



Nutrition Guidelines During and After Treatment for Breast Cancer



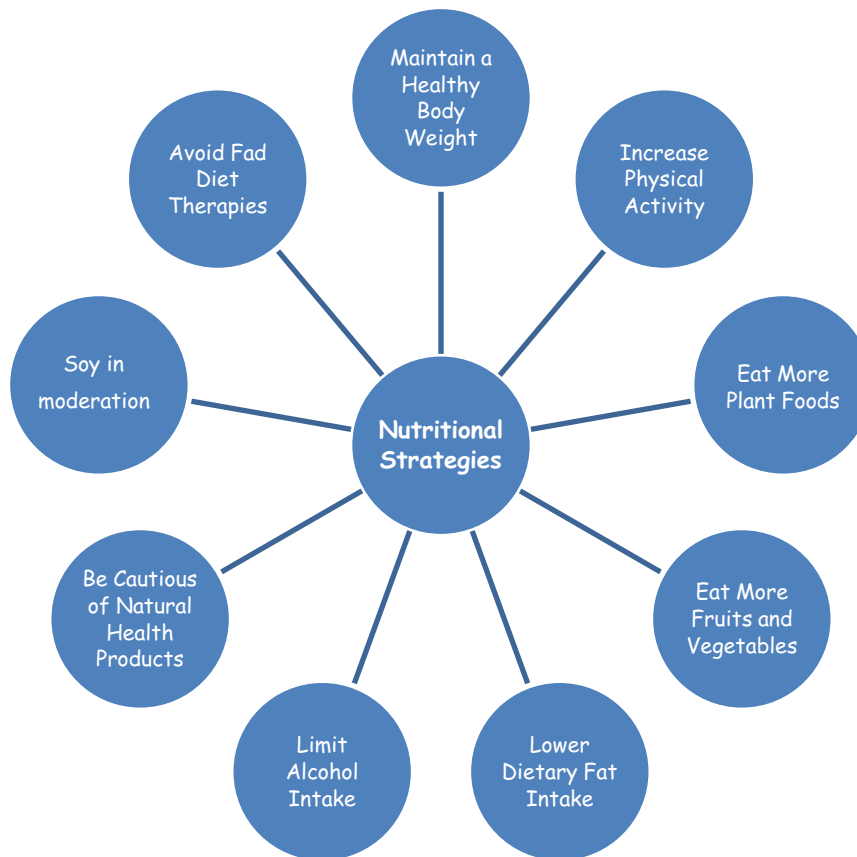
CREDIT VALLEY
THE CREDIT VALLEY HOSPITAL

Nutrition Guidelines During and After Treatment for Breast Cancer

Healthy eating during treatment for breast cancer is important to maintain your strength and energy level. The best advice for women is to eat according to Canada's Food Guide for Healthy Eating and try to maintain your weight.

After treatment women are advised to re-evaluate their diet and health practices as the focus shifts to preventing recurrence. Breast cancer, like any other disease, is influenced by several risk factors. Some of these are controllable while others are not. As you begin the journey of life beyond breast cancer, it is important to work on the risk factors you can change such as eating habits and physical activity.

The following diagram outlines the lifestyle factors that require consideration and hopefully will assist you in making decisions towards a healthier you.



Maintain a Healthy Body Weight



Healthy body weights are measured by the BMI or Body Mass Index. Post treatment if your BMI is greater than 25 it is recommended to try to reduce your weight to achieve a BMI of 18.5 to 25. A healthy rate of weight loss is 0.5 -1 kg (1-2 pounds) per week.

The following suggestions may be helpful when weight loss is desired:

- Control portion sizes
- Avoid skipping meals as this usually leads to overeating later
- Snack wisely – healthy snacks include at least two food groups from Canada’s Food Guide (eg. fruit and yogurt)
- Eat only when hungry and not in response to other emotions
- Make “healthy” choices as this leaves less room for foods that tend to be higher in fat and sugar.

For more information on healthy weights and healthy eating visit www.dietitians.ca or www.healthcanada.ca/nutrition or ask the Cancer Centre Dietitians for the Healthy Weight and Breast Cancer booklet.

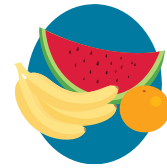
Increase Physical Activity

Physical activity not only helps you achieve and maintain a healthy weight but it also aids in improving fatigue. Ways to increase physical activity include, taking a brisk walk, gardening, dancing, regularly taking the stairs or participating in activities such as hiking, bicycling, skating or swimming. Strive to be physically active 30-60 minutes, 5 or more days per week. For more information, consult Canada’s Physical Activity Guide for exercise tips www.paguide.com.

Regular exercise offers additional health benefits beyond weight loss, such as the prevention and management of heart disease, diabetes, osteoporosis and even helps to overcome depression. Regular physical activity performed during and after treatment has been shown to enhance quality of life, improve symptom management, increase cardiovascular fitness, and improve physical functioning



Eat More Fruits and Vegetables



A diet high in a variety of fruits and vegetables appears to be the most beneficial dietary factor for women who have overcome breast cancer. Recent evidence suggests that a higher intake of fruits and vegetables can increase cancer free survival in women previously treated for breast cancer. Another study suggests that a diet containing at least 5 servings of fruit and vegetables per day, combined with regular physical activity, can increase long term survival after treatment of breast cancer. Canada's Food Guide recommends that adult women consume 7-8 servings of fruits and vegetables daily. One serving is generally defined as 1 cup of raw vegetables, ½ cup of cooked vegetables or raw fruit, ½ cup of fruit or vegetable juice, or 1 medium size fruit.

