Corn contains dietary fiber, mostly insoluble fiber with 7% of the daily value (DV) in only ½ cup. Other nutrients include vitamin C (9% DV), folate (9% DV), niacin (6% DV) and thiamin (10% DV), and the phytochemical ferulic acid. Sweet yellow corn is a good source of carotenoids lutein and zeaxanthin, while blue corn contains the phytochemicals anthocyanins. The darker yellow the corn, the more rich the corn is in carotenoids.

#### **HOW THEY IMPROVE HEALTH**

- Lutein and zeaxanthin help to maintain eye health and prevent macular degeneration. They are also associated with reduced risk of certain cancers and improved cardiovascular health.
- Ferulic acid is an antioxidant, and may help to protect against cancers, cardiovascular disease, diabetes and some neurodegenerative diseases.
- Corn is high in insoluble fiber which can help to improve digestion and may help to prevent or alleviate constipation.



For more information or how to maximize nutrients in other fruits and vegetables, see <a href="http://localfoods.osu.edu/maximizenutrients">http://localfoods.osu.edu/maximizenutrients</a>.

## Farm to Health Series

# MAXIMIZE YOUR NUTRIENTS FROM:

### YELLOW SWEET CORN

#### **NUTRIENT AND PHYTOCHEMICAL CHANGES**

Corn should be refrigerated in the husk for a maximum of 3-8 days. Flavor and vitamin C levels decline during storage, but carotenoid and fiber levels do not change. Different preservation methods of corn have different benefits: fresh cooked is high in vitamin C and carotenoids, canned has higher total antioxidants than fresh, and frozen corn has higher B vitamins than canned (but less than fresh).

		B vits	Fiber	Carotenoids	Total antioxidants
Refrigerated storage	$\downarrow$	=	=	=	=
Cooking:					
Steamed or lightly sautéed	$\downarrow$	=	=	<b>↑</b>	=
Boiled and drained	$\downarrow$	$\downarrow$	=	= or ↑	$\downarrow$
Canning:					
After canning (solid + liquid)	$\downarrow$	$\downarrow \downarrow$	=	<b>↑</b>	<b>↑</b>
During canned storage	=	=	=	=	=
Freezing:					
Blanched and frozen	$\downarrow$	= or ↓	=	= or ↑	=
During frozen storage	$\downarrow$	=	=	=	= then ↓

↓: decrease, ↓↓: large decrease, = : no change, ↑: increase, ↑↑: large increase

## Recipe: Pineapple, Corn, Mango Salsa

(Reprinted with permission from the American Institute for Cancer Research, www.aicr.org)

To maximize nutritional value, this recipe uses frozen yellow corn which has overall more carotenoids when compared to fresh corn.

### Ingredients:

- 1 cup canned crushed pineapple (packed in its own juices), drained
- 1/2 medium mango, diced
- 1/2 cup frozen yellow corn, thawed
- 1/2 cup chopped tomatoes
- 1/4 cup minced parsley
- 3 Tbsp. minced red onion
- Salt, cayenne pepper and cumin, to taste

#### **Directions:**

 In medium bowl, mix pineapple, mango, corn, tomatoes, parsley and onion. Season with salt, cayenne and cumin, to taste. Serve over grilled fish, chicken or tofu.

**10 Servings. Per**  $\frac{1}{2}$  **cup serving**: 31 calories, <1 g total fat (<1 g saturated fat), 8 g carbohydrates, <1 g protein, 1 g dietary fiber (4% DV), 5 mg sodium, 8 mg vitamin C (13% DV), 12  $\mu$ g folate (3% DV), 0.05 mg thiamin (3% DV), 0.4 mg niacin (2% DV).

This information is not meant to diagnose, treat, cure, or prevent any disease. This project is made possible by funding through OSU CARES - an initiative of OSU Extension and the OSU to expand faculty, staff and student partnerships with communities throughout Ohio.







Zeaxanthin

Egg yolk

Asparagus

Green beans



OTHER FOOD SOURCES OF

**KEY NUTRIENTS AND** 

PHYTOCHEMICALS:

