

## Integrating Gender and Nutrition within Agricultural Extension Services

Info Sheet  
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# Cabbage-Family Vegetables Nutritional Value and Recipes

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### Audience:

Extension Field Agents

### Purpose:

To describe the nutritional properties of cabbage-family vegetables



## Nutritional Value of Cabbage-Family Vegetables

Cabbage is only one of many vegetables that belong to the cruciferous vegetable family. The term cruciferous is a formal term derived from the pattern visible on flower buds, but for the purposes of this info sheet we will refer to cruciferous vegetables as cabbage-family vegetables. Some of the other members in the cabbage-family are: cauliflower, bok choy, broccoli, Brussels sprouts, turnip, and radish. The vegetables in the cabbage-family have been extensively studied for their potential health benefits including cancer prevention (National Cancer Institute, 2012). While the cancer protecting properties have not yet been fully documented, we know that the vegetables listed here have plenty of beneficial nutrients for our health. While learning and educating about cabbage-family vegetables, please remember that these are just a few of many vegetables that we need to eat for a healthy diet. It is good for our health to have different foods each day and to think about our meals in colors.

The cabbage-family vegetables offer many health benefits. Having these vegetables two or three times a week may help us keep the heart, blood, arteries and veins healthy. They may also help us live longer and healthier (Zhang et al., 2011). The cabbage-family vegetables help our immune system, heal wounds, build stronger bones, and keep the whole body healthy in multiple ways that we may not even recognize yet (Sizer and Whitney, 2016).

Cabbage-family vegetables provide many vitamins and minerals, such as vitamins A, C, K, and B6, folates, calcium, potassium, phosphorous, iron, and magnesium. Additionally, they also provide compounds called phytochemicals. Phytochemicals are substances that are not nutrients, but are beneficial to our health. Cabbage-family vegetables contain a special type of phytochemical, which is called a glucosinolate. The glucosinolates contain the mineral sulfur, which is responsible for the distinctive smell released when cabbage-family vegetables are peeled, cut or cooked. These “smelly” chemicals are currently under research for their properties to prevent the development of cancer (National Cancer Institute, 2012). Furthermore, it should be noted here that not all of the cabbage-family vegetables provide equal amounts of vitamins or minerals, see Table I for the specific nutrients for some common cabbage-family vegetables.

**Table 1. Nutrients of Common Cabbage-Family Vegetables  
(USDA, 2017)**

<b>Cabbage-Family Vegetable</b>	<b>Nutrients</b>
Cabbage	A good source of iron and vitamins: C, K, B6, and folate
Cauliflower	Provides iron, phosphorous and vitamins: C, K, B6, and folate
Bok choy	A good source of calcium, iron, and vitamins: C, K, B6, and folate
Turnips and radishes	A good source of calcium, copper, iron, magnesium, manganese, phosphorus, potassium, and vitamins: C, E, K, B6, and folate
Broccoli	Provides calcium, copper, iron, magnesium, manganese, phosphorus, potassium, and vitamins: C, E, K, B6, and folate
Brussels sprouts	Plentiful in minerals such as iron, magnesium, manganese, phosphorus, potassium, and vitamins: A, C, E, K, thiamine, B6, and folate

There are many different ways that cabbage-family vegetables can be consumed. They can be eaten raw in salads, cooked in soups or pickled. When cooking any vegetables remember that if they are cooked for a long time they may lose vitamins and nutrients contained inside them. Also, if the water used for cooking these vegetables is discarded, some of the nutrients dissolved in the water will be lost as well. Some ways you can avoid the loss of vitamins and nutrients is by: 1) limiting cooking time; 2) occasionally eating raw vegetables; and 3) incorporating cooking water into the dish (Conde Nast, 2014).

