

Knife Anatomy



- A. Point – End of knife used for piercing.
- B. Tip – First 1/3 of the knife.
- C. Edge – “Working” portion of the knife where nearly all chopping is performed.
- D. Heel – Rear part of the blade where more force may be required.
- E. Spine – Thick, top part of the blade.
- F. Bolster – Couples the handle and blade. Also used to add balance to the knife.
- G. Guard/Hilt – Protects hands from blade.
- H. Return – Where the heel and blade meet.
- J. Tang – Portion of the blade that extends into the handle for strength and weight.
- K. Scales – The sides of the handle that are attached to the tang.
- L. Rivets – Pins holding the scales to the tang.
- M. Handle Guard – Enhances grip and reduces slippage.
- N. Butt – End of the knife.

There are different “types” of Chef’s Knives. Some are left-handed and some are right-handed. Some are light and some are heavy. The key is to feel the knife and “test” it before you buy. To ensure the highest safety and most efficient instrument, the knife must be comfortable.

Using and Caring for Knives

Kitchen Musts

- Chef's Knife (8-inch or 9-inch) - This is the workhorse of the kitchen. Depending on cooking style, this knife will perform 70-90% of kitchen cutting and chopping.
- Bread Knife/Utility Knife – These are serrated knives used for cutting bread, peeling “waxy” veggies, etc. The utility knife is more versatile than the bread knife. It is serrated on both sides (bread knife is mainly serrated on only one side), typically larger, and is more flexible.

Job Dependent

- Most all of the following knives can be substituted with a chef's knife. However, the knives listed below are designed for a specific job and therefore make that job easier.
- Paring Knife (3-inch) – Typically used for detailing in techniques such as food sculpture. Can be used for peeling, but a peeler is faster and easier.
- Santoku Knife (the knife with bevels on the side) – Mainly used for sushi. It is NOT an acceptable substitute for a Chef's knife. The shape, though it may look similar, is not the same as a chef's knife. The bevels help reduce (not completely reduce) the likelihood that food will stick to the knife. Thus, when cutting raw fish (sashimi) or rolls containing rice (sushi), this knife can make the job easier.
- Boning Knife – A knife with a thin, very flexible blade that allows the user to navigate into small spaces to remove bone from meat.
- Fillet Knife – A very flexible blade (similar to a boning knife) that allows the knife to slide easily between the meat and skin of a fish.
- Carving Knife – A large knife typically thinner than a chef's knife that can be used when slicing thin cuts of meat from poultry, ham, roasts, etc.
- Cleaver – A large, typically rectangular knife used for “cleaving” meat and bone. These are thick, durable knives that are designed to cut with one swipe without damaging the blade.
- There are many other job specific knives available. There are certainly more than can be listed. Choose the right knife for the job, within reason.

Using and Caring for Knives

Cutting

General Technique

Knife Hand - As a general rule, most all chopping is performed in the “center” portion of the edge. This provides the best stability and the appropriate pivot point for proper technique. The “rock-n-chop” oval motion is similar to that of the coupling rods on an old-time, steam locomotive. As your wrist comes down and the knife begins to touch the food, push forward (and downward) to cut through. Pull the knife upwards and back to complete the oval motion.

Food-Holding Hand – This is the hand most likely to be cut during food preparation. Be sure to ALWAYS use the bear-claw technique to prevent cutting the tip(s) off of your fingers. In particular ensure the tips of each finger are tucked under your knuckles and the pinky and thumb are tucked under the palm. It is easy to forget, but one fingertip gone is a painful lesson to learn.

Wet Hands – Inevitably, in the kitchen hands and knives are washed often. Before using a knife, ensure both the knife handle and your hands are dry. Wet hands and/or handles can cause slippage during cutting resulting in serious injury.

Good knife technique is critical to great cooking. A deep understanding of knife skills and food preparation allows for even cooking (different sized pieces cook at different rates), visually appealing plates (uniformity), less waste, greater efficiency, and an overall more pleasing dining experience.

Like any skill, proper knife usage takes a lot of practice. It is even more difficult if improper technique has been used over many years. It is easier to break a bad habit when it can be replaced with a good one! Remember, it is not about speed right now. It is about learning and using the right technique. Speed will come with time and practice.

“Flat” Foods

The first step (after washing) in preparation is breaking the food down into manageable portions. Then, for nearly all food preparation, the next step is to make a flat surface so the food is sturdy on

Using and Caring for Knives

the cutting board. Once flat, the food can be cut into batons (i.e. sticks) and then diced (i.e. little pieces).

Celery – This veggie starts off “flat.” Cut the celery into smaller pieces (usually 2 – 4 pieces). Lengthwise, cut the celery again into 2 – 4 pieces (depending on the width). This produces the celery batons great for snacks, dips and serving with Buffalo Wings. The batons can then be diced by turning them 90 degrees and then flushing them to the knife. From here, use the “rock-n-chop” method to dice the celery. These are great for sautéing, soups, and mirepoix.

Cylindrical Foods

Cylindrical foods (such as carrots) present a dilemma when cutting. After peeling, cut the carrot into manageable pieces. Then, create a flat side. This may have been accomplished during the peeling stage. Flat side down, slice the carrot lengthwise (2 – 4 slices). Near the end, the carrot may become unstable. At this point, lay the unstable piece down. It is not safe to cut a “wobbly” food. It can easily slip causing injury. Once the slices are complete, lay the slice down and cut lengthwise again to make batons (yes, great for dips and wings!). The carrot can now be diced similar to the celery batons.

