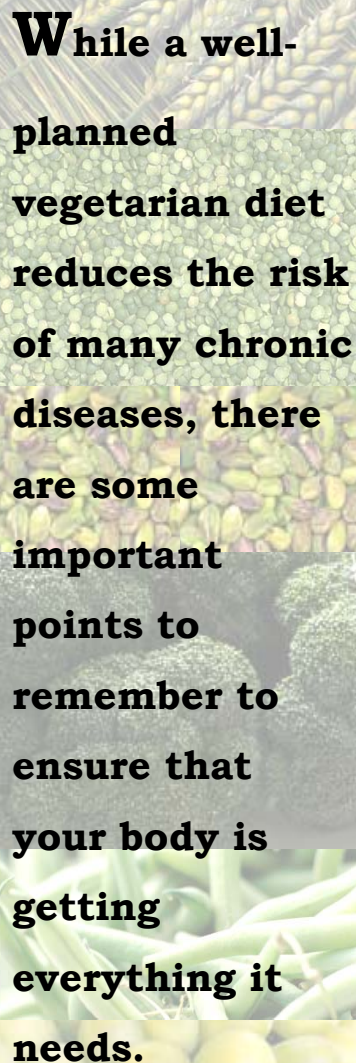


Adopting a Vegetarian Diet



While a well-planned vegetarian diet reduces the risk of many chronic diseases, there are some important points to remember to ensure that your body is getting everything it needs.

In 2002, approximately 4% of Canadians were vegetarian and chose to do so for a variety of reasons including health, cultural, economic, and animal welfare concerns. Due to the increasing interest regarding vegetarian diets, it is important for anyone who is currently a vegetarian or is interested in becoming one to understand both the benefits and concerns of such a diet.

Vegetarians – if they plan their diet properly – can have some health benefits compared to their non-vegetarian counterparts. They tend to have a reduced risk of obesity, type 2 diabetes, heart disease, and certain types of cancers, including prostate and colon cancer. These benefits are likely due to the decreased intakes of saturated fats, cholesterol, and animal protein, and increased intake of carbohydrates, fibre, magnesium, potassium, folate, vitamin C and E, and phytochemicals. Vegetarians also tend to weigh less, have lower blood pressure and lower rates of hypertension.

However, it is important to understand that being vegetarian does not automatically mean you are eating a healthier diet or that you are guaranteed health benefits. For example, it is still possible to eat a diet that is high in fat (eg lots of nuts, cheese, creamy dressings, whip cream). On the other hand vegetarians can develop nutritional deficiencies. Although appropriately planned diets can be equally as healthy and nutritionally adequate as diets containing animal products, there are some key nutrients that may be of concern, including protein, iron, zinc, calcium, Vitamin D, riboflavin (Vitamin B2), Vitamin B12, vitamin A, and n-3 fatty acids. Each of these nutrients will be discussed below.

The term ‘vegetarian’ is generally used to describe a person that excludes all animal-derived foods from their diet.

It is important to remember, however, that vegetarianism exists on a continuum. The list below points out some of the similarities and differences between commonly referred to vegetarian groups:

Vegans exclude all animal-derived foods including milk and milk products, eggs, meat, poultry, and fish. Specific foods such as honey and gelatin may be excluded as well.

Lacto-vegetarians include milk and milk products but exclude all meat, poultry, fish and eggs.

Lacto-ovo-vegetarians include milk and milk products, and eggs; exclude all meat, poultry and fish.

Lacto-ovo-pesco vegetarians include milk and milk products, eggs and fish; exclude all meat and poultry.

