

# Fresh from the Garden

## CABBAGE

This lesson may be presented as part of a general overview of the cruciferous vegetable family (cole crops, brassica family), or as a stand-alone lesson.

The material is suitable for both beginning gardeners and gardeners with established productive vegetable gardens.

### Use the lesson to:

- Teach about the health benefits of cabbage.
- Demonstrate how to properly harvest, store, handle, preserve, and healthfully prepare cabbage.
- Introduce new and/or unfamiliar cabbage family vegetables to gardeners.
- Provide more healthful alternatives to traditional cooking techniques or recipes.
- Instruct gardeners how to deal with an overabundant crop.

With minor adaptation, the lesson may be used to introduce the concept of growing vegetables at home to non-gardeners.

### Key presentation points:

1. Nutrition and health benefits associated with cabbage and other vegetables
2. Importance of eating fruits and vegetables daily.
3. Simple cultivation recommendations
4. Harvesting techniques
5. Washing and storing
6. Healthful cooking/preparation techniques
7. Freezing techniques, if applicable
8. Recipe demonstration (1 or 2)
9. Recipe

### Additional (optional) points:

- History or origin
- Cultural information
- Interesting or fun facts

### Additional (optional) Activities:

- Compare vegetable name in English with another language appropriate for your audience.
- Taste and compare flavor of different varieties of raw cabbage.
- Sample raw cabbage with a healthful dip.
- Test audiences' knowledge regarding the difference between a fruit and a vegetable, and into which category cabbage falls.
- Distribute plants or seeds for immediate planting in the garden.
- Make sauerkraut.

- Explore color changes in red cabbage.
- For children: After harvesting and before preparing the cabbage harvest, have a “Mr. Cabbage Head” contest. Similar to Mr. Potato Head, build faces and body parts on cabbages with pieces of fruits and vegetables, as well as non-toxic flowers and plants.

### **Cabbage Facts:**

- Cabbage has been used as a food crop for more than 3,000 years.
- In the early time of its cultivation, cabbage was used more for medicine than for food.
- Ancient Greek and Roman civilizations used cabbage to treat a wide variety of health conditions, including gout, deafness, and headache.
- The Romans believed that cabbage cured a hangover.
- The name coleslaw (a salad dish made with shredded cabbage) may have come from the Dutch, whose word for cabbage is “kool” and salad is “sla”.
- Fermented cabbage, in the form of sauerkraut, was an essential in the medieval diet.
- On long voyages, Dutch sailors ate fermented cabbage to prevent scurvy.
- The Germans learned to make sauerkraut from the Tartars who learned the fermentation process in China.
- In 1541, Jacques Cartier planted cabbage in Canada on his third voyage to the new world.
- The largest cabbage ever grown was 124 lb.
- When eaten on New Year’s Day, cabbage is supposed to bring good luck for the coming year.
- February 17<sup>th</sup> is World Cabbage Day.
- The word cabbage is derived from the French word caboche or head.

### **Preparation:**

- Review lesson material.
- Review presentation guidelines.
- Review demonstration checklist.
- Review resources for additional presentation information or activities.
- Select seasonal vegetables for demonstration.
- Prepare vegetables for demonstrations, as necessary.
- Prepare recipes or parts of recipes for demonstration and sampling, as necessary.

The following is a suggested script with step-by-step demonstration activities:

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## **PRESENTATION: CABBAGE**

*Introduce yourself and review what you will be presenting with the audience. Discuss the recipe(s) that you will demonstrate.*

“Cabbage is a cool season vegetable and a member of the cruciferous vegetable family (*Flowers on the plants cluster in groups of four, a pattern suggestive of a crucifix*). Also included in the cabbage family are broccoli, Brussels sprouts, cauliflower, and kohlrabi. These vegetables are often called “cole” crops (from the Dutch word for cabbage -- kool).

