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Go Vegetarian!

The green book on vegetarian nutrition

How To Live
A Health
Conscious
Lifestyle

The New Four
Food Groups

Vegetarian
Sources Of
Protein, Iron
And Calcium

Editor: Mark Berriman

6th Edition



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Vegetarian Foods

Powerful for Health



A vegetarian diet is a powerful and pleasurable way to achieve good health. Vegetarian eating is based on a wide variety of foods that are satisfying, delicious and nutritious.

Vegetarians do not eat meat, fish or poultry. Those who include dairy products and eggs in their diets are called lacto-ovo vegetarians. Pure vegetarians eat no meat, fish, poultry, eggs or dairy products. While there are considerable advantages to a lacto-ovo vegetarian diet, pure vegetarian diets are the healthiest of all, reducing the risk of a broad range of health concerns.

Heart Disease

Vegetarians have much lower cholesterol levels than meat eaters, and heart disease is uncommon in vegetarians. The reasons are not hard to find. Vegetarian meals are typically low in saturated fat and usually contain little or no cholesterol. Since dietary cholesterol is found only in animal products such as meat, dairy, and eggs, pure vegetarians consume a cholesterol-free diet.

The type of protein in a vegetarian diet may be another important advantage. Studies have shown replacing animal protein with plant protein lowers blood cholesterol levels - even if the amount and type of fat in the diet stays the same. Those studies show that a low-fat, vegetarian diet has a clear advantage.

Blood Pressure

An impressive number of studies, dating back to the early 1920s, show that vegetarians have lower blood pressure than non-vegetarians. In fact, some studies have shown that adding meat to a vegetarian diet raises blood pressure levels rapidly and significantly. The beneficial effects of a vegetarian diet occur in addition to those caused by reducing the sodium (ie. salt) content of the diet. When patients with high blood pressure begin a vegetarian diet, many are able to eliminate their need for medication.

Diabetes

The latest studies on diabetes show that a diet high in complex carbohydrates (found only in plant foods) and low in fat is the best dietary prescription for

A Simple 3 Step Way To Go Vegetarian

When switching to a vegetarian diet for its health benefits, you'll be pleased to find there is a wonderful additional benefit to vegetarian eating - it's delicious and fun to explore new foods. A vegetarian meal can be as familiar as spaghetti with tomato sauce, as comforting as a bowl of delicious, chunky vegetable soup, or rich and exotic like Carob Chocolate Cake (see **Recipes For Health** p14).

The switch to a vegetarian diet is easier than you might think. Most people, whether vegetarians or meat-eaters, typically use a limited variety of recipes. The average family eats only eight or nine different dinners repeatedly. You can use a simple 3 step method to create nine vegetarian dinner menus you will enjoy and can prepare easily.

1. Think of 3 vegetarian meals that you enjoy now, like spaghetti with tomato sauce, thick vegetable soup with bread, or curried vegetable casserole.

2. Think of 3 recipes that you prepare regularly which easily adapt to a vegetarian menu. For example, a favourite "mince" recipe can be made with all the same ingredients - just replace meat with beans or texturised vegetable protein. Substitute bean burritos (using canned vegetarian refried beans) for beef burritos. Many traditional soups, stews, and casseroles (see **Recipes For Health**) can become vegetarian dishes with simple changes.

3. Borrow some vegetarian cookbooks from a library and experiment with the recipes until you find three that you enjoy and can prepare easily. Just like that, with minimal changes, you will have 9 vegetarian dinners.

Coming up with vegetarian options for breakfast and lunch is easy. Try muffins with fruit spread, toast with fresh tomato, fruit or cereal for breakfasts. Sandwiches, with spreads like hommus or Tofu Loaf (see **Recipes For Health**), pasta salads or even meal leftovers make great lunches. Most stores now stock a range of ready to use vegetarian foods, such as vegetarian hot dogs and sausage slices. ♥

controlling diabetes. Since diabetics are at high risk for heart disease, avoiding fat and cholesterol is an important goal of the diabetic diet, and a vegetarian diet is ideal. Although all insulin-dependent diabetics need to take insulin, plant-based diets can help to reduce insulin needs.

Cancer

A vegetarian diet helps to prevent cancer. Studies of vegetarians show that death rates from cancer are only about one-half to three-quarters that of the general population. Breast cancer rates are dramatically lower in countries where diets are typically plant-based. When people from those countries adopt a Western, meat-based diet, their rates of breast cancer soar.

Vegetarians also have significantly less colon cancer than meat eaters. Meat consumption is more closely associated with colon cancer than any dietary factor.

Why do vegetarian diets help protect against cancer?

First, they are lower in fat and higher in fibre than meat-based diets. But there are other important factors too. For example, vegetarians usually consume more of the plant pigment beta-carotene which is associated with lowered cancer rates. This might help to explain why they have less lung cancer. Also, at least one study has shown that natural sugars in dairy products may raise the risk of ovarian cancer in some women.

