

2007 Family & Consumer Sciences Summer Conference



Knife Skills

Presented by:

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*Riverton High School
Riverton, Utah*

2007 Family & Consumer Sciences Summer Conference

Knife Skills

Objectives: By the end of this class, students will be able to

- list different knives and their uses.
- handle and sharpen knives safely.
- identify and prepare various knife cuts.

Class Sequence:

- Introductions
- Knife skills discussion
- Knife identification
- Handling and sharpening knives
- Demonstration of different knife cuts
- Student participation of knife cuts
- Kitchen sanitation



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Knife Skills

Equipment: Each student will need to bring a knife kit consisting of:

- 1 chef knife
- 1 paring knife
- 1 vegetable peeler
- 1 sharpening steel

If possible, a 3 sided sharpening stone for instructor demonstration.

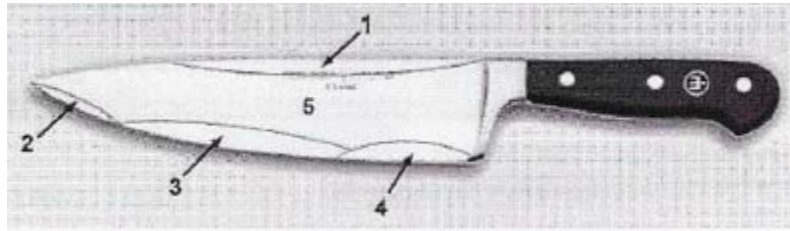
Food: The following should be provided for each student:

- 1 onion
- 2 carrots
- 2 ribs celery
- 1 orange
- 2 potatoes
- 1 green pepper
- several mushrooms

In addition to the above, the instructor will also need:

- 1 bulb garlic
- a few fresh basil leaves

The cook's knife: The most important kitchen tool



1. The sturdy spine of the blade can be used to break up small bones or shellfish.
2. The front of the blade is suitable for many small cutting jobs. It is particularly useful for chopping onions, mushrooms, garlic and other small vegetables.
3. The mid section of the blade is remarkably appropriate for either firm or soft food. The gentle curve of the blade is ideal for mincing of leeks, chives, parsley etc.
Caution: Cook's knives purposely have been ground extra thin for the ultimate cutting performance.
Chopping through bones will damage the fine edge.
For doing this please refer to our assortment of cleavers.
4. The weight distribution is optimal at the heel of the blade and is used to chop through extremely firm food objects.
5. The wide flat surface of the blade is suitable for flattening and shaping of meat cuts such as filets as well as for lifting of the chopped product.

The differences are:



The blade with the straight edge

The straight edge allows a smooth and clean cut. When carving no fibres are torn out of the meat. This edge can be used for firm and soft food like meat, vegetables and fruit.



The blade with the serrated edge

The wavy or serrated edge allows an easy cut through crusty food like a traditional roast and crispy bread.

The blade with the hollow edge



When cutting an air pocket is created between the hollow edge and the slice. This prevents the food from sticking to the blade and allows for finer slices.

Why different knives are needed

It is simple as that: Cutting different types of food requires different types of knives.

- in order to cut small vegetables and fruit a small blade is to be favoured.
- for slicing bread, ripe tomatoes or a crispy roast, a knife with a wavy or serrated edge is the right tool.
- a long and straight edge is ideal for carving.
- and the Cook's knife, the most important tool in a kitchen is ideal for all food preparations including mincing, dicing and slicing. It is the manual food processor.

There is no one universal knife that can be used for the multitude of cutting tasks. The enjoyment of gourmet food begins with the preparation and the right tool.

The perfect knife for any use

When it comes to creating culinary delights as done by famous celebrity chefs, choosing the right knife is essential:



Peeling Knife

This particular shape is ideally suited for peeling, cleaning or shaping any fruit or vegetable with a rounded surface.



Paring Knife

The straight edge offers close control for decorating as well as peeling, mincing and dicing.



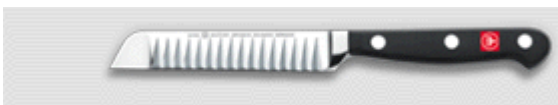
Paring Knife

The most versatile of all parers: for mincing shallots, onions and herbs as well as cleaning and cutting vegetables.



Tomato Knife

The serrated edge slices even the ripest tomato as thin as you like. The forked tip is great for serving.



