

# Broccoli and Cauliflower Quiche

SERVING: 4 QUICHE PREP TIME: 10 MIN YIELD: 6 TOTAL TIME: 30 MIN

## Ingredients

- Cooking spray
- 1 bag Broccoli/Cauliflower Blend, frozen (16 oz)
- 1 cup Cheddar Cheese, finely shredded
- 2 Eggs
- 4 Egg Whites
- 1/8 tsp Salt
- 1/2 tsp Pepper
- 1 tsp Minced Garlic (2 small cloves fresh garlic)

### Directions

- 1. PREHEAT oven to 375°F.
- 2. SPRAY a mini muffin tin with cooking spray.
- 3. COOK broccoli and cauliflower in the microwave as directed on the package.
- 4. DRAIN, CUT into smaller pieces and PLACE in a large bowl.
- 5. COMBINE 2 eggs and 4 egg whites in cup and beat.
- 6. ADD cheese, egg, salt, pepper and garlic to cauliflower. MIX well.
- 7. SCOOP into tins using 1 tablespoon each.
- 8. BAKE for 20-25 minutes until golden brown. Let REST and SERVE warm.

Nutrition Fa	acts
6 servings per container Serving size 4 Quiche (0.0g)	
Amount Per Serving  Calories	120
% [	Daily Value*
Total Fat 8g	10%
Saturated Fat 4g	20%
Trans Fat 0g	
Cholesterol 80mg	27%
Sodium 290mg	13%
Total Carbohydrate 4g	1%
Dietary Fiber 1g	4%
Total Sugars <1g	
Includes 0g Added Sugars	0%
Protein 10g	
Vitamin D 0mcg	0%
Calcium 170mg	15%
Iron 0.6mg	4%
Potassium 140mg	2%
* The % Daily Value (DV) tells you how muc serving of food contributes to a daily diet. 2,0	

\*Recipe adapted from getfreshcooking.com

is used for general nutrition advice.

\*Cost information includes lower cost ingredients found at local grocery store 9/8/22.





Cost Per Recipe	Cost Per Serving
\$4.74	\$0.79



## **Cruciferous Vegetables**

Cruciferous vegetables (or brassicas) are thought to play an important role in cancer prevention. These vegetables contain phytochemicals known as isothiocyanates. These phytochemicals change the way estrogen is metabolized or broken down in the body. This, in turn, decreases the risk of hormone- or estrogen-related cancers like breast and uterine cancer. Isothiocyanates are activated by chopping or chewing the cruciferous vegetables containing them.

In addition to isothiocyanates, cruciferous vegetables are important sources of protein, fiber, vitamins, and minerals. Most people don't realize that plant foods are sources of protein, but a cup of cruciferous vegetables provides about 3 grams. For comparison, that's the same amount of protein found in half an ounce of chicken breast. Additionally, the high fiber content of cruciferous vegetables can aid digestion and improve the health of gut bacteria. Cruciferious vegetables are also good sources of vitamin A, vitamin C, vitamin K, and manganese.

Eating a serving of these vegetables daily (particularly broccoli, kale, and Brussels sprouts) can help lower the risk of disease. To retain the full array of nutrients, it is best to eat cruciferous vegetables either raw, steamed, or lightly sautéed.

#### **Cruciferious Vegetables (Brassicas)**

Arugula

Bok choy (pak choi)

Broccoflower

Broccoli

Broccoli rabe (rapini)

Brussels sprouts

Cabbage (all varieties)

Cauliflower

Collard greens

Daikon

Dark leafy greens (all)

Horseradish

Kale

Kohlrabi

Mustard greens

Radish

Romanesco

Rutabaga

Tatsoi

**Turnips** 

Wasabi

Watercress

#### Common Concerns Associated with Consumption for those with Hypothyroidism or Hashimoto's disease.

Despite the many health benefits associated with cruciferous vegetables, some concerns need to be addressed. Many patients with thyroid conditions such as hypothyroidism and Hashimoto's disease are advised to avoid cruciferous vegetables due to their content of goitrogens, a substance that can interfere with thyroid gland function by inhibiting the uptake of iodine in the thyroid.

However, recent research suggests that the goitrogens found in cruciferous vegetables are most likely to affect those with an iodine deficiency or those consuming excessive amounts of the vegetables (eg, multiple servings every day)

Furthermore, cooking cruciferous vegetables can deactivate myrosinase, an enzyme responsible for the release of goitrin, which is considered the active goitrogenic principle. For this reason, it's typically recommended to cook cruciferous vegetables before consumption, particularly for those with concerns about thyroid function.

NOTE: Some people may experience digestive symptoms after consuming cruciferous vegetables. Gas, bloating, and abdominal discomfort are a few of the most common side effects associated with cruciferous vegetable consumption. This is because they're typically high in fiber as well as raffinose, a complex carbohydrate that's fermented in the gut, causing a buildup of gas in the colon. Staying well hydrated, increasing intake gradually, and chewing foods slowly all can help ease symptoms related to increased fiber consumption

#### References

- 1. Cruciferous Vegetables. Linus Pauling Institute. http://lpi.oregonstate.edu/mic/food-beverages/cruciferous-vegetables. Published April 25, 2017.
- 2. Han B, Li X, Yu T. Cruciferous vegetables consumption and the risk of ovarian cancer: A meta-analysis of observational studies. Diagnostic Pathology. 2014;9:7. doi: http://dx.doi.org/10.1186/1746-1596-9-7.
- 3. Suzuki R, Iwasaki M, Hara A, et al. Fruit and vegetable intake and breast cancer risk defined by estrogen and progesterone receptor status: The japan public health center-based prospective study. Cancer Causes & Control. 2013;24(12):2117-28. doi: http://dx.doi.org/10.1007/s10552-013-0289-7
- 4. Cruciferous Vegetables, Today's Dietitian, https://www.todaysdietitian.com/newarchives/JJ20n46.shtml, Published June 2020.