Some of the anti-cancer aspects of a vegetarian diet can not yet be explained. For example, researchers are not quite sure why vegetarians have more of certain white blood cells, called "natural killer cells", which are able to seek out and destroy cancer cells.

Gallstones, Kidney Stones, And Osteoporosis

Vegetarians are less likely to form either kidney stones or gallstones. In addition, vegetarians may also be at lower risk for osteoporosis because they eat much less animal protein. A high intake of animal protein (eg. cows milk) encourages the *loss of calcium* from the bones. Replacing animal products with plant foods reduces the amount of calcium lost. This may help to explain why people who live in countries where the diet is typically plant-based have little osteoporosis even when calcium intake is low.

Planning Vegetarian Diets

It's easy to plan vegetarian diets that meet nutrient needs. Grains, beans and vegetables are rich in protein and iron. Green leafy vegetables, beans, lentils and nuts provide calcium.

Dairy products and eggs are not necessary in a vegetarian diet. In fact, they suffer from similar nutritional problems to other animal products - being

Tips For Making The Switch To A Vegetarian Diet

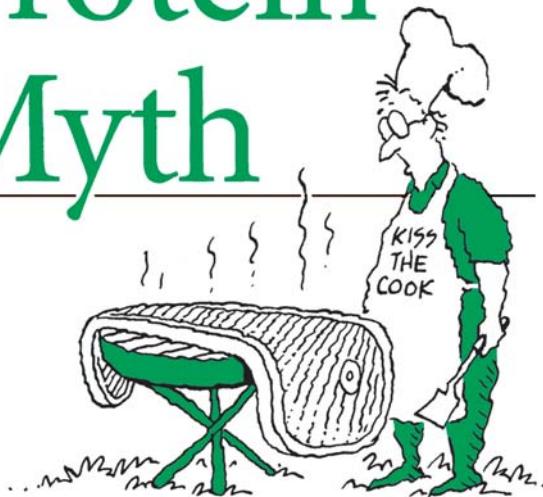
- ◆ Convenience foods cut cooking time. Natural food stores stock a variety of instant soups and main-dish convenience items. Regular supermarkets also carry many fast vegetarian foods (see **Fast Food Tips** p7).
- ◆ Ask for it! Even restaurants that don't offer vegetarian meals can usually whip up a meatless pasta or vegetable plate if you ask. Airlines offer vegetarian meals if you ask in advance.
- ◆ Order your next pizza without cheese but with a mountain of vegetable toppings and extra tomato sauce.
- ◆ Find vegetarian cookbooks at the library or bookstore and have fun experimenting with new foods and recipes.
- ◆ Italian, Chinese, Mexican, Middle East and Indian restaurants all offer a good variety of vegetarian dishes. There are specialist Chinese vegetarian and vegan restaurants.
- ◆ Texturised vegetable protein (TVP) is very low fat, has a texture like ground beef, and is wonderful in tacos, burgers, pasta sauces and casseroles. Look for it in supermarkets and natural food stores.
- ◆ Summer barbecues are healthy and fun with meatless hot dogs and burgers. (cont)

rich in cholesterol, saturated fat, animal protein and devoid of fibre. This booklet focuses on planning vegetarian meals without the use of *any* animal products. This may seem difficult at first, but will prove very rewarding with a little effort and time experimenting with exciting new foods and tastes.

Vitamin D is normally made in the body when sun shines on the skin. Regular sun exposure means there is no need to get vitamin D in foods. The only foods with significant amounts of vitamin D are those that are fortified with it, such as table margarine.

Vitamin B12 is found, though unreliably so, in some traditional Asian foods such as miso and tempeh. However, because of modern processing, the vitamin is not found in plant foods to any reliable extent. Although vitamin B12 deficiency is uncommon, pure vegetarians should be sure to include a source of this vitamin in their diet (see **Vitamin B12** on p12) . ♥

Protein Myth



In the past, some people believed one could never get too much protein. As recently as the 1950s, health-conscious people were encouraged to boost their protein intake. However, now the average Australian consumes twice the amount of protein their body really needs.

The Building Blocks Of Life

People build the proteins of their bodies from amino acids, which, in turn, come from the proteins they eat. A varied diet of beans, lentils, grains, and vegetables contains *all of the essential* amino acids. It used to be believed that various plant foods had to be eaten together to get their full protein value, but many nutrition authorities, including the respected American Dietetic Association, have determined that intentional combining is not necessary¹. As long as your diet includes a variety of grains, legumes, and vegetables, protein needs are easily met.

The Trouble With Too Much Protein

The average Australian diet contains meat and dairy products, and so it is often high in protein. According to government research, women are consuming over 70 grams and men over 100 grams of protein per day on average¹⁰. Compare this with the World Health Organisation recommendation of 29 grams for a woman and 37 grams for a man⁹.