Round-Layered Foods

Onions and cabbage are layered and can be cut in a similar manner. For the onion, begin by cutting off the “top.” Ensure you do NOT cut off the root (end with all of the “hair”) end of the onion. Once the top is cut off, stand the onion with the root (i.e. hair) pointed up. Place the knife in the center (always place the knife before placing your hand on the food), stabilize the onion and slice through. Peel the onion half. To dice, lay the onion down on the now large flat side and slide it towards the front edge (closest to you) of the cutting board. Stabilize the onion with your palm (on top) and slice parallel to the cutting board ALMOST through the onion. Leave it attached at the root. Do this 2 – 3 times. Turn the onion 90 degrees towards the front of the board. Using the tip of the knife, slice down through the onion. Again, do NOT slice through the back (root) end of the onion. This needs to be there to hold the onion together. Turn the onion back 90 degrees, flush up the cut side to the knife, and “rock-n-chop” for diced. When the root end of the onion becomes unstable

Using and Caring for Knives

and wobbly, STOP! Tip the root end over and create mini batons up to the root. These can then be diced along with the left over edges of the root baton. To julienne onions, do NOT make ½ moons. Cut the root-end off of the onion half and then peel. With the cut ends pointed towards the front and back of the board, start cutting the onion lengthwise at an angle (this avoids creating an oval flat piece to start). Cut towards the middle and slowly straighten then knife until it is perpendicular to the board at the center. Continue cutting until the onion becomes wobbly. Tip over the wobbly piece and turn it 180 degrees. Continue cutting until complete. The cabbage is cut in the same manner.

BIG FOOD!

Large foods like watermelon, cantaloupe, cabbage and butternut squash can be cumbersome. Use the mass of the food to your advantage. Pierce the food with the tip of the knife. Gently push down on the knife while turning the food in the opposite direction with your other hand. The size of the food assists in the cutting as it is being rolled away.

Knife Care

Sharpening

Sharpening is a process where the blade edge is reshaped. During sharpening, metal is removed from the blade via grinding. For the typical user, a knife should only need to be sharpened 1-2 times per year. There are home sharpeners from small hand-held devices to large, electrical sharpeners and from dry-stones to wet-stones. Many stores (such as A Southern Season) offer services where the knife can be sent off, for a small fee, to be professionally sharpened. Hand-held and electrical devices have the sharpening angle pre-set. These are the easiest and fastest methods for home knife sharpening. However, if not careful, the electric sharpener can severely damage your knife. Since the stones are set by the manufacturer, there is a little less versatility in these sharpeners. Utilizing a sharpening stone, though somewhat difficult to master, allows the user much more flexibility than a pre-set sharpener. Typical angles of sharpening range from ~ 19° to 22.5°. A “multi-surface” stone is recommended (coarse/fine) for added versatility.

Using and Caring for Knives

Honing

Honing is a process where the edge of the blade is brought back into “alignment” after use. Honing can NOT sharpen a dull blade. It is the fine tuning of an already sharp knife. A knife should be honed after every use and even during use if necessary. Similar to sharpening, the knife should be held between ~ 19° and 22.5° to the steel.

Cleaning

Clean your knife with hot, soapy water after each use. It is NOT recommended that knives be put into the dishwasher. Excessive dishwashing can discolor the handle and compromise the integrity of the rivets.

Storage

Improper storing of knives can cause injury and/or damage to the knife. If knives are kept in a drawer, always utilize a sheath. Many knives come with a paper sheath. A plastic sheath provides better protection from cuts and dings. There are also “clam-shell” sheaths that “lock” the knife in. These are the safest, but are much more bulky and take up more drawer space.

A magnetic bar on the wall is another option for knife storage. This method avoids the potential of knife damage. However, homes with children should be cautious if using this method as the knife is out in the open.

Cutting Boards

Acceptable Materials

“Epicurean” – A composite cutting board that offers the advantages of both plastic and wooden cutting boards. The surface of this board does not nick and groove, so there is less area for bacteria to grow. These boards are easy on knives and are dishwasher safe. The major disadvantage of this type of board is cost.

Plastic – Plastic (polyethylene, PE) cutting boards will nick and can provide an environment for bacteria growth. However, they are completely dishwasher safe, highly durable, and very inexpensive.

Wood/Bamboo – Similar to plastic cutting boards, wooden cutting boards nick. In addition, the surface of wood is much more porous than that of plastic. Because of this, wood provides an excellent environment for bacteria growth. Some wood, like Bamboo, offers a small amount of natural anti-bacterial properties. Wood is very easy on the knife edge. However, prolonged washing (especially in the dishwasher) will cause the wood to separate and/or delaminate. Large wood blocks must be sanded and oiled on a regular basis to ensure they stay sanitary.

Unacceptable Materials

Glass – Glass cutting boards are great for serving meat, cheese, and crackers, but terrible as a cutting board. They are easy to clean and disinfect. However, not only will glass quickly dull a knife, but there is a chance the glass will chip and contaminate your food.

Steel – Similar to glass, steel cutting boards are easily cleaned and disinfected. Similar to glass, steel will also quickly dull and damage your knife blade.

Stone – Stone slabs are great for rolling dough and great for serving. Stone will dull and damage your knife. In addition, stone wear over time when exposed to highly acidic foods, such as citrus, tomatoes, and vinegar.