

COOKING CLASSES
AT SUR LA TABLE

KNIFE SKILLS 101

WITH SUR LA TABLE CHEF

Ingredient Shopping List

Below is a list of ingredients you'll need to make the recipes in this packet. Please reach out for substitution suggestions.

Produce

- 2 celery stalks
- Small bunch of green onions
- 1 bell pepper
- 1 jalapeño
- 1 orange
- Small bunch of parsley
- 3 plum tomatoes
- 1 bulb of garlic
- 1 medium yellow onion
- 2 medium carrots

Pantry Items

- Bay leaves (if making stock)
- Black peppercorns (if making stock)
- Ice

Equipment Needed

Below is a list of tools you'll need to make the recipes in this packet.

Cutlery

- Chef's knife
- Paring knife
- Sharpening steel

Hand Tools/Gadgets

- Bench scraper (optional)
- Cutting board
- Vegetable peeler
- 2 medium mixing bowls
- Slotted spoon or spider

Cookware

- Stockpot

Pre-Class Mise en Place and Notes

- Please gather all the ingredients before class.
- Wash and dry all the produce.
- If you would like to make use of the vegetable scraps produced during class, we have included a bonus recipe at the end of the packet for vegetable stock.

KNIFE SAFETY

Knife safety is important in every kitchen, from professional to home. Below are a few simple guidelines for using kitchen knives safely:

A sharp knife is a safe knife. By trying to force a dull knife through a piece of food, the knife is much more likely to slip and cause an injury.

Never, ever grab a falling knife. Always make sure your knife is placed securely on your work surface at all times. If a knife happens to fall, resist the natural urge to grab it.

Always cut on a cutting board. Cutting boards made from wood products and plastic help reduce wear and tear on a knife's edge. Never cut on glass, marble, or metal surfaces, which dull and damage knives.

Secure your cutting board. If your cutting board doesn't have rubber grips, place a moistened paper towel underneath to keep it from sliding or shifting during cutting.

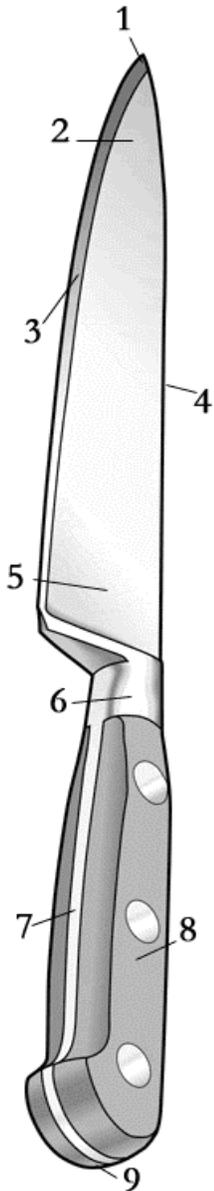
Always cut away from—never toward—yourself. Position your hands and knife so that you draw the knife away from you while cutting.

Keep your eyes on your knife while using it. Often, injuries happen when you look up from your cutting task. Stay focused on the knife relative to your hands during all cutting tasks.

Carry a knife safely. If you're walking with a knife, carry it pointed straight down, with the blade turned towards your thigh.

Never put a knife in a sink full of water. Placing a knife in a sink full of water is a potential hazard for you and others, plus it can damage wooden knife handles. Always wash kitchen knives by hand, wipe them dry and store safely. Fine quality kitchen knives should never be cleaned in the dishwasher since the high temperatures and abrasive cleansers can damage both the knife handle and blade.

THE PARTS OF A KNIFE



1. **POINT** - the piercing tool of the blade; used to begin the cut.
2. **TIP** - forward quarter of the blade, used for many cutting tasks; best used for cutting smaller foods and cuts.
3. **CUTTING EDGE** – the working part of the blade, from point to heel. The central part of the knife cuts virtually all foods using long, rocking, or slicing motions.
4. **SPINE** - the edge opposite of the cutting edge.
5. **HEEL** - rear part of the cutting edge; used to cut through larger and tougher foods when weight and force are needed.
6. **BOLSTER** - thick steel band present on forged knives; helps balance knife and protect from accidental slips.
7. **TANG** - part of the blade that extends into the handle; designed to give the knife its balance.
8. **SCALES/HANDLE** – section of handle that is commonly gripped; generally made from wood or plastic.
9. **BUTT**– end of the knife.