*Note: If you plan to demonstrate 2 recipes, select 1 that requires cooking and 1 that is served raw. Start the recipe that requires cooking at the beginning of the presentation to allow adequate cooking time. The 2<sup>nd</sup> recipe may be prepared at or towards the end of the presentation.*

Also included in the cabbage family are beet greens, chard, collards, kale, mustard and turnips greens from the leafy green vegetable category; and radishes, turnips and rutabagas from the root vegetable category.

There are at least a hundred different types of cabbage grown throughout the world. The most common types in the United States are the Green, Red, and Savoy varieties. Chinese cabbages are also available. The two most common types of Chinese cabbage are Bok Choy and Napa cabbage.”

☞ Display a variety of washed cabbage. If some varieties are unavailable, display photographs of the various cabbage family vegetables.

“Green cabbage is round and compact. Red cabbage differs only in color. Savoy cabbage has crinkled leaves that form a looser head. Chinese or Napa cabbage is an elongated, oval head that is very firm and very pale green to white in color. Bok Choy resembles celery, with thick white stems and round green leaves.”

☞ Point out the color and shape differences of the displayed cabbage or photographs

☞ Distribute a few leaves from each of the different cabbages

☞ Encourage the audience to taste the raw cabbage

“Cabbage thrives in cool weather and is easy to grow. It doesn’t require much attention, but it does require space. It is best grown in a garden plot, rather than a container.

Harvest cabbage anytime after solid heads form. Cut the head from the stem with a sharp knife.

You may remove the outer leaves, especially if they are damaged; but do not wash cabbage before storing. It will keep for up to 2 weeks loosely covered with a plastic bag in the refrigerator crisper.

Cabbage is very low in calories containing only about 20 calories in both a 1/2 cup cooked and 1-cup raw shredded cabbage.

Cabbage is rich in vitamin C (an antioxidant) and fiber. It contains plant chemicals (phytochemicals: isothiocyanates and idoles), which have been shown to reduce the risk of certain cancers. Try to eat vegetables from the cabbage family at least three times a week.”

☞ Discuss daily vegetable recommendation (see “*Nutrition – the basics*” handout, in general 2 ½ to 3 cups per day for adults)

☞ Discuss MyPyramid, if time allows

☞ Define phytochemicals and discuss health benefits, if time allows. (See “*Nutrition – the basics*” handout for information on phytochemicals)

“Research also shows that cabbage juice is effective in treating stomach (peptic) ulcers.

Don’t wash cabbage until you are ready to use it. The interior of a tight head is almost always clean; but if you want to rinse it, do so after cutting or chopping the vegetable.

Don’t chop or shred cabbage in advance, because vitamin C is lost. However, if you must, seal the cut cabbage tightly in a plastic bag and refrigerate.

To cut cabbage, remove damaged or wilted outer leaves then quarter and core it. Place a quarter on the cutting board, resting on its side, then slice the wedge vertically in either chunky pieces, wide ribbons or fine shreds.

☞ Demonstrate slicing/chopping technique

“Do not use a carbon steel knife to cut cabbage. Green cabbage will turn black and red cabbage blue. Cabbage may also be shredded on the largest holes of a grater.”

☞ Introduce cabbage recipe #1 or the cabbage and onion recipe

☞ Begin preparation:

- Use cabbage cut during the slicing/cutting demonstration
- Chop garlic and onions
- Sauté garlic and onions briefly. Add chopped cabbage.
- While cabbage is cooking, chop parsley

☞ Continue with presentation while you prepare the recipe

“Season your cabbage with garlic, onion, peppers, herbs, or whatever you like.

Just don’t “undo” all the nutritional benefits of eating cabbage family vegetables by cooking them with large amounts of fat and salt. Sauces, dressings, and other ingredients can add calories and cholesterol.

Raw red cabbage bleeds into recipes to which it has been added. For example, if used in a cole slaw, it will turn the mayonnaise pink. If this is a problem, use green cabbage or add red cabbage just before serving.

