

Vegetable Lecture

I. **Botanical Names for Vegetables - Parts of plant from which they come.**

- A. Tubers - potato
- B. Bulbs - chives, onions, garlic, leeks, shallots
- C. Roots - beets, turnips, carrot, radish
- D. Stem - asparagus, celery, mushroom
- E. Leaves - brussel sprouts, cabbage, chard, greens, lettuce, spinach.
Watercress
- F. Seeds - beans, peas, corn
- G. Flowers - artichoke, cauliflower, broccoli
- H. Fruit - cucumber, eggplant, tomato, peppers, squash

II. **Flavors**

- A. Strong - cabbage, brussel sprouts, turnips, cauliflower onions
- B. Mild - most all vegetables

III. **Nutrients**

- A. Water content - fruits, stems, flowers, leaves
 - 1. tomato, celery, broccoli, lettuce - juicy and succulent
- B. Starch - tubers, bulbs, roots, seeds
 - 1. potato, sweet potato, lima beans, corn - starchy vegetables

IV. **Color**

- A. Yellow
- B. White
- C. Red
- D. Green

V. **Forms**

- A. Fresh - available certain times of the year
- B. Canned
- C. Frozen
- D. Dried

VI. **Nutrient Contribution**

- A. Vitamins
 - 1. Chlorophyll - green substance of plant cells that gives their green color.
 - 2. Vitamin A - eyes
 - a. Leafy green and deep yellow vegetables contain carotene which converts to Vitamin A
 - 3. Vitamin C -
 - a. Most vegetables contain vitamin C - broccoli, green peppers, tomatoes, cabbage
 - 4. Vitamin B
 - a. Lima beans and peas
- B. Minerals
 - 1. Calcium
 - 2. Iron
- C. Carbohydrates
 - 1. Cellulose, starch and sugar
- D. Proteins
 - 1. Incomplete protein - dried beans and peas

VII. Principles of Cookery

- A. Goal to retain color, flavor, nutrient, texture
 - 1. Cellulose structure softens, and they become less crisp
 - 2. Starch absorbs water, swells, and become more soluble
- B. Water-soluble vitamins from vegetables seep out into the cooking liquid - B and C vitamins and minerals
- C. **Amount of water**
 - 1. Loss of nutrients is reduced when cooked in small amount of water
 - 2. Pan is covered to prevents both scorching and loss of water due to evaporation
- D. **Length of Cooking Time**
 - 1. Vitamins are destroyed by heat and overcooking
 - 2. Cook only until fork tender and still slightly crisp
 - 3. Overcooking dulls the bright colors of vegetables, lose their texture and shape and become mushy
 - 4. Properly cooked vegetables retain their color, flavor, and texture and nutrients

E. Method of Cookery

1. Boil - boil small amount of water, add vegetables, return to boil, cover pan, reduce heat to a simmer
2. Baked - Wash thoroughly and place on oven rack
3. Panned - Stir-fry, braise (fat, low heat)
4. Steam - Water in bottom of pan, basket to hold food, cook over boiling water
5. Fried - pan, deep fry, batter/crumbs
6. Pressure cook - quick, good flavor, color
7. Broil - tomato, eggplant
8. Microwave - retain color, flavor, texture, and nutrients

VIII. Selection and Buying

- A. Canned - more water, cooked at processing time, graded by government
- B. Fresh - more nutritious, crisp, firm, color,
- C. Frozen - label information is your guide
- D. Dried - beans, peas, legumes - Soak before cooking

IX. Care and Storage

- A. Refrigerate most. Examine first before putting away.
- B. Tubers and root vegetables - store in cool, dry, dark place
- C. Canned vegetables - on shelf at room temperature, use within a year
- D. Frozen - use immediately when thawed