# LIFETIME LEARNING PROUDLY PRESENTS – KNIFE SKILLS AND KNIFE KNOWLEDGE

There are two things one must understand about knives. There is definitely a skill needed to successfully use the utensil safely and efficiently and then there is some basic understanding of the utensil. Let's assume you are going to purchase a new knife, so let me ask you a few questions.

- 1. Are you right or left handed?
- 2. What are you going to use the knife for?
- 3. How much are you prepared to spend?
- 4. How does the knife feel in your hand?
- 5. Do you own another knife that can do the same job?
- 6. Do you know how to keep this knife sharp?
- 7. Where do you plan to store this knife?
- 8. Do you like a wooden riveted handle, molded handle, or metal handle?
- 9. What do you know about the manufacture of the knife?
- 10. If you are considering purchasing a ceramic knife, do you understand what they are made of and how they can and cannot be used?

### TRUE OR FALSE – KNIFE KNOW HOW

You can wash good knives in the dishwasher?

You can let knives soak in hot soapy water?

Cost has no bearing on the quality of your knife?

The best knives come from Japan?

Ceramic knives are best used for chopping?

A solid hard surface makes a great chopping block?

You only need to sharpen your knives once a year?

Good knives never get dull, only cheap knives get dull?

If you cut yourself with a sharp knife, it will heal quicker than if you cut yourself with a dull knife?

You cannot sharpen serrated knives?

In cooking, it does not matter which knife you use as long as it is a sharp one?

When knives are placed in soapy water, they will turn "blade up"?

Knives should be stored in a large drawer all together?

# Some Knife History:

The first pieces of cutlery were made about four thousand years ago with the discovery that iron ore could be melted and shaped into tools. The creation of steel, which is a combination of 80 percent iron with 20 percent other elements, led to the development of carbon steel knives - the standard for three thousand years. Although this kind of steel takes and holds an edge easily, it also stains and rusts. Something as simple as cutting an acidic tomato or living along the ocean can corrode carbon steel making it a high-maintenance material.

In this century, new alloys have given cooks better options. Stainless steel, made with at least 4 percent chromium and/or nickel, will never rust. Used for many cheap knives, stainless steel is also very difficult to sharpen. The compromise between durable but dull stainless steel and sharp but corrosive carbon steel is something called high carbon stainless steel. Used by most premium knife manufactures, it combines sharpness with durability.

Until recently, all knives were hot drop forged – that is, the steel was heated to two thousand degrees, dropped into a mold, given four or five shots with a hammer, and then tempered (cooled and heated several times to build strength). At some factories this process requires as many as one hundred separate steps, many of them done by hand, accounting for the high cost of forged knives.

A second manufacturing process feeds long sheets of steel through a press that punches out knife after knife, much like a cookie cutter cutting dough. Called stamped blades, these knives require some hand finishing but are much cheaper to produce, as a machine does most of the work.

Henkel's, one of the largest producers of kitchen knives today, uses a new patented process that is neither forging nor stamping. It takes three pieces of steel – one each for the blade, bolster (between blade and handle) and tang (the portion of the knife that extends into the handle) – especially designed for each part of the knife. The pieces are then fused together. Henkel says this process allows them to use the perfect steel for each section of the knife as opposed to using a compromise material that will work for all three parts.

#### **Knife Construction:**

**The Blade** – the blade is considered the front end of the knife, the cutting portion. It is made up of two parts, the edge or sharpened portion and the heel, the larger portion on top of the blade.

The Handle – the handle is that portion of the knife that you hold while cutting. It can be made of wood, metal or plastic. It can be molded or cut and secured to the knife with rivets. In 1976 Henkel's Knife Manufacturing introduced the single piece of molded handle. Because these new knives don't have any grooves or rivets that can trap bacteria, they are generally preferred in professional kitchens and are enjoying increased sales to consumers because the handles provide a better grip. One important point to remember is that the knife handle should feel "comfortable" in your hand. And yes, there are knives designed for left hand users as well as the most commonly produced right hand version.

**The Tang** – this is the portion of the knife that is inside the handle. It can be molded, stamped or forged.

**The Bolster** – this is the portion of metal that separates the tang/handle from the knife. It is found on forged or hand crafted knives only, stamped knives do not have a bolster attached to them.