Nutrient	Importance in the body	Vegetarian/Vegan sources
Calcium	<ul style="list-style-type: none"> • Calcium plays a vital role in the formation and maintenance of bone • Necessary for heart function, nerve transmission and blood clotting 	<ul style="list-style-type: none"> • Numerous plant-based sources – bok choy, broccoli, Chinese/napa cabbage, collards, kale, okra, turnip greens, legumes • enriched soy milks, fortified fruit juices, • calcium set tofu • almonds, sesame seeds
Iron	<ul style="list-style-type: none"> • Essential component of blood cells • Important role in the delivery of oxygen to your cells • Heme (animal source) vs non heme iron (plant source): Non-heme iron harder to absorb than heme iron. 	<ul style="list-style-type: none"> • Legumes, dark green leafy vegetables, whole grains – take with source of vitamin C (citrus, red pepper, etc.) to aid absorption. Other ways to enhance iron absorption include soaking and sprouting beans, grains and seeds • Foods that may decrease iron absorption include calcium, teas, coffee, cocoa, some spices and fibre • Due to decreased absorption, iron intakes should be ~1.8x greater.
Lycopene	<ul style="list-style-type: none"> • Potent antioxidant that can help to protect against prostate cancer by destroying compounds that damage DNA and/or by inhibiting the growth of prostate cancer cells. 	<ul style="list-style-type: none"> • Cooked/processed tomato products, watermelon, pink grapefruit
Omega 3 F.A. – short chain	<ul style="list-style-type: none"> • Important component of cell membranes • Plays vital role in inflammation and the nervous system (vision and brain function) 	<ul style="list-style-type: none"> • Numerous plant-based sources – flax seed, olive and canola oils, walnuts, etc. but they have to be converted to the active form, EPA
Omega 3 F.A. – long chain	<ul style="list-style-type: none"> • Important component of cell membranes • Plays vital role in inflammation and the nervous system (vision and brain function) 	<ul style="list-style-type: none"> • None – found naturally in cold-water fishes (salmon, mackerel, sardines, etc) and shellfish
Phytonutrients	<ul style="list-style-type: none"> • Can reduce the risk of cancer due to antioxidant and anti-inflammatory properties 	<ul style="list-style-type: none"> • Abundant – broccoli, garlic & onions, berries, citrus fruits, green tea, nuts & seeds, etc
Protein	<ul style="list-style-type: none"> • Protein is required for healthy skin, muscles, and for your body to function optimally • Eating a variety legumes, grains and vegetables will help you get all the proteins you need 	<ul style="list-style-type: none"> • Legumes (beans, soy, lentils), nuts, seeds, whole grains, vegetables • Plant proteins are harder to digest so protein requirements may be increased 15-20%.
Selenium	<ul style="list-style-type: none"> • Essential component for the function of antioxidant systems in our body to defend against free-radical 	<ul style="list-style-type: none"> • Numerous plant-based sources – Brazil nuts, whole wheat flour, barley, etc
Soy	<ul style="list-style-type: none"> • Contains isoflavones which may decrease risk of prostate cancer by reducing testosterone stimulation of the prostate 	<ul style="list-style-type: none"> • All are vegan appropriate – tofu, edamame, tempeh, soy milk, etc
Vitamin B₁₂	<ul style="list-style-type: none"> • Required to produce blood cells, thereby preventing anemia 	<ul style="list-style-type: none"> • Found naturally in animal-derived foods only • Enriched soy milk, Red Star® nutritional yeast, multivitamin-minerals
Vitamin D	<ul style="list-style-type: none"> • May play a role in the prevention of prostate cancer. • Major function is to control blood calcium levels and to form and maintain bones. 	<ul style="list-style-type: none"> • Enriched soy milks, other enriched beverages, fortified margarine • Supplements a consideration. • Can also be obtained from sunlight exposure (5-15 minutes during summer). Note: darker skin requires longer exposure to obtain the same amount of Vitamin D
Vitamin E	<ul style="list-style-type: none"> • Powerful antioxidant which works with body's natural defense system to prevent free radical damage and reduce risk of some cancers, including prostate cancer 	<ul style="list-style-type: none"> • Numerous plant-based sources – wheat germ, almonds, vegetable oils, broccoli, etc
Zinc	<ul style="list-style-type: none"> • Important in cell division and formation of proteins • Deficiency not seen in western vegetarians 	<ul style="list-style-type: none"> • Legumes (esp. black-eyed peas, kidney and pinto beans), nuts, whole grains, some vegetables

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