

What You Need to Know About Taking Antioxidants During Your Radiation Therapy

For patients getting radiation therapy

Read this brochure to know:

- should you take antioxidants during radiation treatment
- which vitamins and supplements are safe to take during radiation therapy
- what are food sources with antioxidants
- where to get more information



What are antioxidants?

Antioxidants are nutrients found in some foods and also in supplements such as pills. Antioxidants help your body protect your cells from damage and help your body repair damage to your cells. They are good for normal cells because they help repair and prevent damage.

Should I take antioxidants during radiation therapy?

The goal of radiation therapy is to damage your cancer cells. Antioxidants may prevent your radiation treatment from being as effective because they may protect your cancer cells. Avoid taking large amounts of antioxidants during your radiation therapy treatment.

Avoid taking these antioxidant pills in large amounts such as:

- vitamin C
- vitamin E
- beta carotene
- selenium

Look at the side of your supplement or multivitamin bottle to check the amount of antioxidants.

Below is a table of safe amounts of antioxidants you can take while having treatment. **Do not take more than the amount listed.**

Name of antioxidant	Do NOT take more than:
Vitamin C	90 milligrams per day for men 75 mg per day for women
Vitamin E natural Vitamin E (d-alpha-tocopherol) synthetic Vitamin E (dl-alpha-tocopherol)	22 IU per day 33 IU per day
Selenium	55 micrograms per day
Beta carotene	Avoid because there is no safe level

IU = International Unit

The safe amounts of antioxidants listed in the table come from Health Canada.

Do NOT take large amounts of antioxidants:

- 1 week before your first radiation treatment, if time allows
- anytime during your radiation treatment
- 1 week after your last radiation treatment

What vitamins and supplements can I take?

Not all vitamin and mineral supplements have antioxidants. For example calcium, vitamin D and vitamin B12 are not antioxidants. These vitamins and minerals are safe to take during your radiation treatment.

Talk with your doctor, pharmacist or dietitian about what you can take during treatment.

Can I eat foods with antioxidants in them?

Yes, since the amount of antioxidants in food is small, they will not interfere with radiation treatments.

Many foods have antioxidants. You can keep eating these foods because they have small amounts of antioxidants.

The amount of antioxidants in your food will not affect your radiation treatment. Get the nutrients your body needs by eating many foods. Good sources of antioxidants are listed here.

Good sources of vitamin C are:

- broccoli
- cranberry juice
- mango
- brussel sprouts
- guava
- papaya
- cantaloupe
- kiwi fruit
- red peppers
- citrus fruits
- lychee nuts
- strawberries
- citrus juices

Good sources of vitamin E are:

- brown rice
- nuts and seeds
- whole wheat
- green leafy vegetables
- vegetable oils
- wheat germ

Good sources of beta carotene are:

- apricots
- carrots
- sweet potatoes
- broccoli
- papaya
- winter squash
- cantaloupe
- spinach

Good sources of selenium are:

- Brazil nuts
- seafood
- tuna
- beef
- organ meats
- turkey
- whole grains



The antioxidant supplements listed in this pamphlet are vitamin and mineral supplements.

This pamphlet does not refer to nutritional supplements such as Ensure[®] or Boost[®]. Taking small amounts of antioxidants does not affect your radiation treatment. Small amounts of antioxidants like those found in food and some multivitamins are safe.

Continue to eat foods as a part of your usual meal planning.

Where can I get more information?

Talk to your Radiation Therapy team if you have questions about antioxidants and your treatment. Bring your antioxidant or vitamin supplement bottles with you.

Key points

- ✓ Large amounts of antioxidants may reduce radiation therapy damage to your cancer cells.
- ✓ The amount of antioxidants in your food will not affect your radiation treatment.
- ✓ Stop taking antioxidant supplements 1 week before your first radiation treatment, if possible.
- ✓ Do not take antioxidant supplements during your radiation treatment and up to 1 week after your treatment is finished.

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