

# COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

STATE OF WASHINGTON

STATE COLLEGE OF WASHINGTON  
COOPERATING WITH  
U. S. DEPT. OF AGRICULTURE

EXTENSION DEPARTMENT  
CLUB WORK  
PULLMAN, WASHINGTON

## Girls' Cooking Clubs

LESSON No. 2

These lessons are intended for the Rural Clubs where no regular  
Domestic Science instruction is given.

### VALUE OF VEGETABLES

I.—We should eat more vegetables. Why?

1. They contain mineral matter, which is necessary for the blood and for the repair and growth of the bones.
2. They give bulk in our diet, which increases the digestive surface.
3. They contain all necessary food materials but in varying amounts; generally they lack fats and tissue foods.
4. They make the diet more attractive and palatable.
5. They give us health and vigor.

II.—Why we cook vegetables:

1. To break up the starch grains (only the starch grains that have been bursted by heat and moisture are digestible). To make them more easily digested.
2. To soften and break up cellulose (cell walls) and to set free nutritive materials for the action of the digestive juices. Cellulose stimulates the onward action of the digestive tract, so necessary, and increases the flow of the digestive juices.
3. To retain the potash salts and develop flavors.

#### FOOD VALUE OF VEGETABLES (raw)

| FOOD         | Water | Muscle Building or Protein | Heat and Energy or Fat | Starch, Sugar or Carbohydrates | Minerals or Ash | Waste |
|--------------|-------|----------------------------|------------------------|--------------------------------|-----------------|-------|
| Asparagus    | 91.6  | 2.1                        | 3.3                    | 2.2                            | .8              |       |
| Beets        | 70.0  | 1.3                        | .1                     | 7.7                            | .9              | 20    |
| Beans, dried | 12.6  | 22.5                       | 1.8                    | 59.6                           | 3.5             |       |
| Carrots      | 70.6  | .9                         | .2                     | 7.4                            | .9              | 20    |
| Cabbage      | 77.7  | 1.4                        | .2                     | 4.8                            | .9              | 15    |
| Corn         | 29.4  | 1.2                        | .4                     | 7.7                            | .3              | 61    |
| Lentils      | 8.4   | 25.7                       | 1.6                    | 59.2                           | 5.7             |       |
| Potatoes     | 62.6  | 1.8                        | .1                     | 14.7                           | .8              | 20    |
| Parsnips     | 66.4  | 1.3                        | .4                     | 10.8                           | 1.1             | 20    |
| Peas, dried  | 9.5   | 24.6                       | 1.0                    | 62.0                           | 2.9             |       |
| Squash       | 44.2  | .7                         | .2                     | 4.5                            | .4              | 50    |
| Spinach      | 92.3  | 2.1                        | .3                     | 3.2                            | 2.1             |       |
| Turnips      | 62.7  | .9                         | .1                     | 5.7                            | .6              | 30    |
| Tomatoes     | 94.3  | .9                         | .4                     | 3.9                            | .5              |       |

#### TIME TABLE FOR COOKING VEGETABLES

| FOOD  | TIME          |
|---|---------------|
| Green corn  | 15 to 20 Min. |
| Peas, tomatoes, asparagus                           | 15 to 20 Min. |
| Young beets, carrots, onions, parsnips, cauliflower | 30 to 45 Min. |
| String beans, shelled beans, oyster plant           | 45 to 60 Min. |
| Winter vegetables                                   | 1 to 2 hours  |

#### VEGETABLE COOKERY—Suggestions and Recipes

Nearly all of our starches, sugars, and minerals come from vegetables and grains.

The most economical methods of cooking vegetables are baking and steaming. We should know many ways of cooking our commonest ones, like potatoes, where variety is so essential. Each veg-

etable has a best way of cooking to save its food values. By consulting the table on Page 1 you will see that vegetables are mainly water, hence the reason for supplying but little in ordinary cooking. You will note again that all vegetables except the legumes like peas, beans and lentils are lacking in fats and tissue materials, hence the reason for using butter (fats) and milk (tissue foods) in their preparation. Starchy vegetables with their heat and energy, are largely consumed in the winter months, while the muscle forming or protein group is most in demand when the body is engaged in hard muscular activities.

