

What Patients with Prostate Cancer Need to Know About Antioxidants and Brachytherapy (Iodine 125)

For patients getting brachytherapy therapy at Princess Margaret Cancer Centre

Read this brochure to know:

- What are antioxidants
- Should I take antioxidants during my brachytherapy treatments
- What vitamins and supplements can I take
- Can I eat foods with antioxidants
- Where to get more information



What are antioxidants?

Antioxidants are nutrients that help your body protect your cells from damage. They also help repair damage to your cells. Antioxidants can be found naturally in foods as well as and in vitamin and mineral supplements.

Should I take antioxidants during my brachytherapy treatments?

Brachytherapy controls your cancer by damaging your cancer cells. In the same way antioxidants protect normal cells, they may also protect cancer cells from this damage.

It is best to avoid taking **large** amounts of antioxidants (in supplement form) during these times:

- 1 week before your first brachytherapy treatment (if time allows)
- During your brachytherapy treatment
- 6 months after your brachytherapy treatment

Below is a table of safe amounts of antioxidants you can take while on treatment. Look at the side of your supplement or multivitamin bottle to check the amount contained inside them. Do not go over the safe amounts listed below.

Antioxidant	Safe amount (daily)
Vitamin C	90 milligrams
Vitamin E	
Natural vitamin E (d-alpha-tocopherol)	22 IU (international units)
Synthetic vitamin E (dl-alpha-tocopherol)	33 IU (international units)
Selenium	55 mcg (micrograms)
Beta-carotene	Do not take. There is no safe level.

What vitamins and supplements can I take?

The antioxidant supplements referred to in this pamphlet are vitamin and mineral supplements. This pamphlet does not refer to nutritional supplements such as Ensure or Boost.

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

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

Can I eat foods with antioxidants?

The amount of antioxidants in your food will not affect your brachytherapy treatment, so it is safe to eat them. Get the nutrients your body needs by eating a variety of foods. Good sources of antioxidants are listed below.

Sources of Vitamin C:

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

Sources of Vitamin E:

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

Sources of Beta-carotene:

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

Sources of Selenium:

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

Where can I get more information?

Talk to your health care 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 (in supplement form) may reduce brachytherapy 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
- Do not take antioxidant supplements during and 6 months after your brachytherapy treatment



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