KITCHEN KNIFE TYPES/STYLES

While hundreds of knife styles, sizes and designs are available, most kitchen tasks can be accomplished with three essential knives: a chef's knife; a serrated knife; and a paring or utility knife. When purchasing any knife, it's important to look at several styles, handle designs, lengths and weights. The best knife for you will feel like an extension of your hand, with a natural-feeling grip, good balance and a comfortable weight. Try holding several knives and practice cutting with them, before making any purchase.

In general, there are two broad categories of chef's knives, Western and Japanese. Western knives tend to have thicker, heavier blades and their edges are ground to a wedge shape with an angle of around 20 degrees on each side. These types of knives are good for heavy-duty cutting tasks, such as slitting tough or fibrous vegetables, or bones. Japanese knives often feature thinner blades, which are ground on one side at an angle around 15 degrees. The thinner blade and steeper angle make Japanese knives suitable for finer and more delicate cutting and slicing tasks.

Below are descriptions of different types of common kitchen knives, as well as things to keep in mind when purchasing knives:

Chef's Knife - an all-purpose kitchen knife, used for most types of chopping, dicing, mincing and slicing tasks. They are typically available in 6-, 8-, 10-, and 12-inch lengths. The length you choose will depend upon the weight and size of the knife you prefer.

Serrated Knife - a knife with a sharp edge and saw-like teeth. The blade of a serrated knife is normally 5 to 10 inches in length. Due to their irregular edge, serrated blades are typically sharpened by a professional sharpening service. A serrated knife with a long blade is used to slice through food-with a hard outer surface and soft interior, such as a loaf of crusty bread. A serrated knife with a short, thinner blade is typically used for slicing small fruits and vegetables.

Paring Knife - a small knife with a 3- to 4-inch long blade. It works well for delicate tasks and for peeling and coring foods, such as apples. The blade is typically thin and narrow, and tapers to a point at the tip of the knife.

Utility Knife - a small lightweight knife with a 4- to 7-inch long blade. It is used for many of the same tasks as a paring knife, plus miscellaneous light cutting tasks, such as fruits and vegetables, and slicing sandwiches.

Carving Knife - a knife with an 8- to 15-inch blade, used for carving large roasts, poultry and filleting large fish. The blade edge of a carving knife is either smooth or sometimes beveled. The blade should be large enough to carve across the cut of meat, poultry, or fish in one cut. The blades vary in flexibility. A carving knife with a rigid blade is used for slicing roasted meats, while more flexible blades are used for poultry. The thinnest and most flexible blades are used for slicing smoked fish. Carving knives are most often sold in sets with a carving fork. A carving fork is designed to hold the meat steady while slicing.

Boning Knife - a knife with a thin, short blade, normally 5 or 6 inches long, used to remove the main bone within a cut of meat, such as a ham or a beef roast. A boning knife will typically have a long, narrow blade for trimming meat around bones.

Filet Knife - a knife with a thin, flexible blade, normally 6 to 11 inches long, used for filleting fish. The narrow blade enables the knife to cleanly move along the backbones of the fish, in and around areas adjacent to bones and to evenly slice along the skin, removing it easily from the flesh.

Cleaver - a knife with a wide, rigid blade approximately 6 inches in length, which tapers to a sharp cutting edge. It is used to chop, shred, pound, or crush food ingredients.

Santoku Knife – in Japanese, “Santoku” means “three virtues,” referring to the attributes of this all-purpose kitchen knife, which is used for cutting, slicing, mincing and dicing. The main difference between a santoku and a chef’s knife is the blade edge. While a chef’s knife features a slightly curved edge, a santoku has a straight edge. From a cutting standpoint, a chef’s knife is suited for cutting with a “rocking” motion, while the santoku is best suited for up-and-down cutting and chopping. A santoku also has a shorter blade, typically 5 to 7 inches long, in contrast to a longer chef’s knife. In addition, santoku knives are made with standard-edged blades or a hollow ground edge, also known as a Granton edge. The purpose of the Granton style blade is to assist with keeping particles from sticking to the edge of the knife. Santoku knives are a good choice for people with smaller hands, who also like a lighter-weight knife.

KNIFE CONSTRUCTION

Kitchen knives are manufactured using several different processes and materials. The best quality knives are forged, meaning the knife material is heated and hammered. A good-quality knife will also feature a tang that extends through the entire length of the handle, as well as a bolster that is an integrated part of the blade.

Lesser quality knives are often stamped or cut from sheets of metal using a die or stamp. They often feature plastic handles and are less expensive than forged knives. When selecting a knife, consider the amount of time you spend in the kitchen, the types of cutting tasks you most often perform, and how much time you want to devote to honing and sharpening.