Your goal should be to aim for a diet that provides variety and colour when selecting your fruits and vegetables. This will load up your body with an abundance of phytochemicals which are naturally occurring plant chemicals that contain disease fighting powers.

The following chart provides information on the important phytochemicals in various fruits and vegetables and their common food sources.



Phytochemical	Food Sources	Colour
Lycopene	Tomatoes, Watermelon	Red
Anthocyanins	Grapes, Prunes, Red Apples, Cranberries, Blackberries, Red Wine	Red/ Purple
Carotenoids	Carrots, Mangoes, Apricots, Cantaloupe, Pumpkin, Acorn, Winter Squash, Sweet Potatoes	Orange
Cryptoxanthin	Orange Juice, Oranges, Tangerines, Peaches, Papaya, Nectarines	Orange/ Yellow
Lutein and Zeaxanthin	Spinach, Collard Greens, Turnip, Corn, Green Peas, Honey Dew, Melon, Avocados	Yellow/ Green
Indoles	Cabbage, Broccoli, Brussel Sprouts, Kale	Green
Allicin, Quercetin, and Flavonoids	Leeks, Onions, Garlic, Chives, White Grape Juice, White Wine	White/ Green



Eat More Plant Foods

Your daily diet should consist of two thirds plant based foods and one third animal protein or dairy-based food. Whole grains, beans, fruits, and vegetables are low in saturated fats and rich in vitamins, minerals, phytochemicals, and antioxidants which are beneficial for maintaining good health and preventing chronic disease.



Lower Dietary Fat Intake

A diet high in fat has been shown to reduce survival in both postmenopausal and premenopausal breast cancer patients. Consuming a lower fat diet will increase long term survival, reduce risk of recurrence of cancer, assist in weight reduction, and decrease risk of chronic diseases such as heart disease and diabetes.

Strive to achieve a diet that provides 30% or less of total calories from fat. You can achieve this by consuming 1 gram of fat per kg of body weight and this translates into a diet that provides 30% fat. A few simple suggestions for lowering the fat content of your diet include: eating less meat, eating leaner meat, using lower fat dairy products and eating small amounts of oils and fats such as margarine, butter, vegetable oil and mayonnaise. Canada's Food Guide recommends limiting fats to 30 to 45 ml (2 to 3 tablespoons) each day.

In addition to being concerned with how much fat you eat, it is also important to focus on the type of fat you eat. Diets high in "good fats" and low in "bad fats" can decrease risk of chronic disease. The following chart contains information about these fats and their food sources.

Good Fats	Bad Fats
<p style="text-align: center;">Unsaturated Fats</p> <ul style="list-style-type: none"> • Healthy for you • Protect against heart disease • Liquid at room temperature • Found in nuts, seeds, vegetable oils, salmon, trout, olives 	<p style="text-align: center;">Saturated Fats</p> <ul style="list-style-type: none"> • Found in animal sources of food such as meat, chicken, butter, cheese • Solid at room temperature

Limit Alcohol Intake



Alcohol intake has been linked with increased risk for breast cancer. The American Institute for Cancer Research along with the World Cancer Research Fund conducted a major review of the evidence and have published a book entitled “ Food, Nutrition, Physical Activity and the Prevention of Cancer : a Global Perspective”. (2009). They have concluded the evidence is convincing that alcoholic drinks increase the risk of premenopausal and post menopausal breast cancer. It is apparent that a dose response relationship exists meaning the more you drink the greater the risk. If you choose to include alcohol in your diet it is recommended alcohol should be consumed in moderation. This means women should limit consumption to 1 standard drink per day. A standard drink is considered to be 1.5 oz of liquor, 5 oz of wine, or 1 bottle of beer (12 oz).

Be Cautious of Natural Health Products

Natural Health Products (NHP) includes vitamin and mineral supplements as well as botanical (herbal) products. If you are considering taking a NHP and will be receiving active treatment we recommend you discuss this with your Health Care Team. If you are already taking a NHP we recommend that you inform your Health Care Team before beginning your cancer treatment. You may be advised to discontinue use of some supplements during active treatment. Discuss with your Health Care Team the most appropriate time to resume use of NHP’s following completion of your active treatment.

The following NHP's warrant discussion in relation to breast cancer:



Vitamins and Mineral Supplements

Many vitamins and minerals are important for human health. Not all, but some vitamin and mineral supplements work in the body by antioxidant activity. These include: Vitamin C, Vitamin E, Beta Carotene (Vitamin A) and Selenium.

In human health under normal circumstances, free radicals are produced by normal body processes such as metabolism and by environmental factors such as pollution and UV light. Free radicals work by damaging healthy cells which can lead to the development of cancer or other chronic diseases. Antioxidants work by destroying free radicals so they cannot damage healthy cells. This scenario indicates that free radicals are “bad” and antioxidants are “good”.