Decorating Knife

Makes crinkle cuts for french fries and decorative crudites, even eye catching butter paddies.



Boning Knife

De-boning chicken or ham, trimming fat and sinews. The tapered, pointed blade is a necessity for working closely around joints.



Fillet Knife

Filleting delicate fish or preparing carpaccio - it's easier with this extra thin, flexible blade.



Bread Knife

Fresh, crunchy breads, even cutting the birthday cake - the serrated edge does it all.



Carving Knife

Perfect for the larger cuts of meat, fruit and vegetable.



Cook's Knife

No kitchen should be without this manual food processor. It is the most essential of all knives used in the kitchen. Slicing, mincing, dicing of all kind of food. Perfectly balanced, an extension of your hand.



Salmon Slicer

The ultimate specialty knife designed solely for the paper-thin slicing of this delicate cut of fish.



Spatula

With the thin and flexible blade items can be lifted without damaging the underside. Perfect also for spreading dough.



Straight Meat Fork

As a carving or serving fork, you'll have a good hold on most anything.



Sharpening Steel

Keeping knives sharp is easy if you sharpen them often on a sharpening steel.



Diamond Knife Sharpener

Dull knives can be easily sharpened with a steel which is coated with industrial

diamonds.

Care and sharpening

Sharpening steel

With regular use, any knife's edge will lose its "bite". Please use a sharpening steel to realign the edge and to keep it sharp. This will insure a lifetime of cooking pleasures.

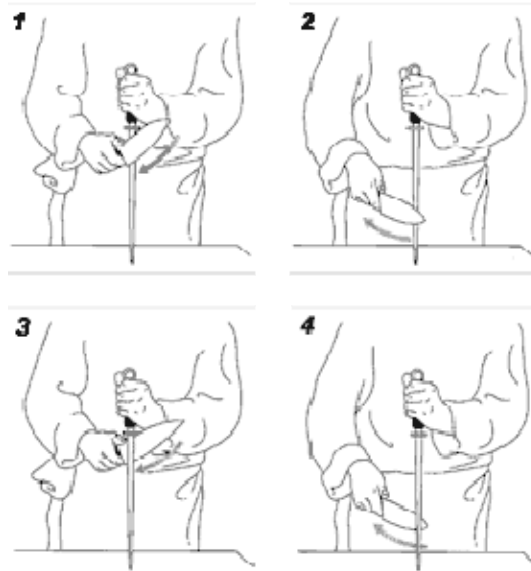
Diamond Sharpening steel

But also dull knives can easily be sharpened by using a sharpening steel which is coated with industrial diamonds



Honing/ Sharpening Method

Hold the steel with your left and the knife with your right hand (lefties simply do the opposite) and guide the blade with light pressure across the steel. Do this in an arching motion at a 20 degree angle side-to-side. Repeat this process 6 - 8 times. With practice, you will find this becomes an easy motion. Never stroke each side more than once in succession. That's all. Now your knife should be as sharp as the first time you used it. By the way, please use a steel which is longer than the knife you hone



Professional Knife Cuts:

VEGETABLES

Mince	very fine chop	extremely small – no set shape
Brunoise	fine dice	1/8" cube
Macédoine	small dice	1/4" cube
Parmentier	medium dice	1/2" cube
Carré	large dice	3/4" cube
Vichy	short, very thin stick	less than 1/8" thick slice
Julienne	short, thin stick	1/8" x 1/8" x 1 1/2" to 2"
Allumette	matchstick	1/8" x 1/8" x 3"
Batonnet	small stick	1/4" x 1/4" x 3"
Frite	French fry	1/2" x 1/2" x 3"
Pont-Neuf	steak fry	3/4" x 3/4" x 3"
Mignonette	stick	3/8" x 3/8" x 2"
Mirepoix	rough cut	1" average
Paysanne	diamond cut	1/2" x 1/2" x 1/8"
Chips/Rondelle/Bias	very thin slice	1/8" slice
Gaufrettes	waffle	1/8" thick; perforated
Chiffonade	ribbon cut	very thin rolled slice
Oblique	roll cut	45° angle cut
Paille	straw	Finely shredded
Parisienne	Paris style	Sphere shape: 1" average
Noisette	pazelnut	Sphere shape; 1/2" to 3/4"
Tourné Olivette	olive like	7 sided; 1" to 2"
Tourné Chateau	castle like	7 sided; 2" to 2 1/2"
Tourné Fondante	melting	7 sided; 3" or more