## Recipes for Cabbage-Family Vegetables



Source: Volshebnaya-eda

### **Mashed Broccoli and Potatoes (puree)**

4 servings  
cooking time - 30 minutes

**Ingredients:**

- 2 large potatoes
- 200 ml of water
- 1/2 kg of broccoli
- 1 tablespoon of vegetable oil
- Iodized salt to taste

**How to prepare:**

- Wash all the vegetables thoroughly.
- Cook potatoes with peel in water.
- Peel and whip.
- Separate broccoli florets from stem (the stem is hard to puree).
- Cook broccoli in water for 5-10 minutes over low heat.
- Mash all products.
- Add vegetable oil and salt.
- If the mashed potatoes are thick, add a little bit of water used to cook broccoli.



Source: *Russian Food*

### Cabbage & Cucumber Salad

2 servings  
cooking time - 15 minutes

#### Ingredients:

- ½ of cabbage (medium size cabbage)
- 1 medium cucumber
- 1 medium carrot
- 1 medium onion
- 1 bundle of parsley
- 1 bundle of dill
- 2 tablespoons of vegetable oil
- 1 tablespoon of lemon juice (if not available you can use 1 teaspoon of vinegar and some water to dilute it)
- Iodized salt, ground black pepper to taste

#### How to prepare:

- Wash all the vegetables thoroughly.
- Chop thinly the cabbage and onion.
- Put in a dish/bowl, add oil and lemon juice and mix them.
- Grate the cucumber and carrot on the large holes of a grater and add to the salad.
- Finely chop the greens and put on top of the salad.
- Add vegetable oil and mix well.
- Add salt and black pepper to taste and enjoy.

It is recommended to add salt at the end right before eating. If added at the beginning of the process, it makes cabbage “sweat” and lose vitamins C and B.



Source: *Eda*

### Brussels Sprouts Salad

4 servings  
cooking time 15 minutes

#### Ingredients:

- 500 g of Brussels sprouts
- 1 teaspoon of iodized salt
- 3 tablespoons of vegetable oil
- Juice of ½ lemon
- 1/2 tablespoon of sugar
- 1 bunch of dill

#### How to prepare:

- Rinse Brussels sprouts thoroughly and boil for 10 minutes in salt water.
- Pour out the water (but do not discard the water).
- Put cooked Brussels sprouts in a bowl.
- Mix with prepared salad dressing and salt (To prepare the salad dressing: mix oil, sugar, lemon juice and finely chopped greens together).

It is recommended to add back the water from cooking Brussels sprouts into the salad as part of dressing because the water contains most of the vitamin C from Brussels sprouts. Adding dill to the salad will add a lot more vitamin C.

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Source: Receptvka

## Broccoli & Macaroni

4 servings  
cooking time - 30 minutes

### Ingredients:

- 1 broccoli
- 2 cups of macaroni
- 2 medium tomatoes
- 2 boiled eggs
- 2 tablespoons of vegetable oil
- 1 bundle of dill or parsley
- Iodized salt to taste

### How to prepare:

Thoroughly rinse all vegetables!

- Divide the broccoli into twigs and boil for 5 minutes in a salt water.
- Boil the macaroni for 10 minutes in salty water.
- Cut the tomatoes into small 6-8 pieces.
- Sauté the tomatoes for 1 minute in the pan with vegetables oil.
- Add the broccoli and sauté for 2 minutes.
- Add boiled macaroni to the broccoli, stir and sauté for 1 minute.
- Cut boiled eggs into 8 small pieces.
- Put macaroni with vegetables on the plate and decorate with eggs and greens on top.



Source: Russian Food

## Cauliflower Salad

4 servings  
cooking time - 20 minutes

### Ingredients:

- 1 cauliflower (about 300 g)
- 2 eggs hardboiled
- 1 bundle of green onions
- 1 bundle of dill
- 3 tablespoons of sour cream
- Iodized salt to taste

### How to prepare:

- Wash all the vegetables thoroughly.
- Divide the cauliflower into branches.
- Cook in water until half cooked.
- Chop 2 eggs and add to cooled and chopped cauliflower.
- Add salt and sour cream, and decorate with or mix in the finely chopped dill and green onions.

## References

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