Ceramic Knives – A rather new approach to knife making which is gaining in popularity day by day. Ceramic knives are really "glass knives", the ceramic material used in making the blade is made just like glass. It can be sharpened to scalpel-like sharpness and holds it edge for quite some time. It is very light weight, something to consider when you are using a knife all day long. The down size to ceramic knives is two-fold, the first being re-sharpening the knife blade. Until recently most re-sharpening had to be done by a manufacture or a special sharpening operation. Today, this aspect is improving with the invention of Ceramic sharpeners. The second down side is it is also breakable, should the knife be dropped or banged.

# Slicing, Dicing and Cutting terms:

Allumette - Vegetables, potatoes or other items cut into pieces the size and shape of matchsticks: 1/8 inch by 1/8 inch by 1 to 2 inches is the standard.

Baton/Batonnet – Items cut into pieces somewhat larger than allumette or julienne; ¼ inch by ¼ inch by 1 or 2 inches long. Translated to English, it means stick or small stick.

Brunoise – Small dice; 1/8 inch square is the standard. For a brunoise cut, items are first cut in julienne, then cut crosswise. For a fine brunoise, 1/16 square cut.

Chef's knife – An all-purpose knife used for chopping, slicing, and mincing; its blade is usually 8 to 14 inches long.

Chiffonade – Leafy vegetables or herbs cut into fine shreds; often used as a garnish.

Chop – To cut into pieces of roughly the same size.

Course chop – A type of preparation in which food is cut into pieces of roughly the same size. Used for items such a mirepoix, where appearance is not important.

Dice – To cut ingredients into small cubes (1/4 inch for small,  $\frac{1}{2}$  inches for medium, and  $\frac{3}{4}$  inch for large) is the standard.

Emincer – To cut an item, usually leftover meat, into very thin slices, covered with sauce and reheated.

Filet (fillet) – A boneless cut of meat, fish, or poultry

Hollow-ground – A type of knife blade made by fusing two sheets of metal and beveling or fluting the edge

Julienne – Vegetables, potatoes, or other items cut into thin strips 1/8 inch by 1/8 inch by 1 or 2 inches. Fine julienne is 1/16 by 1/16 by 1 to 2 inches

Mandoline – A slicing device of stainless steel with carbon-steel blades; the blades may be adjusted to cut items into various shapes and thicknesses

Mezzaluna – A two bladed knife that cuts/chops by rocking back and forth inside a hollowed out round in the cutting board, great for working with herbs

Oblique cut/roll cut – A knife cut used primarily with long, cylindrical vegetables such as carrots. The item is cut on a diagonal, rolled 180 degrees, then cut on the same diagonal, producing a piece with two angled edges

Pallet knife – A flexible, round-tipped knife used to turn pancakes and grilled foods and to spread fillings and glazes, may have a serrated edge. Also called a metal spatula

Pare – To remove the skin from a fruit or vegetable, to pare or skin an apple or tomato

Paysanne, a la or fermier cut – A knife cut in which ingredients are cut into flat, square pieces: ½ inch by ½ inch by 1/8 inch is the standard

Primal cuts – The portions produced by the initial cutting of an animal carcass. Cuts are determined standards that may vary by country and animal. Primal cuts are further broken down into smaller, more manageable cuts.

Rondell – A knife cut that produces round or oval flat pieces; used on cylindrical vegetables or items trimmed into cylinders before cutting.

Score – To cut the surface of an item at regular intervals to allow it to cook evenly

Steel – A tool used to hone knife blades. It is usually made of steel but may be ceramic, glass, or diamond-impregnated metal.

Tourne' – To cut items, usually vegetables, into barrel, olive, or football shapes.

Tourne'ed foods should have five or seven sides or faces. Also a term used to describe foot that has gone bad or a sauce that has separated.

#### One Final Word on Knives

A good knife will serve you for years. All you need do is to keep it clean, keep it sharp and keep it stored safely to protect the blades edge. Of all the tools in your kitchen, the knife is the one that is used the most.

**Happy Cooking** 

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