KNIFE CUT TERMS

“Strip Cuts”

Julienne Batonnet

$\frac{1}{8} \times \frac{1}{8} \times 1-2$ inch
inch
(very fine strip)

$\frac{1}{4} \times \frac{1}{4} \times 2 - 2\frac{1}{2}$
(small strip)

Frite

$\frac{1}{2} \times \frac{1}{2} \times 3$ inch
(medium strip)

Pont Neuf

$\frac{3}{4} \times \frac{3}{4} \times 3$ inch
(large strip)

“Dice Cuts”

Brunoise

$\frac{1}{8} \times \frac{1}{8} \times \frac{1}{8}$ inch
(very fine dice)

Macédoine

$\frac{1}{4} \times \frac{1}{4} \times \frac{1}{4}$ inch
(small dice)

Parmentier

$\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$ inch
(medium dice)

Carré

$\frac{3}{4} \times \frac{3}{4} \times \frac{3}{4}$ inch
(large dice)

KNIFE CUT TERMS

Rondelle/Bias

Paysanne

**1/8 – 1/2 inch-“round cut”
inch**

1/2 x 1/2 x 1/8

Tourné (7 sides)

Olivette: 1 – 2 inches

“Roll cut”

Chateau: 2 – 2 1/2 inches

Fondante: 3 inches

Oblique

Graufrette

Chiffonade

**“waffle cut”
cut”**

**(made with a mandoline)
herbs & veg)**

“ribbon

(used with leafy

Mince

“very fine chop”

**Concassée - A tomato that has been:
peeled; seeded & diced or chopped**

(Adapted from: Johnson & Wales University. Culinary Fundamentals. Thailand: McGraw Hill, 2003)

Basic Vegetable and Fruit preparation:

Julienne of Vegetables:

- Step 1. Trim the vegetable so that the sides are straight, making it easier to produce even cuts.
- Step 2. Slice the vegetable length wise to the desired thickness using parallel cuts.
- Step 3. Stack the slices and make even parallel cuts to produce a series of batons.
- Step 4. The finished result is a series of batons 1/8 inch x 1/8 inch x 1-2 inches



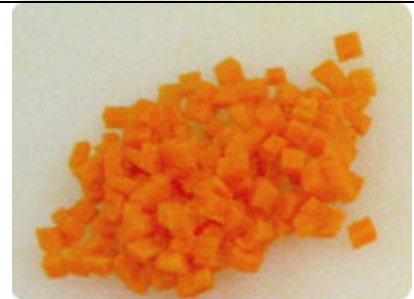
Batonnets of Vegetables:

- Step 1. Peel the vegetable using a peeler or paring knife.
- Step 2. Top and tail the vegetable by removing the ends.
- Step 3. Cut the vegetable into sections approximately 2- 2 1/2 inches long.
- Step 4. Trim the vegetable so that the sides are straight, making it easier to produce even cuts.
- Step 5. Slice the vegetable length wise to the using parallel 1/4 inch cuts.
- Step 6. Cut each slice into baton shapes about 1/4 inch wide



Brunoise of Vegetables

- Step 1. Prepare the vegetable as you would for Julienne, making sure the sides are straight making it easier to produce even cuts.
- Step 2. Slice the vegetable length wise into 1/8 inch slices using a series of parallel cuts.
- Step 3. Cut each slice into baton shapes 1/8 inch wide.
- Step 4. Using a series of parallel cuts, cut the batons into 1/8 inch cubes.



Paysanne of Vegetables

- Step 1. Peel the vegetable using a peeler or paring knife.
- Step 2. Top and tail the vegetable by removing the ends.
- Step 3. Use a channel knife to cut grooves along the length of the carrot.
- Step 4. Giving the carrot three or four sides along its length can create other shapes.
- Step 5. The carrot can then be cut crosswise.
- Step 6. The shapes made vary from circles, squares, and triangles to flowers.






Dimensions: 1/2 x 1/2 x 1/8 inch



Macedoine of Vegetables

- Step 1. Prepare the vegetable as you would for Jardiniere.
- Step 2. Trim the vegetable so that the sides are straight, making it easier to produce even cuts.
- Step 3. Slice the vegetable length wise into 1/4 inch slices using using a series of parallel cuts.
- Step 4. Cut each slice into baton shapes 1/4 inch wide.
- Step 5. Using a series of parallel cuts, cut the batons into 1/4 inch cubes.