When you are undergoing active treatment for your cancer, this scenario changes. Taking excess antioxidants from supplements is “bad” because it may decrease the effectiveness of your treatments (chemotherapy and radiation). The reason is because your treatments work by creating free radicals. The free radicals produced by your treatment have a job and that is to damage the cancer cell so badly that cancer cell death occurs. Knowing antioxidants destroy free radicals the scientific community feels the best advice for people undergoing active treatment is to avoid taking antioxidants in high doses via pills, powders and supplements. Diets rich in antioxidants from food sources not supplements, is recommended to fight cancer.

If you choose to supplement your diet it is acceptable to take a one a day multivitamin/mineral supplement appropriate for age as the levels of antioxidants are considered safe.

Sometimes women taking a specific hormonal treatment known as Aromatase Inhibitors may be advised to take supplements. Aromatase Inhibitors are known to increase risk of osteoporosis so your Oncologist will advise you to take 1500 mg calcium along with 800 IU of Vitamin D daily.

The Canadian Cancer Society recommends that adults take a Vitamin D supplement containing 1000 IU a day during the fall and winter. This recommendation is based on the growing evidence which suggests that supplementation with Vitamin D will help reduce cancer risk. Both calcium and Vitamin D are supplements that do not function by antioxidant activity so taking these do not pose any concern.



Botanical (Herbal) Supplement

Botanical or herbal supplements are natural health products derived from plant sources. Currently there is very little scientific information in this area so it remains quite controversial whether taking herbals is safe or effective once you have been diagnosed with breast cancer.

Some botanical supplements contain hormones or hormonal like substances that may affect disease progression or the effectiveness of hormonal treatments such as Tamoxifen. The following is a list of natural health products which are known to contain hormonally active ingredients and therefore *should be avoided* during active treatment.

Natural Health Products (supplements) that contain hormones (does not include food sources)		
<ul style="list-style-type: none"> • African Wild Potato • Aletris • Alfalfa • Androstenedione • Anise • Asparagus racemosus • Beta-sitosterols • Bitter yam • Black cohosh • Blue Cohosh • Black Currant • Bladderwrack • Boron • Burdock • Chasteberry • Chrysin • Cola Nut • DHEA • Dong Quai • Dyer's Broom 	<ul style="list-style-type: none"> • Epimedium • Evening Primrose Oil • Fennel • Flaxseed (not including flaxseed oil) • Flor*Essence® (contains red clover) • Fo-ti • Genistein (combined polysaccharide) • German Chamomile • Ginseng (all types) • Guarana • Guggul • Hops • Hu-Zhang • Ipriflavone • Job's tears • Kudzu • Lavender • Licorice 	<ul style="list-style-type: none"> • Milk Thistle • Mountain Flax • Oregano • Panax (pseudo ginseng) • Pleurisy root • Pomegranate seeds • Pregnenolone • Raspberry leaf • Red clover • Resveratrol • Scarlet pimpernel • Sage • Schisandra • Soy supplements • Star Anise • Tea tree oil • Tinospora cordifolia • Wild carrot • Wild yam

Source: BC Cancer Agency (updated July 2008)

Soy

Current evidence suggests that there are no specific benefits or harmful effects when soy is consumed in moderate amounts as part of a healthy diet. Dietitians of Canada recommends that for “breast cancer survivors, soy remains a healthy food to add protein, fibre , and variety to a plant based diet”. Moderate soy consumption is acceptable and is defined as 1-2 servings a day of soy foods such as tofu, soy beverage, miso, tempeh, and soy nuts and no more than 3 servings per day.

Soy supplements such as powders and isoflavone supplements are not recommended because the high dose provided by concentrated sources may have estrogenic effects which could increase the risk for progression of estrogen receptor-positive breast cancer.

Avoid Fad Diets

Diet Therapies Promoted for Cancer:

Diet therapies that advocate fasting as a means of detoxification, or diets that promote juices as the primary source of nourishment, are not recommended. Although vegetarian and macrobiotic diets have healthful features, there is no evidence to suggest they are superior in preventing recurrence than following guidelines to healthy eating such as *Eating Well with Canada’s Food Guide*.

Diet Therapies Promoted for Weight Loss:

Many popular diet therapies exist today that promote quick and painless methods for weight loss. Some fad diets focus on reducing carbohydrates in the diet and increasing consumption of protein and fat. If this type of diet is maintained long term, it can lead to fatigue, nausea, muscle breakdown, kidney problems, constipation and negatively affect bone health. Diets such as these also increase the risk of heart disease and possibly some cancers.

A healthy lifestyle including regular physical activity and a diet high in fruits in vegetables, whole grains, and low in saturated fat has been proven to increase long term survival, decrease risk of chronic disease, and possibly reduce risk of recurrence. Following these guidelines will promote weight loss while providing the required nutrients to maintain health.

If you require further information
or have specific nutritional concerns,
you may contact the CVH Oncology Dietitians at
(905) 813-1100 ext. 5157 / 6120.