

# What You Need to Know About **Antioxidants** During Treatment

---

## What are antioxidants?

Antioxidants are nutrients found in some foods. Antioxidants are also found in vitamin and mineral supplements, some herbal products, some protein powders, fruit and vegetable powders/pills, vitamin water and juices. Antioxidants help your body in many ways by protecting normal cells and helping to repair and prevent damage.

## What are some common antioxidants?

- 
- |             |                 |           |
|-------------|-----------------|-----------|
| • Vitamin A | • Beta carotene | • Co-Q-10 |
| • Vitamin C | • Selenium      | • Zinc    |
| • Vitamin E |                 |           |
- 

## Should I take antioxidants during radiation therapy or chemotherapy?

Radiation therapy and many chemotherapy drugs work to control your cancer by damaging cancer cells. Antioxidants may also protect cancer cells in the same way that they protect normal cells. Antioxidants may reduce how well your treatment works and could also increase your side effects.



### **It is recommended that you DO NOT take large amounts of antioxidants:**

- One week before your first radiation or chemotherapy treatment, if time allows
- During your radiation or chemotherapy treatment
- For two weeks after your last radiation or chemotherapy treatment

## What vitamins and supplements can I take?

Not all vitamin and mineral supplements have antioxidants. Calcium, vitamin D, vitamin B12 and iron are not antioxidants and are safe to take at recommended levels during radiation and chemotherapy treatment.

Taking small amounts of antioxidants, like those found in some multi-vitamins, may be okay to take during your radiation or chemotherapy treatment. Check the product labeling to make sure the amount of each antioxidant is not more than 100% of the daily value (%DV). This information is usually listed on the bottle. It is important to continue taking any vitamin or mineral supplements that have been prescribed by your

doctor. If you have any questions, please talk to your doctor, pharmacist or dietitian about what you can take during treatment.

It is safe to use meal replacements such as Ensure® or Boost® because they provide similar amounts of vitamins and minerals as food sources.

## Can I eat foods with antioxidants?



Yes! It is okay to eat normal amounts of foods with antioxidants as a part of your diet. A normal healthy diet involves eating a variety of fruits, vegetables, protein foods including nuts and seeds, and whole grains.

Generally food sources are safe; just do not eat excessive amounts of antioxidant rich foods or beverages on a regular basis. One example is Brazil nuts which contain more than two days' worth of selenium in one nut. Another example is an orange or a kiwi which each provide nearly a days' worth of vitamin C. This does not mean you need to avoid these foods, but try to avoid eating too much of any one fruit or vegetable.

You should have 7-8 servings per day of fruit or vegetables from all sources. This includes whole fruits and vegetables, fruit smoothies, juice and purees. One serving of fruit or vegetable is about ½ cup (125 mL). It is important to avoid excessive juicing and use caution with any supplement (pill or powder) that is made from plant extracts or dried and concentrated plant powders.

## Where can I get more information?

Talk to your healthcare team if you have questions about antioxidants and your treatment. Bring an updated list of your vitamin, mineral, or herbal supplements with you.

### Key points to remember:

- Large amounts of antioxidants may protect cancer cells against radiation therapy and chemotherapy. This could make your cancer treatment less effective.
- Stop taking antioxidant supplements 1 week before your first radiation and/or chemotherapy treatment
- Do not take antioxidant supplements during your radiation and/or chemotherapy treatment and for 2 weeks after