Knife blades are made from a variety of metal alloys, or combinations, to achieve a balance between blade hardness, toughness, edge retention, corrosion resistance, and sharpness. Below are some common knife blade materials found in kitchen knives:

Carbon Steel - carbon steel has been used in the making of blades for many years. Carbon steel blades can be sharpened to a very fine edge and can be sharpened with relative ease. Carbon steel blades discolor when they come in contact with foods that are high in acid, such as tomatoes and citrus. These blades must be treated with care to avoid discoloration and rusting. Wash and dry very thoroughly after each use.

Stainless Steel - stainless steel blades are easy to care for since they resist rusting and discoloration. Due to the material's hardness, they maintain a sharp edge longer than carbon steel but are more difficult to sharpen.

High-Carbon Stainless Steel - A combination of the best attributes of carbon steel and stainless steel blades. They have the toughness and ability to hold an edge and do not discolor.

Titanium - Titanium blades are made from a mold of titanium and carbides. When compared to steel, titanium is lighter, more wear-resistant, and holds its edge longer. A titanium blade is also much more flexible than steel and is used in making boning and fillet knives.

Ceramic - Ceramic blades are made of zirconium oxide and aluminum oxide. They are much more delicate than steel knives but tend to hold their edge up to 10 times longer than them. Once the blades have dulled, however, only a professional should sharpen them. These are excellent for high-acid foods like tomatoes, herbs, or food that bruise or turn brown, like basil. Ceramic knives should not be used for carving, boning, or a task that requires twisting or flexing of the knife. Ceramic knives are brittle and once chipped or broken, they cannot be fixed.

Plastic - Plastic blades are used to prevent vegetables from becoming discolored from the blade of a knife. Plastic blades are not very sharp and require some force when cutting. They are also a good choice for shredding iceberg lettuce.



KNIFE HONING AND SHARPENING TOOLS

To properly maintain a sharp knife-edge, knives must be regularly honed and periodically sharpened. It's important to note that honing and sharpening serve different functions for maintaining a knife's edge. Honing refers to using a steel, a long rod with a handle used regularly to microscopically straighten the knife's edge. Sharpening refers to the removal of minute amounts of metal to restore a knife's edge. Honing should be done each time a knife is used, either before using or just before storing the knife after using. Sharpening should be performed when the knife-edge cannot be restored by honing alone.

When buying a knife, ask for steel made to sharpen that particular type of blade material or that specific brand of knife. Steels can be made from glass, ceramic, or diamond-impregnated metal.

Sharpening implements are available at varying prices and require different levels of expertise to use properly.

Manual Sharpeners - easy-to-use hand tools with sharpening discs set at specific angles. They are relatively inexpensive and require no special skills to use.

Electric Sharpeners - fast and effective sharpening tools powered by a small electric motor. They also require no special skills and make knife sharpening quick and easy. Some feature pairs of sharpening discs of varying degrees of fineness, and some are made to sharpen both European and Japanese knives.

Sharpening Stones - A finishing tool typically used to sharpen steel blades. Most often rectangular in shape, the sharpening stone may be 1/2-inch to several inches in thickness. They are typically moistened with either water or a lightweight oil, and the knife is held at the desired sharpening angle while being slid across the stone's surface. Sharpening stones require practice to use properly but can achieve an extremely sharp, fine edge.

MAINTAINING AND STORING KNIVES

To extend the lifetime of kitchen knives, always wipe knives clean with a damp towel immediately after use to prevent the discoloration of the blade. This will also help to prevent foods from hardening onto the blade, allowing for ease of cleaning. Always wash knives by hand to preserve the knife and for safety reasons.

If available, store knives in a wooden or polyethylene knife block or knife sleeve. If one is not available, store knives in a sheath or, at a minimum, store the knives away from other utensils to prevent damage to the sharp edges.

HOW TO HOLD AND USE A KNIFE

The proper way to hold a chef's knife is to grasp the blade firmly between the pad of your thumb and the knuckle of your index finger just in front of the bolster, curling your remaining fingers around the bottom of the handle. Resist the temptation to extend your index finger along the spine of your knife, which makes the knife harder to control and fatigues your hand.

When using a chef's knife, it's most effective and efficient to use a "rocking" motion. To do this, keep the tip of the knife on the cutting surface, and rock the rear of the knife up and down while sliding the knife forward. This motion allows for a smoother range of movement and more control when cutting and slicing.

It's also very important to be aware of the position of your "guide" hand. **Always keep your thumb tucked behind the gently curled fingers of your guide hand.** This alone will prevent countless injuries, and also facilitate the use of your knuckles to guide the edge of your knife to its proper position for the next cut.

