

Nutrition Guidelines for Carcinoid Patients

Gastrointestinal carcinoid tumors are a type of slow growing neuroendocrine tumor found in your gastrointestinal tract. These tumors can be found in the lining of your stomach, small intestine, appendix, colon or rectum and may cause nutritional problems. Carcinoid tumors can release extra hormones into your blood that can cause carcinoid syndrome. Not everyone with carcinoid tumors will develop carcinoid syndrome.

Some symptoms of carcinoid syndrome may include:

- Flushing (redness of your skin with a feeling of warmth)
- Diarrhea
- Abdominal Cramping
- Wheezing
- Pellagra (niacin deficiency)

Here is information on what may trigger carcinoid syndrome and tips to help you manage this problem.

Triggers for this syndrome can include:

- Large meals
- Alcohol
- Tomatoes
- Fatty Foods
- Drinks with caffeine
- Chocolate
- Spicy foods with pepper or cayenne
- Foods with amines

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

Tips to help manage this problem:

- You should not eat or should limit the following foods that are high in amines, including:
 - ▶ Aged cheeses (Cheddar, Camembert, Stilton)
 - ▶ Alcoholic drinks
 - ▶ Smoked, salted or pickled fish and meat (herring, salami, sausage, corned beef, bologna, pepperoni)
 - ▶ Chicken, beef liver or liver pate
 - ▶ Yeast extracts and Brewers yeast (nutritional yeast) and hydrolyzed proteins
 - ▶ Sauerkraut, shrimp paste, fish sauce, miso soup, soy sauce, tofu
 - ▶ Drinks with caffeine (coffee in large amounts and soda)
 - ▶ Large amount of chocolate
 - ▶ Some nuts (peanuts, coconuts, brazil nuts)
 - ▶ Raspberries, bananas, and avocados

It is important to maintain your health and wellness even if you do not have active symptoms of carcinoid syndrome.

- Eat a plant-based diet. For more details refer to the American Institute for Cancer Research (AICR) guidelines (<http://www.aicr.org/>)
- Eat foods higher in protein and lower in fat
- Keep a healthy body weight
- Do physical activity each day

Niacin Deficiency

Digestive disorders may cause niacin deficiency. This can happen if you do not eat enough niacin or your body does not absorb enough niacin from what you eat.

Symptoms of niacin deficiency include:

- Diarrhea
- Thick scaly rash
- Swollen mouth
- Bright red tongue
- Headache
- Fatigue
- Depression
- Memory loss

Your doctor or dietitian may suggest that you eat foods that are good sources of niacin such as:

- Lean meat, poultry, fish
- Whole and enriched grains and cereals
- Beans
- Nuts
- Vegetables

If your diet changes do not work, your doctor may ask you to take a niacin supplement for this problem. If you need a niacin supplement, it is best to take nicotinamide. Your doctor will give you directions for how to take this medicine.

It is important to talk with your doctor or health care team if you have any questions.