need a bottle opener, but you will for any bottled beer or other capped beverages. Consider using openers that are wall-mounted – they're fast to use and won't be misplaced behind the bar.

### CORKSCREW

Invest in professional corkscrews that slide effortlessly into the cork and extract easily without crumbling or damaging the cork. Choose one that's stainless steel with an easy-to-hold handle.

### COCKTAIL SHAKER

A well-equipped bar has one or more cocktail shakers to provide customers with the ideal shaken beverage. Ingredients are placed in the sealed stainless-steel shaker, typically liquor, syrups, fruit juices, and ice. After vigorously shaking and mixing the drink, shakers allow for easy pouring into the customer glass. Many varieties of shakers come with built-in strainers to separate the ice or other ingredients.

### COCKTAIL STRAINER

If your cocktail shaker doesn't come with a built-in strainer, you'll want a cocktail strainer. You'll need one of these to create cold ice-free drinks. The strainer is placed over the mouth of the shaker, with the small holes letting the drink pass through, leaving the ice in the shaker.

A common brand used by many bartenders is the Hawthorne strainer, which is made from stainless steel, is dishwasher safe, and fits most professional bar shakers.

# Mixology Equipment

## Most common equipment and tools used by bartenders:

### MUDDLER

It's not just the Mojito that requires a muddler, this bartender's tool is used to create many other cocktails. A good muddler will bring out the aromatics of herbs, spices, and fruits so that their flavors are released and infused into the drink.

Look for muddlers that are long-handled and ergonomically designed for easy holding. The long handle keeps bartenders from hitting their hands on the sides of the glass or cocktail shaker, allowing them to mix drinks safely and efficiently.

Muddlers should also be durable and dishwasher safe.

### RIMMER

If you're making margaritas and other drinks that require a rimmed glass edge, a rimmer lets bartenders quickly create the perfect rim of salt or sugar. Choose one with multi trays, adding that burst of flavor to cocktails.

### ZESTER

Although not the most-used tool behind the bar, some drinks such as a Dry Martini or a Cosmopolitan need a dusting of lemon or lime on top. A quick twist with a zester is all it takes for your bartenders to add that visual appeal and boost of flavor to drinks.

# Mixology Equipment

## Mixology Glasses Glossary



### Collins

Similar to the highball only taller and slimmer at 6 cm x 17 cm and can contain 10-14 oz. of liquid. It is also used for mixed drinks such as the Tom Collins.



### Coupe

It looks like a stemmed small bowl that is used to serve cocktails like aviation or daiquiris, though initially they were used for champagne.



### Flute

A fancy-looking glass that is slim and is used for champagne and mimosas. It can hold 6-10 oz. of liquid and its stem allows the drinker to hold it without affecting the drink's temperature.



### Highball

A tall glass that can store 8-12 oz. of liquid and measures about 7 cm x 15 cm. It is used to serve mixed drinks like tequila sunrise and long island iced tea.



### Margarita

A variation of the coupe glass that has two curves and used to serve margaritas and even shrimp cocktails.



### Martini

Take the coupe glass but replace the round bowl shape with a triangular bowl. This is a typical glass for martinis as can be seen by the name. It is ideal if it is served with an olive on a toothpick.



### Rocks

A short glass with various designs that can contain 6-10 oz. of liquid and measures 3.5 in. in height and about 3 in. in diameter. It is also called old-fashioned glass or lowball glass and is typically used to serve whiskey or scotch with ice.



### Shot Glass

A tiny glass designed to allow the drinker to consume the drink in one gulp, called the "shot". It can hold 25-50 ml of liquid and has several varieties like the shooter. It can also double as a jigger.



# Mixology Equipment

## Essential Bar Tools



Shaker



Cocktail Spoon



Muddler



Jigger



Martini glass



Shot glass



High-ball or Collins glass



Bottle Opener



Corkscrew



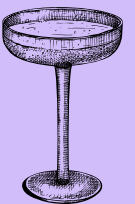
Strainer



Low-ball or Rocks glass



Champagne Flute



Champagne Coupe

## How to Stock the Perfect Home Bar



### White Spirit

- Vodka
- Gin
- Tequila (blanco)
- Rum (light)

### Brown Spirit

- Scotch
- Whiskey
- Bourbon/rye

### Cocktail Ingredients

- Triple sec/cointreau
- Angosturs bitters
- Sweet vermouth
- Dry vermouth

### Mixer

- Tonic water
- Club soda
- Ginger ale
- Tomato juice
- Coca cola
- Sprite

# How to Follow a Drink Recipe

The components of a cocktail: the base, the modifier, and flavoring/coloring. All cocktail ingredients can be sorted into three categories:

- The base is generally a single spirit on which the cocktail is based, such as vodka, whisky, or rum.
- The modifier is the ingredient which is added to the base to give the drink the desired flavor and smoothness. It helps to round off the sharp burn of the spirit. Typical modifiers are vermouth, softer spirits like Fernet Branca, fruit juices, or ingredients like eggs or cream which lend a smooth quality to the cocktail.
- Finally, special ingredients can be added for flavoring or coloring. These include ingredients like bitters, or syrups like Grenadine or Orgeat syrup.