When cooked, the pigment in red cabbage leaches out turning it an unappealing bluish-gray color. To preserve the red color in cabbage, cook or dress it with something acidic like lemon juice or vinegar (add 1 teaspoon lemon juice or vinegar to 1 quart of the cooking liquid). (*Red cabbage gets its color from a pigment called anthocyanin as do all red, blue, and purple plants.*)”

Optional:

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- ☞ Display a portion of raw red cabbage, red cabbage cooked/dressed without acid, and red cabbage cooked/dressed with acid
- ☞ Point out the differences in color among the three types of cabbage

“Cabbage may be steamed, boiled, braised, sautéed, stir-fried, roasted, stuffed, and pickled. It may be eaten raw or cooked.”

### **COOKING CABBAGE:**

Boiling: Use a lot of water and cook quickly in an uncovered pot. Drop chopped, quartered, or sliced cabbage into boiling water and cook for about 4 to 8 minutes. Shredded cabbage will cook in 2 to 3 minutes.

Braising: Braise in water, stock, juice, or wine. Add onions, garlic, and herbs for flavor. For quartered cabbage, put about 1” of water in a pan. Bring it to a boil, cover the pan, turn down the heat, and simmer until tender for about 6 to 8 minutes. For chopped or shredded cabbage, use about ¼” of water and cook for about 3 minutes.

Microwaving: Put cabbage wedges in a microwaveable dish with 2 tablespoons of liquid. Cook for 5 to 7 minutes, stirring halfway through. For shredded cabbage, add ¼-cup liquid to 2 cups cabbage. Cook for 5 minutes, stirring halfway through.

Steaming: This is the best way to preserve the nutrients, color, and crisp texture of cabbage. Place quartered, sliced, or shredded cabbage in a vegetable steamer over boiling water or in a pot with about an inch of boiling water. Steam quarters or wedges for 10 to 15 minutes. Steam shredded cabbage for 5 to 10 minutes.

Stir-frying: Shred or slice any variety of cabbage. Heat a small amount of vegetable oil in a large skillet. When hot, toss cabbage in and stir frequently until softened, about 2 to 4 minutes. Other vegetables may be cooked with the cabbage for a more interesting dish. For a crisper cabbage for cole slaws, shred the cabbage and soak it in salted ice water for 15 minutes and then drain.

“Cooking cabbage usually reduces its volume by about ½. One-pound cabbage will yield 4 cups raw shredded or 2 cups cooked cabbage.”

- ☞ Point out the reduced volume of the cooking cabbage
- ☞ Tilt pan to allow audience to see

“Many older recipes called for long cooking because old-fashioned varieties of cabbage were tougher. However, today’s more tender cabbage should be cooked quickly and uncovered. Shorter cooking retains more of the vitamins, and prevents strong odors (caused by hydrogen sulfide-sulfur compounds) and flavors from forming. If your cabbage smells, you’ve cooked it too long.”

- ☞ When recipe is finished cooking and before portioning samples, measure a ½ cup serving and place on a small plate
- ☞ Point out the portion size
- ☞ Distribute a small portion of the recipe for tasting
- ☞ Ask the audience how they like the recipe
- ☞ Conclude presentation here (see closing remarks at bottom of page), or continue with recipe #2
- ☞ Introduce cabbage recipe #2 or cabbage salad recipe
- ☞ Demonstrate recipe
- ☞ When recipe is finished and before portioning samples, measure a 1-cup serving of raw cabbage and place on a small plate
- ☞ Point out portion size
- ☞ Distribute a small portion of the recipe for tasting
- ☞ Ask the audience how they like the recipe
- ☞ Conclude presentation

“For good health, it is important to eat a variety of vegetables including cabbage. Eat vegetables every day – at least 2 ½ cups, but more is better. The more you eat the better chance you have for a healthy life.

Remember, scientists have found that people who eat cabbage and other vegetables, have a lower risk of developing some of the more common cancers. They recommend that we eat vegetables from the cabbage family at least 3 times a week.”

