



PLANT-BASED FOODS

Plant-based foods constitute a cuisine of their own and meat substitutes are unnecessary. Vegetarian diets have both environmental and health benefits.

Environment

One of the simplest and most significant choices we can make to reduce our environmental impact is to switch to a plant-based diet. Crops, vegetables and fruits use land more efficiently than grazing animals and are free of the pollution produced by animals.

Refined or processed foods lose nutrients in the processing. Processed foods are also less environmentally friendly due to both the processing and the packaging required.

Health

A well-balanced vegetarian diet can reduce the risk of chronic diseases, including obesity, coronary artery disease, high blood pressure, diabetes and some types of cancer. Vegetarians also have lower rates of illness and death from a number of degenerative diseases. (Reference: Victorian government, www.betterhealth.vic.gov.au, Vegetarian Eating.)

Nutrition

If you choose to be vegetarian you need to plan your diet to make sure it includes all the essential nutrients. The wider the variety of foods you eat, the easier it will be to meet your nutritional requirements. Some essential dietary requirements, which could be missing from a vegetarian diet if it isn't carefully planned, include protein, minerals (including iron, calcium and zinc), vitamin B12 and vitamin D.

It is recommended that vegetarians eat legumes and nuts daily, along with wholegrain cereals, to ensure adequate nutrient intakes. The Victorian government BetterHealth website offers detailed nutritional information. People who elect to eat no animal products ie become vegan, need to give thought to their nutritional needs especially for protein, iron, vitamin B12 and minerals.

Plant sources of important nutrients are shown in the Appendix.

If you make the change from a meat-based diet, change gradually. We all take quite a long time to become used to different foods.

For reliable advice on diet consult your doctor or an accredited practising dietitian. To find a dietitian contact the Dietitians Association of Australia, www.daa.asn.au

Menu planning

You can plan meals around a basic ingredient comprising a grain or a legume or both. Add to the dish vegetables, spices, and other ingredients. Eat something from each plant-food category each day - grains & cereals, vegetables, legumes, nuts & seeds and fruit. Choose something different from each category each time and eat plenty of different types of fruit and vegetables. Eat three regular meals each day and aim to use foods grown in Australia.

Food groups

- Grains and cereals, preferably whole grain. These include rice, polenta, wheat (as wheat-germ and bran, breads, rice, pasta and noodles), oats, millet, barley
- Vegetables
- Legumes and pulses - fresh peas and beans, and dried varieties including brown lentils, red lentils, split peas, chick peas, and dried peas, beans (eg mung beans, black-eye beans, borlotti, lima, fava or broad beans). Soy bean products are especially useful because they contain complete proteins with all essential amino acids
- Nuts - almonds, walnuts, peanuts, pistachios and macadamia
- Seeds - Sesame seeds, sunflower seeds, pumpkin seeds (pepitas), linseeds
- Fruit - fresh or dried varieties

What you can do

- Change meal patterns gradually
- Cook interesting and tasty vegetarian recipes; there are many in Mediterranean and Asian recipe books
- Arrange for family and friends to change with you
- Buy foods that are grown in Australia

APPENDIX - Vegetarian nutrition

Protein

Proteins in our diet provide us with a range of essential amino acids. Foods containing all the essential amino acids are called *complete proteins* and they include meat, eggs, milk, cheese, yoghurt and soya bean products. Plant-based foods lack one or more of the amino acids essential to human health, and plant proteins are called *incomplete proteins*. An adequate plant-based diet can be achieved by eating a combination of different foods especially by combining whole grains and legumes. Whole grains are found in eg wholemeal bread, wholemeal pasta and brown rice. Combine these with legumes such as lentils, peas, chickpeas and beans; nuts and seeds; potatoes and corn.

Iron

Sources include dried fruits, potatoes, mushrooms, cashews, dried beans, spinach, chard, tofu, tempeh, bulgur, eggs, nuts, legumes, whole grains and spinach. Some processed foods such as cereals, instant oatmeal, and veggie "meats" are fortified with iron. To increase the amount of iron absorbed at a meal, eat a food containing vitamin C, such as citrus fruit or juices, tomatoes, or broccoli. Using iron cookware also adds to iron intake.

Vitamin B12

The adult recommended intake for vitamin B12 is low but essential. A diet containing milk, cheese, yoghurt or eggs provides an adequate supply. Fortified foods, such as some brands of cereal, nutritional yeast, soymilk and yeast extracts are good non-animal sources.

Calcium

Good sources include dark green vegetables like spinach, broccoli and kale, mustard greens, legumes, almonds, brazil nuts, tahini, tofu prepared with calcium, low-fat dairy products, fortified soy milk, and fortified orange juice.

Omega-3

Omega-3 fatty acids are found in flaxseed, flaxseed oil, canola oil, tofu, soybeans, dark green vegetables, strawberries and walnuts and also in fish oil. Nutritionally essential **omega-3 fatty acids** are: α -linolenic acid (ALA), eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA)

Zinc

Sources include nuts, tofu, miso, legumes, wheat germ and wholegrain foods.

Iodine

Apart from fish, the sources of iodine in the diet are iodised salt and vegetables grown in soil containing iodine.

References

www.vrg.org/nutshell/nutshell.htm#nut

www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Vegetarian_eating

www.nutritionaustralia.org

Healthy Vegetarian Eating by Rosemary Stanton