<p>Mirepoix</p> <p>Step 1. Trim the vegetable so that the sides are straight, making it easier to produce even cuts. Step 2. Slice or chop the vegetables so that all pieces are relatively uniform in size.</p>	
<p>Chiffonade</p> <p>Step 1. Wash and drain the vegetable well. Step 2. Carefully remove any stalks. Step 3. Slice the cylinders of leaves crosswise into thin strips. Step 4. Stack and roll the leaves into a cylinder.</p>	
<p>Fruit segments</p> <p>Step 1. Remove the skin and pith from the fruit. Step 2. Using a small knife cut between the internal membranes of the fruit. Step 3. Remove the segments individual, discarding the internal membrane. Step 4. Some citrus, such as mandarins, can be divided into segments without cutting by pulling the segments apart by hand.</p>	
<p>Coring Fruit</p> <p>Step 1. Place the apple on a chopping board Step 2. Position the apple corer over the core of the apple. Step 3. Push the corer through using a back and forth twisting motion. Step 4. Remove the corer and discard the core.</p>	
<p>Lemon wedges</p> <p>Step 1. Divide the fruit in half through the poles and then into quarters Step 2. Remove the central core of the fruit. Step 3. You can also use a special zesting tool as shown.</p>	

Zesting Fruit

Step 1. Use a peeler to remove the outer skin of the fruit.

Step 2. The pieces can then be cut into thin strips using a chef's knife



KNIFE SKILLS

INTRODUCTION

Proper knife skills are essential when working in the kitchen. The better your knife skills, the more production you can accomplish and your value as an employee is increased.

Good knife skills don't happen over night. It takes many hours of practice to handle a knife like a professional. A good understanding of basic cutting techniques is the first step towards advanced knife skills.

UNIT SUMMARY

Knife Materials

1. Carbon steel
 - a. keeps a good edge
 - b. blade corrodes and discolors
 - c. discolors some foods (hard boiled eggs, citrus fruits)
2. Stainless steel
 - a. doesn't rust or corrode
 - b. hard to sharpen
3. High carbon stainless steel
 - a. keeps a good edge
 - b. doesn't rust or corrode
 - c. highly prized and expensive

KNIFE HANDLES

The **tang** is the portion of the metal blade that is inside the handle. The best quality knives have a full tang.

Knives and their uses:

1. French knife (chef knife)
 - a. 10 to 12 inches long
 - b. used for general work
 - c. most important knife
2. Utility knife (salad knife)
 - a. 6 to 8 inches long
 - b. used mostly for salad greens and fruits
 - c. can be used for meats

3. Paring knife
 - a. 2 to 3.5 inches long
 - b. Used for trimming fruits and vegetables
4. Boning knife
 - a. about 6 inches long
 - b. used for boning raw meats, poultry and fish
5. Slicer
 - a. long, slender, flexible blade
 - b. used for carving and slicing meats
6. Serrated slice
 - a. blade has “teeth” in it
 - b. used for slicing breads and cakes
7. Butcher knife
 - a. heavy, slightly curved blade
 - b. used for cutting, sectioning and trimming raw meats
8. Scimitar (steak knife)
 - a. curved, pointed blade
 - b. used for cutting steaks
9. Cleaver
 - a. heavy, broad blade
 - b. used for cutting through bones
(Chinese cleaver is used for cutting vegetables)
10. Oyster knife
 - a. short, rigid, blunt blade
11. Clam knife
 - a. short, rigid, blunt blade
12. Vegetable peeler
 - a. tool with slotted, swirling blade
13. Steel
 - a. used for truing and maintaining a knife’s edge
14. Cutting board
 - a. made of hard rubber or plastic
 - b. always use when working with a knife

KNIFE SAFETY

Preventing cuts

1. Keep knives sharp
2. Use a cutting board
3. Pay attention
4. Cut away from yourself and others
5. Use knives only for cutting
6. Don't catch a falling knife
7. Don't leave knives in a sink or in the pots and pans area
8. Clean knives carefully with the sharp edge away from you
9. Store knives in a safe place – not in drawers
10. Carry a knife properly
 - a. hold it beside you, point down, sharp edge back and away from you
 - b. don't swing your arm
 - c. let people know you are waking past them with a knife