COMMON AND SPECIALTY KNIFE CUTS

In order to effectively use a kitchen knife, a few basic cuts are all that's needed for most food preparation tasks. The size of the cut is most often dictated by the cooking method being used. As your experience grows, you can attempt specialty cuts for presentation purposes.

THE MOST COMMONLY USED KNIFE CUTS INCLUDE:

- A **dice** or food cut into cubes, is one of the most common cuts used for vegetables and fruits. The goal of dicing is to cut the food into uniform pieces, which allows the food to cook evenly. Dices are specified by size in many recipes:
 - **Large dice** is a cube measuring 3/4 inch on a side.
 - **Medium dice** is a cube measuring 1/2 inch on a side.
 - **Small dice** is a cube measuring 1/4 inch on a side.
 - **Brunoise** is a cube measuring 1/8 inch on a side. It is often used as a fine garnish.
- A **mince** is a tiny cut, with no specific dimensions, except that it should be smaller than a brunoise. It's used frequently in order to promote a quick infusion of flavor to a dish. To accomplish a quick mince, cut your product into manageably small slices or segments, then rock the edge of the knife back and forth over the cutting surface while pressing down on the spine of the knife with the palm of your guide hand. Be sure to arch your palm to keep your fingertips out of the way of the blade.
- A **batonnet** is a stick-shaped cut that measures 1/4- by 1/4- by 2 to 2-1/2 inches, commonly used for items like French fries.
 - A **julienne** is similar to a batonnet but smaller, measuring 1/8- by 1/8- by 2 to 2-1/2 inches. This cut can be used for salads and garnishes.

- A **fine julienne** measures 1/16- by 1/16- by 2 to 2-1/2 inches. This cut is also used for garnishes.

SOME SPECIALTY KNIFE CUTS INCLUDE:

- **Supreme/Portioning Citrus Fruits** - to produce attractive, skinless citrus sections, remove the rind and pith from the outside of the entire fruit with your knife with a curving stroke. Slice off the ends, freeing the sections from all but the side panels of skin in between them. Then make a “v” cut on either side of the section, between the flesh and the skin. Finally, slide the loosened section out. These skinless sections look great in salads or as a garnish.
- A **rondelle** is a coin-shaped slice of a cylindrical vegetable. A **diagonal** can be formed by simply turning your knife at an angle to the axis of the carrot. Keep in mind that many cylindrical fruits, vegetables, and breads can be cut into diagonal slices (squash, cucumber, baguettes) to produce this attractive shape.
- A **paysanne** is a decorative cut related to a medium dice but sliced into 1/8-inch thick squares (1/2- by 1/2- by 1/8 inch). It is most often used as a garnish.
- A **tourne** is a football-shaped, blunt-ended cut with seven equal sides. They take a lot of practice, but they make an attractive plate presentation, especially for dense root vegetables, such as turnips and carrots. Practicing with a potato is a good idea, however, because the softer texture of a potato is more forgiving when you begin.



BONUS RECIPE: VEGETABLE STOCK

Yield: 12 cups

Vegetable stock or even chicken stock, is a great use for your vegetable scraps after class. See the recipe variations below for some tips and tricks for a full-flavored stock.

4 to 6 cups vegetable scraps, suitable for stock

4 garlic cloves

Small bunch of herbs, stems and leaves

1 tablespoon whole black peppercorns

2 bay leaves

12 cups water

1. **To prepare in a pressure cooker:** Add all the ingredients to the pressure cooker.
2. Close and secure the lid. Select manual function, high pressure and set the time at 30 minutes.
3. When the time has elapsed, allow for the natural pressure to release.
4. Strain the stock through a sieve or strainer. Use immediately or use proper cooling methods to quickly chill your stock. Store in the refrigerator for up to 1 week or freezer for up to 3 months.
5. **To prepare in a stockpot:** To a large stockpot, add all the ingredients over medium-high heat; bring to a boil. Reduce the heat and simmer 1 hour until the vegetables are tender.
6. Strain the stock through a sieve or strainer, discarding the solids. Use immediately or use proper cooling methods to quickly chill your stock. Store in the refrigerator for up to 1 week or freezer up to 3 months.

Recipe variations:

- **Vegetables most often used in vegetable stock:** Carrots, celery, onion, leeks, garlic, herbs, herb stems, mushrooms, tomatoes (can make your stock cloudy) and fennel.
- Potato peelings will add flavor and body to stock.
- Avoid bitter vegetables like bell peppers and cabbage when making stock.
- **To make chicken stock:** Add the carcass of a roasted or rotisserie chicken to the vegetable stock recipe. Simmer for 1 1/2 to 2 hours until the residual chicken meat falls off the carcass. Follow the straining and storage methods above.