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# CHAPTER 9: ODE TO VEGETABLES





# Vegetables: Types and Market Forms



A **vegetable** is an edible, herb-like plant. The edible parts of vegetables include the leaves, fruit, stems, roots, tubers, seeds, and flowers.

- Vegetables are often categorized by their botanical origins or by their edible parts
- **Vegetable Match Mania!!!!**
  - Each team will receive need to use the pieces to determine what vegetables belong in which category.
  - Categories are numbered to assist in determining how many vegetables belong in the category.
  - Use reasoning skills in determining which vegetables have similar characteristics.



# Vegetables: Types and Market Forms



- **Flower vegetables** include broccoli, cauliflower, brussel sprouts, and cabbage.
- **Fruit vegetables** include avocados, cucumbers, eggplants, peppers, squash, and tomatoes.



# Vegetables: Types and Market Forms



**Green leafy vegetables** include various types of lettuce, mustard greens, spinach, and Swiss chard.

- Some greens are lettuces; some are related to cabbage; others, like radicchio, are chicory.
- **Spring greens** are the new leaves of leafy vegetables that had been harvested the previous season:
  - **Field mixes** may be more tender and can be planted in the spring for harvest a few weeks later.



# Vegetables: Types and Market Forms (cont.)



- **Seed vegetables** include corn, peas, and beans.
- **Root vegetables** include carrots, beets, radishes, turnips, and onions.



# Vegetables: Types and Market Forms (cont.)



- **Tuber vegetables** include potatoes, sweet potatoes, and yams.
- **Stem vegetables** include asparagus, celery, artichokes, and mushrooms.

# Growing Seasons and Grades

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- In **hydroponic farming**, vegetables are grown indoors year-round, under regulated temperatures and light, in nutrient-enriched water.



- As with fruit, during their growing seasons vegetables are plentiful, the quality is higher, and the prices are usually lower.
- The same USDA fruit quality grades apply to vegetables as well.



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# Growing Seasons and Grades

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# Storing Vegetables



- Roots and tubers should be stored dry and unpeeled in a cool, dark area.
- If possible, vegetables should be stored separately in one refrigerator and fruit in another refrigerator.
- Most vegetables need to be kept dry because excess moisture causes produce to spoil quickly.

# Storing Veg. Cont.

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- Produce should not be peeled, washed, or trimmed until just before it is used.
- Vegetables that need to ripen should be stored at room temperatures of 65°F to 70°F.
  - Once produce is ripe, refrigerate it immediately or it will become overripe.



# Preparing Vegetables



Vegetables must be properly prepared before they are cooked.

- All fresh vegetables must be cleaned thoroughly. Washing removes surface dirt as well as other contaminants.
- When cutting vegetables, the cutting station should have a container to hold peelings and another to hold the cut vegetables.

# Common Knife Techniques

- For safety, foods such as raw meat, fish, and poultry require a different cutting board from that used for fruits and vegetables:
  - **Dicing** is cutting a product into cubes with a chef's knife. Normally, dicing refers to about a half-inch cube. This is a common technique for use with vegetables.
  - **Mincing** is a fine chop cut made by using a chef's knife or **mezzaluna**. This cut is commonly used on smaller foods, such as garlic, fresh herbs, and ginger.



# Cooking Vegetables



- The best way to maintain overall quality is to **cook vegetables soon after purchase** and then serve them as quickly as possible.
- **Prepare vegetables for cooking as close to the actual cooking time** as possible to ensure the vegetables' freshness.
- Vegetables must be cooked in a way that **protects their texture, flavor, color, and nutrients.**

# Cooking Vegetables



- **Boiling** is best for hard, starchy vegetables.
- **Blanch** vegetables by quickly and partially cooking them in hot water or oil.
- **Parboiling**, like blanching, partially cooks vegetables in boiling water.
- **Steaming** is the best way to retain vitamins and minerals.

# Cooking Vegetables

- Cook vegetables in a **microwave**-safe container, covered, in a small amount of liquid.
  - To leave the vegetable whole, with the skin or peel intact, and steam it with its own moisture.
- **Roast or bake** vegetables in a hot or moderate oven. This cooking method is best suited to vegetables with thick skins that protect the interior from drying or scorching.



# Cooking Vegetables (cont.)



- While thick-skinned vegetables are well suited for roasting, **vegetables with little or no skin** are best when **sautéed**.
- **Glazing** is a finishing technique that gives vegetables a glossy appearance.
- Cooks often coat **pan-fried** vegetables with **breeding or batter**.
  - Cook batter-dipped vegetables in oil or butter until their exteriors are lightly browned and crisp.



# Cooking Methods (cont.)

- **Sous vide:** Food is cooked for a long time, sometimes well over 24 hours.
  - Use airtight bags placed in hot water well below the boiling point
  - Cooked using precise controlled heating, at the temperature at which it will be served



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# Cooking Methods

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- **Pureed:**
  - Cook until vegetables are tender enough to push through a food mill or sieve, or use a blender.
    - Cucumbers, tomatoes, and spinach can be pureed from raw state.



# Cooking Vegetables

- To **marinate** vegetables, soak them in oil or vinegar, herbs, and spices. This gives them added flavor and helps to tenderize the vegetable.



- Vegetable **stews and braises** are good ways to **retain the vitamins and minerals** that are transferred to the cooking liquid.



# Section 9.2 Summary



- Flower, fruit, green leafy, seed, root/tuber, and stem are categories of vegetables.
- Hydroponic farming allows vegetables to be grown indoors year-round under regulated temperatures and light in nutrient-enriched water.
- Roots and tubers should be stored dry and unpeeled in a cool, dark area.
- There are many ways to cook vegetables, including boiling (blanching, parboiling), steaming, microwaving, roasting and baking, sautéing and stir-frying, pan-frying, deep-frying, *sous vide*, stewing and braising, grilling, and puréeing.
- The best way to maintain overall quality is to cook vegetables rapidly and then serve them as soon as possible.