Hard water (containing lime) retards the cooking of legumes. Add a little soda, then pour off after ten minutes cooking.

### SOME FOOD HINTS

We generally eat too much lean meats, eggs, concentrated foods and spices. Constipation is one of the greatest causes of ill health to people who do not exercise regularly. We should not burden our systems with too much waste. Too much protein means extra work for the kidneys. Vegetables are laxative or loosening.

#### Some Common Foods Classified

| Laxative      | Constipating       |
|---------------|--------------------|
| Coarse breads | Cheese             |
| Apples        | Boiled milk        |
| Prunes        | Spices             |
| Fruits, Figs  | Soda crackers      |
| Molasses      | Milk gravy         |
| Greens        | Tea                |
| Buttermilk    | Coffee             |
| Vegetables    | Use of drugs       |
| Oatmeal       | Concentrated foods |
| Oils, Bacon   | Nuts               |
| Honey in comb |                    |

#### Prevention of Constipation:

1. By correct diet rather than by patent medicines and drugs.
2. Well balanced meals, well masticated, prevent accumulation of waste.
3. Eat an apple before going to bed and before breakfast or drink fruit juices then.
4. Take regular exercise.
5. Drink abundantly of water.

Greens furnish much material for broken down nerve cells. Greens such as celery, cabbage, lettuce, are better raw, as valuable mineral salts are lost in cooking.

### GENERAL DIRECTIONS FOR PREPARING AND COOKING VEGETABLES

1. The chief principle to observe in all vegetable cookery is to save all the soluble food material.

Save the stock that is left when cooking the vegetables in water, this contains much food material; especially is this true of green vegetables which contain so much of our mineral matter. Steaming, baking or evaporating to "dryness" when possible, prevents this loss.

In the use of the potato and the onion we lose some food value in order to improve the taste.

2. The second important principle to observe is the breaking up of the woody fibre to set free the nutritive materials and starches for the action of the digestive juices.

The woody fibre or cellulose forms a sort of framework that holds the food material within it, and until this is broken down by cooking it cannot be digested. Moisture, heat, and time are essential to the cooking of all starchy foods and vegetables.

3. (1) Select vegetables or prepare them in uniform sizes for cooking.

(2) Wash thoroughly, pare, scrape or peel them.

(3) Soak wilted or dried vegetables until the original form is restored before cooking.

(4) Cook until tender in boiling salted water, allowing 1 t. salt to each quart of water.

(5) Strongly flavored vegetables, such as cabbage, onions, turnips, etc., should be cooked uncovered.

(6) Green vegetables, also, such as spinach, peas, and dandelions, should be cooked uncovered so as to preserve the color.

(7) Pour off first water to get rid of acrid flavors in greens, peas, beans, corn and asparagus, after three to five minutes boiling, then add new supply of boiling water.

(8) Do not throw away the stock or broth left in the cooking of vegetables in water. It contains foods in solution. Use it in making sauces for creamed vegetables and for soups, except with onions and potatoes.

## SOME TESTED RECIPES

### Potatoes

"The potato is the cheapest and most economical of foods." The potato lacks fats and protein, hence the reason for cooking with butter (fat) and milk (protein). Potatoes should be kept by the sack (in the dark). Baking the potato is the most economical way of cooking it. When peeled some of the minerals and starch are lost in the water. Boiled with the jackets on is next best. When peeled and cooked they become whiter, however, Potatoes contain about fourteen per cent starch, two per cent protein, one per cent mineral, almost no fat, and sixty-two per cent water.

#### Baked Potato—

Put clean, medium sized potatoes in a hot oven; bake forty to forty-five minutes. Puncture with fork, or chip one end, to let steam escape. Serve immediately or they become soggy.

#### Mashed Potato—

Boil and mash white potatoes and whip to a cream with a cupful of hot milk and a tablespoonful of melted butter. Whip for fully five minutes, then pile up on hot platter.

#### Carrots—

Boil young carrots eight minutes in salted water. Rub or scrape off the skins. Cover with boiling water, cook tender. Lay in cold water one minute; split. Heat one T. butter in frying pan, one-half t. of white sugar, salt. When hot lay in strips of carrots, cook three minutes, sprinkle with chopped parsley, stir lightly for one minute, drain and serve hot.