## **What's in a cocktail recipe**

- When making mixed drinks, first add ice, then liquor and then your mixers.
- The average pour of alcohol is 1.5 ounces (or a "jigger"), but depending on your mixers and audience, it can go anywhere from 1 to 2.

**KEEP IN MIND:** As a general rule, stir clear (or translucent) drinks; shake opaque ones.

- If you're serving a drink on the rocks, larger cubes of ice are often appreciated, as they melt more slowly than shaved ice, diluting the drink less.
- Get to know the spirits you're using; not all gins (or vodkas or whiskeys) are created equal, and some might do better with certain blends than others. For example, when making a sweeter cocktail like the Old-Fashioned or the Manhattan, you'll want a stronger whiskey to give the drink backbone.

# How to Follow a Drink Recipe

## Cocktails



*Daiquiri*

50ml white rum  
25ml lime juice  
10ml sugar syrup



*Martini*

60ml vodka/gin  
1 tbs dry vermouth  
olive or lemon peel,



*Gimlet*

50ml lime cordial  
50ml gin  
slice of lime



*Margarita*

50ml tequila  
25ml lime juice  
20ml triple sec



*Negroni*

25ml gin  
25ml sweet vermouth  
25ml Campari



*Sidecar*

50ml cognac  
25ml triple sec  
25ml lemon juice  
angostura bitters



*Amaretto sour*

200ml amaretto  
juice of 3-4 lemons  
1 egg white  
cherries & syrup



*French 75*

50ml gin  
champagne  
1 tbs lemon juice  
1 tsp sugar syrup



*Gin fizz*

50ml gin  
25ml lemon juice  
2 tsp sugar syrup  
sparkling water



*Espresso martini*

100ml vodka  
50ml coffee liqueur  
50ml espresso  
1 tsp sugar syrup



*Paloma*

50ml tequila blanco  
10ml agave syrup  
10ml lime juice  
60ml grapefruit juice  
soda water



*Lemon drop*

50ml vodka  
25ml triple sec  
25ml lemon juice  
1 tbs caster sugar  
zest of 1/2 a lemon



*Manhattan*

75ml bourbon  
15ml sweet vermouth  
15ml extra dry vermouth  
angostura bitters  
5ml cherry eau de vie



*Bramble*

50ml gin  
3/4 tbs blackberry  
liqueur  
25ml lemon juice  
3/4 tbs sugar syrup



*Whiskey sour*

50ml bourbon  
35ml lemon juice  
12.5ml sugar syrup  
angostura bitters  
1/2 fresh egg white



*Pina colada*

60ml white rum  
120ml pineapple juice  
60ml coconut cream



*Mojito*

60ml white rum  
juice of 1 lime  
1 tsp brown sugar  
mint leaves  
soda water



*Woo woo*

50ml vodka  
25ml peach schnapps  
75ml cranberry juice  
1 tbs lime juice



*Cosmopolitan*

120ml vodka  
60ml orange liqueur  
60ml cranberry juice  
1 lime



*Bloody Mary*

100ml vodka  
500ml tomato juice  
1 tbs lemon juice  
Worcestershire sauce  
Tabasco  
celery salt  
black pepper

# Understanding Liquor, Liqueurs, & Spirits

Liqueurs are just as vital to a well-stocked bar as the base spirits. These are the distilled spirits that give drinks flavor. Liqueurs come in almost every flavor imaginable, from sweetened fruits to snappy spices and proprietary blends that are truly unique.

## Learn Your Liqueurs

**Crème vs. Cream Liqueurs:** As you explore liqueurs, you will come across many that use the word "crème." These are not creamy liqueurs even though crème does translate from French to mean cream.

Liqueurs like crème de cassis (black currant) and crème de fraises (strawberry) are typically made with more sugar than the average liqueur. They are syrupier, but they are not creamy. Quite often, crème liqueurs use the French word for the flavor. For example, crème de banane (banana). Cream liqueurs, on the other hand, are those like Irish cream and RumChata that have a dairy base. These are actually creamy.

## Liquors and Spirits

There are six types of liquor that you will use most often in the bar. These are often referred to as "base distilled spirits" because they form the base for many mixed drinks and even act as the foundations for many liqueurs.

# Understanding Liquor, Liqueurs, & Spirits

**Each type has its own primary characteristics, a few styles and variations, and many brands to choose from:**

**Brandy:** Distilled from fruits (most commonly grapes), the name derives from brandewijn, the Dutch word meaning "burnt wine."

**Gin:** Often distilled from grains, gin includes the flavorings of botanicals. Juniper is considered the trademark flavor.

**Rum:** Made by distilling sugar or molasses, rum is a sweeter liquor and is produced throughout the world.

**Tequila:** Strictly a product of Mexico, tequila is distilled from the agave plant and has a distinct earthy flavor.

**Vodka:** The most used liquor, vodka can be distilled from any number of ingredients though grains and potato are most common.

**Whiskey:** Whiskey is a complex category with a variety of styles, though they all begin with a distillate of fermented grains. Whiskies are almost always aged; moonshine is the primary exception.

*All credit for outside sources used to their  
respective creators.*