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THE CREDIT VALLEY HOSPITAL

Nutrition Guidelines
During and After Treatment for
Breast Cancer



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





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A healthy diet during treatment will help you keep up your strength, tolerate your therapy better, and help you recover faster from treatment. The following information is intended to help guide you in terms of making informed choices, to better self-manage your health.

During active treatment you may experience side effects that can affect your well being and ability to nourish yourself. Your oncologist may prescribe medication for particular problems and often changes in your diet may also help you deal with these problems.

The goal during treatment is to maintain a stable weight and keep up your strength. Simple strategies for this include healthy eating based on Canada's Food Guide, accepting help with meal preparation, and increasing use of prepared meals and take out foods.

Research over the years suggests the best advice to maintain health post treatment is to consume a "healthy diet" and stay physically active. By eating healthy and staying active you can increase your body's ability to resist cancer.

This means the same dietary changes recommended for prevention may also aid in preventing recurrence and secondary cancers. Although the benefit is not proven, the strength of the evidence suggests it is possible and probable that the following nutritional strategies offer benefit to cancer survivors.

1. Maintain a Healthy Body Weight

During active treatment the goal is to maintain your weight. Intentional weight loss is not recommended at this time. Post treatment, however, it is important for women to try to achieve a healthy body weight as obesity has been associated with an increased rate of cancer recurrence. Healthy body weights are measured by the BMI or Body Mass Index. If your BMI is greater than 25 it is recommended to try to reduce weight post treatment to achieve a BMI of 18.5 – 25 . For more information on healthy weights and healthy eating visit www.dietitians.ca or www.healthcanada.ca/nutrition If weight loss is desired, strive to lose 1-2 pounds per week.

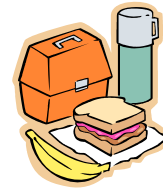


promoted by all reputable health organizations.

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 by leaching calcium from the bones. Diets such as these also increase the risk of heart disease and possibly some cancers.

The best advice is to follow a healthy lifestyle plan that includes all foods and incorporates regular physical activity into your daily routine. These recommendations may produce slower results for weight loss but the results are lasting and the method is proven.



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
- 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.

2. Increase Physical Activity

Exercise not only helps you achieve and maintain a healthy weight but it may also aid in improving fatigue.

Strive to be physically active 30-45 minutes at least 4 days per week. Consult Canada’s Physical Activity Guide for exercise tips www.paguide.com.

Regular exercise also offers additional health benefits such as prevention and management of heart disease, diabetes, osteoporosis and even helps fight depression.

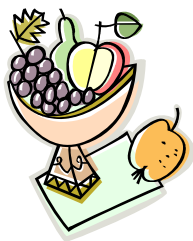


3. Consume More Plant Foods



Health experts suggest that our 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 supply the body with vitamins, minerals, phytochemicals, antioxidants and other beneficial substances scientists are just discovering.

4. Consume More Fruits and Vegetables



A diet high in fruits and vegetables appears to be the most beneficial dietary factor for improving cancer survival. It is recommended to consume 5 -10 servings of fruits and vegetables daily. Strive to consume 3-5 servings of vegetables and 2-4 servings of fruit. One serving is generally defined as 1 cup or 1 medium size fruit or vegetable; see Canada's Food Guide for more information on serving sizes. Aim for variety and colour as this will load up your body with an abundance of protective substances, such as phytochemicals, along with their disease fighting powers.



Soy powders and pill supplements should be avoided as they usually contain doses in excess of that provided in a normal diet. To date very little research has been done on these “mega doses” and the research results obtained so far casts enough doubt to conclude powder and pill soy supplements are not recommended.

9. Avoid Fad Diet Therapies

During and after treatment it is important to eat a healthy, well balanced diet to achieve and maintain optimal health status. Many diet therapies are promoted for cancer and weight loss that are not based on scientific evidence and may do more harm than good.

Diet Therapies Promoted for Cancer:

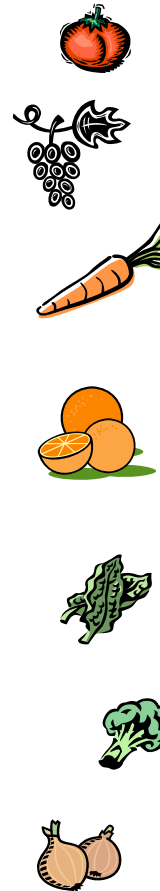
Diet therapies that advocate fasting as a means of detoxification, or juice therapies that promote juices as the primary source of nourishment are not recommended. Although vegetarian and macrobiotic diets have healthful features, there is no evidence to suggest they are any more superior in terms of preventing recurrence than simply following standard guidelines to healthy eating as

8. Think About Soy

Whether or not to include soy in the diet to prevent cancer, slow tumour growth or prevent recurrence of disease is quite controversial. There are two opposing opinions:

- A. Soy is protective against breast cancer and should be consumed by healthy women and women with breast cancer.
- B. Soy is harmful for those with a history of or at high risk for breast cancer.

Unfortunately, there is no convincing data to support either claim. Recommendations for soy intake should reflect “moderation”. The best advice for soy consumption is, if you choose to include soy in the diet it seems reasonable to use the model of Asian soy intake as a general guide. Most researchers agree this translates into 1-3 servings of soy foods per day for cancer prevention in healthy women. For others the recommendations are different. Women at high risk for breast cancer, those on Tamoxifen and those who have had hormone dependant (ER+) breast cancer may want to limit themselves to no more than a few servings per week.



