

Vegetables

Guide to Good Food Chapter 15 (Pages- 267-278)

Vegetable classification:

Examples:

1. Bulbs – **Onions and garlic**
2. Flowers - **Artichokes, broccoli, and cauliflower**
3. Fruits – **Tomatoes, cucumbers, eggplant, okra, peppers, pumpkins, and squash**
4. Stems – **Asparagus and celery**
5. Leaves – **Brussels sprouts, cabbage, lettuce and spinach**
6. Seeds – **Peas, corn and beans**
7. Tubers - **Potatoes**
8. Roots – **Beets, carrots, parsnips, radishes, rutabagas, and turnips**

Nutritional Value: **5** servings a Day

- ❖ Vitamin A – Leafy **green** and deep yellow vegetables-sources of **carotene**
- ❖ Vitamin C – Tomatoes, **broccoli**, Brussels sprouts, **cabbage** and cauliflower
- ❖ The B Vitamins – **Dark** green leafy, broccoli, dried **peas** and asparagus
- ❖ Calcium and iron – Leafy green and dried peas
- ❖ Fiber – All **vegetables- most from fresh vegetables-help** digestion
- ❖ Carbohydrates – Seeds, **roots** and **tubers**
 ➔ Most others are low in **calories**.

Selecting Fresh Vegetables:

- ✧ Good color, firmness and absence of bruises and decay
- ✧ Avoid **wilted** and misshapen vegetables.
- ✧ **Medium** in size
- ✧ Buy only what you will use in **short** period of time.
- ✧ Veggies in season are usually higher quality and less **expensive**.

Storage of Fresh Vegetables:

- ❖ Usually stored in refrigerator in **crisper**, plastic bag or container
- ❖ Tomatoes store uncovered
- ❖ Lettuce should be **cored**, washed, drained, wrapped and refrigerated.
- ❖ Onions - open container at or below room temperature.
- ❖ Potatoes - cool, **dark** and **dry** place

Cost of Fresh Vegetables:

- ✧ Depends on **growing** season
- /✧ In off season, depends on cost of storage, handling and shipping. Also, weather and growing conditions where it is being grown

Canned, Frozen and Dried Vegetables:

Canned:

- ✧ Less expensive than fresh
- ✧ Cans should be free from dents, bulges and leaks
- ✧ Store in a cool, dry place

Frozen:

- ✧ Package should be clean and solidly frozen.
- ✧ Heavy layer of ice indicates thawing and refreezing.
- ✧ IQF veggies should be loose in bagged frozen vegetables.
- ✧ Store in coldest part of freezer

Dried:

- ✧ Uniform in size and free from visible defects.
- ✧ Store in covered containers in cool dry place

Preparing Vegetables:

1. *Raw vegetables*

- ✧ Wash carefully to remove dirt, bacteria and pesticide residue
- ✧ Best when served cold.

2. *Food Science Principles of Cooking Vegetables*

- ✧ Cellulose (fiber) in veggies softens - makes for easier chewing.
- ✧ Starch absorbs water to ease digestion
- ✧ If properly cooked, should be colorful and flavorful - crisp-tender.
- ✧ Cook in little or no added water to retain water-soluble nutrients.
- ✧ Cook until only crisp tender. Overcooking causes loss of vitamins and unpleasant flavor, texture and color.

✧ Effects of overcooking on vegetable color

☆ Green Veggies (chlorophyll) – lose their bright green color and look grayish green

☆ Yellow Veggies (Carotene) – cellular structure will be destroyed and release carotene into the water

☆ White Veggies (Flavones) – soluble in water-turn yellow or gray

☆ Red Veggies (Anthocyanin) – alkali in water turns purple- neutralize alkaline with small amt. vinegar or lemon juice to keep red color

Methods of Cooking Vegetables:

1. In water – Choose **pan** with a tight fitting lid, add salt to small amount **water** & bring to a boil, add **vegetables**, cover and bring to boil. Reduce heat, simmer cook until **crisp tender**
2. Steam – Place in **steaming** basket over simmering water. Tightly cover with **lid** and steam until **crisp tender**.
3. Pressure Cooking – Follow instruction with pressure cooker- cooks **quickly**
4. Baking – Wrap vegetables in foil or place in covered casserole with a small amount of liquid before baking. Takes **longest** to cook. Potatoes, tomatoes & onions popular to bake. **Prick** potato skins to prevent exploding.
5. Frying- deep fry in **batter**, sauté in small amt. fat, **stir-fry** in wok small amt. oil- cook over med-high heat until **crisp tender**
6. Broil – **brush** surfaces with oil, place under broiling unit, & watch closely cook fast- tomatoes and eggplant popular to broil.
7. Microwave – **short** cooking time- retain shape, flavor, color, & nutrients, cook on **high** in covered dish, stirring and arranging to prevent overcooking. **Prick** skins to prevent exploding

Based on the information presented in today's lecture, fill in the following information:

Name of Recipe: _____

Cooking method your group will be using: _____

Name of Vegetables

Classification

Chemical- Vegetable Color