- ☞ Ask for questions
- ☞ Thank audience for their participation

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## Recipes

### **SIMPLY SAUTEED CABBAGE AND ONIONS**

6-8 servings

Oil - about 2 tablespoons

1 cabbage, cored, cut into 2 inch pieces, layers separated

1 large onion, cut into 1 inch pieces, layers separated

2-3 cloves garlic, minced

A handful of fresh herbs, chopped (parsley, thyme, cilantro, basil, tarragon, etc.)

Salt and pepper to taste

Heat oil in a nonstick pan over moderately high heat.

Add onions and garlic and cook one to two minutes.

Add cabbage and cook until tender or until it begins to wilt slightly.

Stir in chopped herbs and season with salt and pepper to taste.

**ROASTED CABBAGE**

6 servings

1 large head red cabbage, cored and sliced  
2 tablespoons oil  
Salt and pepper to taste

Preheat oven to 450 degrees.

On a baking sheet, toss sliced cabbage with oil, salt, and pepper.

Cover sheet tightly with foil.

Bake until cabbage is crisp-tender, about 20 minutes.

Remove foil and continue cooking and stirring occasionally for 20 to 25 minutes more.

Cabbage should be tender and browned in spots.

**CABBAGE AND POTATOES (COLCANNON)**

6-8 servings

6 medium potatoes, peeled and quartered (red potatoes need not be peeled, just quartered) (leftover mashed can be used).

1 large cabbage, cored, cut into 2 inch pieces, layers separated

2 Tbs butter or margarine

½ to ¾ cup milk (use 1%, 2%, fat free, or evaporated skim milk)

6 scallions, trimmed and sliced

A handful of fresh, chopped parsley

Boil potatoes until tender.

Put cabbage into pot with the potatoes, cook until tender, and drain.

Mash potatoes and cabbage with the butter/margarine and the milk. Start with a small amount of milk and add as much as needed to make a smooth, thick puree.

Season with salt and pepper.

Stir in the scallions and parsley.

**ORIENTAL NAPA CABBAGE SALAD**

4-6 servings

1 head Napa cabbage, thinly sliced (or green cabbage, cored and thinly sliced)

1 bunch scallions, trimmed and chopped

1 bunch cilantro, chopped

1 Jalapeno chile, seeded and minced

1 cup chopped peanuts

1/3 - 1/2 cup lime juice or vinegar

2 T oil

1 tablespoon grated ginger (optional)

½ teaspoon sugar

Salt and pepper to taste

Place cabbage in a large bowl. Mix in the scallions, cilantro, chile and ginger.

Toss with the oil, lime juice and sugar. Season with salt and pepper. Stir in peanuts.

**PINEAPPLE SLAW** (*An Official Network for Healthy CA Recipe*)

4 servings

1/2 tsp. grated orange peel  
2 Tbsp. fresh orange juice  
2 1/2 cups shredded cabbage  
1/2 cup shredded carrot  
1 cup coarsely chopped fresh pineapple or one 8 oz can pineapple tidbits  
1/4 cup raisins

Combine orange peel and orange juice and mix well.  
Add shredded cabbage, carrot, pineapple, and raisins and toss.  
Serve immediately or cover and chill until serving time.

**CABBAGE AND NOODLES**      8-10 servings

Oil - about 2 tablespoon  
1 cabbage, cored, cut into 2 inch pieces, layers separated  
1 large onion, cut into 1 inch pieces, layers separated  
3-4 cloves garlic, minced  
8 ounces noodles (use shells, bowties, rigatoni, corkscrews, etc.)  
A handful of chopped parsley or a combination of parsley and basil.  
Salt and pepper to taste  
Parmesan cheese

Boil noodles.  
Heat oil in a nonstick pan over moderately high heat.  
Add onions and garlic and cook a minute or two.  
Add cabbage and cook until tender or until it begins to wilt slightly.  
Drain noodles and add to cabbage and onions and mix well.  
Season with salt and pepper to taste.  
Stir in the herbs and Parmesan cheese.

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