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

Colour	Phytochemical	Food Source
Red	Lycopene	Tomatoes, Watermelon
Red/Purple	Anthrocyanins	Grapes, Prunes, Red Apples, Cranberries, Blackberries, Red Wine
Orange	Carotenoids	Carrots, Mangoes, Apricots, Cantaloupe, Pumpkin, Acorn and winter squash, Sweet Potatoes
Orange/Yellow	Cryptothanxin	Orange juice, Oranges, Tangerines, Peaches, Papaya and Nectarines
Yellow/Green	Lutein and Zeaxanthin	Spinach, Collard, Turnip, Corn, Green Peas, Honey Dew Melon and Avocados
Green	Indoles	Cabbage, Broccoli, Brussel Sprouts, Kale
White/Green	Allicin, Quercitin and Flavinoids	Leeks, Onions, Garlic, Chives, White Grape Juice and White Wine

5. Lower Dietary Fat Intake

A lower fat diet can assist in weight reduction, possibly lower risk of recurrence of cancer, and may also decrease risk of heart disease. Strive to achieve a diet that provides 30% or less of total calories from fat. For an average woman that translates into about 60 grams of fat per day, but this will vary from person to person. 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 common foods that have a high fat content.

Common Sources of Fat and Fat Content in Grams

Food (Serving Size)	Fat Content (grams)
Vegetable Oil (1 tbsp)	15
Peanut Butter (1 tbsp)	8
Butter or Margarine (1 teaspoon)	5
Mayonnaise (1 tbsp)	15
Salad Dressing (3 tbsp)	15
Bacon (3 slices)	15
Cream cheese (1 tbsp)	5



If you choose to use these types of hormone-like products after you are finished radiation treatment, it has been recommended by other cancer centres and the American Institute for Cancer Research to use the lowest dose possible for a short duration of time.

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 may advise you to take 1200 mg Calcium along with 400 IU Vitamin D supplements daily.



Botanical (Herbal) Supplements

Botanical or herbal supplements are natural health products derived from plants. These products are often used to treat hot flashes despite the fact that very little scientific evidence exists to support their effectiveness. More importantly many of these products contain hormones or substances that act like hormones. Hormones may stimulate breast cancer growth if your breast cancer is hormone sensitive, or can affect hormone treatments such as Tamoxifen. The following products are known to contain hormones in a variety of doses and formulations and should be avoided during active treatment.

Hormonal Products to Avoid

Aletris	Fennel
Alfalfa	Flax Seed
Anise	Ginseng
Beta-Sitosterols	Licorice
Bitter Melon	Milk Thistle
Black Cohosh	Raspberry Leaf
Blue Cohosh	Red Clover
Chasteberry	Resveratrol
DHEA	Scarlet Pimpernel
Dong Quai	Soy Supplements
Flor Essence	Wild Yam

(Source: Natural Medicines Comprehensive Database)

In addition to being concerned with how much fat you eat it is also important to focus on the type of fat you eat. Experts agree it is beneficial to consume the majority of fats in your diet as monounsaturated fats such as olive oil and canola oil as well as nuts such as almonds, hazelnuts and macadamia. Other important fats in the diet that may reduce the cancer process, prevent blood clots and boost the immune system are the omega 3 fatty acids. They can be found in fatty fish such as salmon, tuna and trout. It is recommended you consume approximately 3 ounces of fish twice a week.

6. Limit Alcohol Intake

Alcohol intake has been linked with increased risk for breast cancer. Although very little information exists on alcohol and cancer recurrence, most experts recommend that survivors avoid frequent use of alcohol. If alcohol is consumed at all, it should be taken in extreme moderation. This means less than 1 standard size drink per day. Standard size drinks are considered to be 1 oz of liquor, 3 oz of wine and 1 beer.



7. Be Cautious with Natural Health Products

Natural Health Products (NHP) include vitamin and mineral supplements as well as botanical (herbal) products. It is advisable to discuss use of these products with your healthcare providers as some NHP may be continued safely and not interfere with your treatment. Others however, may be discouraged by your health care team while you are on active treatment because there is concern that they may affect the way your treatment works.

Vitamins/Minerals

Certain vitamin and mineral supplements function by antioxidant activity. The vitamins and minerals that function this way are: beta carotene, vitamin C, vitamin E, selenium and zinc. Under normal circumstances antioxidants are considered “good “ as they destroy or inactivate free radicals. Free radicals in our environment and from illness and inflammatory processes are “bad “ as they work by damaging healthy cells. This is what can lead to the cancer process. However active treatment for your cancer (radiation /chemotherapy) also works by creating free radicals.

These free radicals created by your treatment have the job of damaging cancer cells so badly that cancer cell death occurs. Since antioxidants function by destroying free radicals, many in the scientific community feel that taking large doses may potentially interfere with the effectiveness of your treatment.

If you choose to supplement your diet it is acceptable to take a daily multivitamin/mineral supplement that contains antioxidant vitamins and minerals at levels close to the DRI 's (Dietary Reference Intakes)

Supplement	DRI
Vitamin C	75 mg/day (women) , 90 mg/day (men)
Vitamin E	22 International Units
Selenium	55 ug/day
Zinc	8 mg/day (women), 11mg/day (men)
Beta Carotene (Vitamin A)	no established level