#### Carrots and Peas—

- 1 c. cubed carrots
- 1 c. cooked green peas
- 2 T. butter
- ½ t. salt.

Wash, scrape and cut carrots into cubes, cook in boiling salted water until soft. Add the peas, season with salt and butter, or cover with white sauce.

#### Mashed Turnips—

Peel thickly, lay in cold water for one hour to remove strong taste. Boil until tender in salted water. Drain, add more water, cook five minutes; drain, rub through colander or vegetable press. Beat in lump of butter, with flour, salt. Return to fire and cook one minute.

#### Boiled Turnips With Leaves—

Remove leaves, wash thoroughly and put in cold water. Cook turnips and leaves in separate vessels. When turnips have cooled ten minutes, drain, pour over the fresh boiling water and 1 T. of vinegar. Boil ten minutes, scrape and slice. Dip strips in melted butter and place on edge of platter. Drain the leaves when tender, chop fine, return to fire. Add two T. of butter, salt. Beat and fill center of platter. Arrange slices of turnip on the edge.

#### Boiled Peas—

Shell green peas, cook in boiling salty water until tender. Season with butter, or cream, and serve immediately. A small head of green mint, parsley or two or three young onions may be added.

#### Baked Split Peas—

Soak one pt. of salt peas over night, and put into an earthen dish. Add to 1 pt. of butter, 1 t. of salt, cover with boiling water, bake five hours.

#### Lentils—

Soak one c. of lentils in cold water over night, boil until tender. Chop a small onion fine, fry in butter, add salt, pour over lentils. Cook until done. Serve hot.

#### Stewed Cabbage—

Boil a head of cabbage, season with salt, and pour over one c. of boiling milk. Add a little butter, and serve hot.

#### Creamed Cabbage—

Chop cabbage fine and boil for twenty minutes in salted water. Fill sauce pan, or small individual dishes, cover with white sauce, grated cheese and bread crumbs, then bake until brown.

Consult your cook book for other tried recipes.

**VEGETABLES TO BE BOILED SHOULD BE STARTED IN BOILING SALTED WATER, NEVER  
· IN COLD WATER, EXCEPT WHEN DRIED**

| FOOD                  | SUPPLY                     | LACK             | HOW SUPPLIED         | THEY                                |
|-----------------------|----------------------------|------------------|----------------------|-------------------------------------|
| Vegetables in general | Minerals and cellulose     | Fats and protein | Butter, milk         | Eliminate scurvy                    |
| Peas, Beans           | Tissue building            | Fat              | Butter (fat), meats  | Contain much sulphur                |
| Lentils               | Tissue building            | Fat              | Butter (fat), meats  | Are more easily digested than beans |
| Carrots               | Starch                     | Fat and protein  | Butter, meats, milk  | Best when tender                    |
| Potatoes              | Starch                     | Fat and protein  | Butter, milk, cheese | Best baked with jacket on           |
| Cabbage               | Carbohydrates and minerals | Fat and protein  | Milk, butter         | Boiled cabbage, slow to digest      |

**QUESTIONS**

1. Name four uses of vegetables in our diet.
2. Give three reasons for the cooking of vegetables.
3. Name two vegetables better not cooked. Why?
- 4 Name two principles of vegetable cookery.
5. Give five laxative and five constipating foods.
6. Name three essentials of cooking starchy vegetables.
7. Give most economical methods of vegetable cooking.
8. What food elements do most vegetables lack?
9. Why are some vegetables blanched? (No. 7, Pg. 2)

**PRACTICE**

1. State your success with at least four of these recipes.
2. Consult mother or others for her best recipes and submit your **one best vegetable recipe** for our attention.
3. After consulting table, page 2, Lesson I. and table, page 1, Lesson II., submit a more or less balanced dinner, using vegetables also, which **you have prepared and served.**

**NOTE:** Whenever answers under the two heading of Questions and Practice have been received Lesson No. III. will be mailed to you. Use two sheets for reply. **Be prompt.** Mail in self addressed envelope to

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