Some studies have linked excess protein intake to a number of serious health problems such as kidney disease, some cancers and osteoporosis.

Kidney Disease

There is evidence that when people eat too much protein, they take in more nitrogen than is needed. This strains the kidneys which must expel the extra nitrogen through the urine. People with kidney disease are encouraged to eat low-protein diets².

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Tips For The Switch

- ◆ Check out ethnic grocers for special vegetarian foods. Middle-Eastern delis offer stuffed grape leaves, falafels, and eggplant spreads. Italian, Indian and Asian markets offer many vegetarian delicacies.
- ◆ Simple dishes are often the most satisfying. Brown rice, gently seasoned with herbs and lemon and sprinkled with chopped nuts or sunflower seeds, is a delicious dish.
- ◆ Add variety to your diet easily by preparing familiar foods in interesting new ways. Cook rice in a mixture of water and apple juice. Toss broccoli with raisins, sprinkle sunflower seeds or chopped almonds on vegetables. Simmer carrots, turnips, cabbage, or parsnips in orange juice.
- ◆ When travelling, pack vegetarian snacks like instant soup, fresh fruit and raw vegetables, dried fruit and nuts, healthy chewy bars, and cracker biscuits. Fill a cooler with sandwiches and individual containers of juice and soy milk (travels well if kept out of the heat and refrigerated on arrival). ♥

Cancer

Although fat is the dietary substance most often singled out for increasing one's risk of cancer, protein may also play a role. Populations that eat meat regularly, are at an increased risk for colon cancer³, and some researchers believe that the fat, protein, carcinogens, and the absence of fibre in meat all play roles. In 1982, the National Research Council (USA) noted a link between cancer and protein intake⁴.

Osteoporosis And Kidney Stones

Diets that are rich in protein, especially animal protein⁵, are known to cause people to excrete more calcium than normal through their urine⁶ and possibly increase the risk of osteoporosis. Countries with lower-protein diets have lower rates of osteoporosis and hip fractures⁷.

Increased calcium excretion increases risk for kidney stones. Researchers in England found that by adding about 140 grams of fish (about 34 grams of protein) to a normal diet the risk of forming urinary tract stones increased by as much as 250 percent⁸.

For a long time it was thought that athletes needed much more protein than other people. The truth is that athletes need only slightly more protein, which is easily obtained in the larger servings athletes require for their higher caloric intake. Vegetarian diets are great for athletes - just ask the vegetarian athlete Carl Lewis who is one of the fastest men on Earth!

Healthy Protein

Plants tend not to contribute to protein excess, so to consume a healthy diet that contains enough - but not too much - protein, simply replace animal products with grains, vegetables, legumes (peas, beans, and lentils), soy products and fruits. As long as you are eating a variety of plant foods in sufficient quantity to maintain your weight, your body will get plenty of nutritious, healthy protein. ♥

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Calcium in Plant-Based Diets

Many people choose to avoid milk because it contains fat, cholesterol, allergenic proteins, lactose, and frequent traces of contamination. Milk is also linked to juvenile-onset diabetes and other serious conditions. Happily, there are plenty of other good sources of calcium.

Keeping your bones strong depends more on preventing the loss of calcium from your body than on boosting your calcium intake^{2,3}. Some cultures consume no dairy products and typically ingest only 175 to 475 milligrams of calcium per day¹. However, these people generally have low rates of osteoporosis. Many scientists believe that exercise and other factors have more to do with osteoporosis than calcium intake does².

Calcium In The Body

Almost all of the calcium in the body is in the bones. There is a tiny amount in the blood stream which is

responsible for important functions such as muscle contraction, maintenance of the heartbeat, and transmission of nerve impulses.

We constantly lose calcium from our blood stream through urine, perspiration, and faeces. It is renewed with calcium from bone. In this process, bones continuously lose calcium which must be replaced from our food.

Calcium needs change throughout our life. Up until the age of 30 or so, we consume more calcium than we lose. Adequate calcium intake during childhood and adolescence is especially important. Later, the body begins to slip into "negative calcium balance", and the bones start to lose more calcium than they take up. The loss of too much calcium can lead to soft bones or osteoporosis.

How rapidly calcium is lost depends, in part, on the kind and amount of protein you eat as well as other diet and lifestyle choices.

Reducing Calcium Loss

A number of factors affect calcium loss:

- ◆ Diets that are high in protein cause more calcium to be lost through the urine. Protein from animal products is much more likely to cause calcium loss than protein from plant foods. This may be one reason that vegetarians tend to have stronger bones than meat eaters³.
- ◆ Exercise slows bone loss and is one of the most important factors in maintaining bone health.
- ◆ Caffeine increases the rate at which calcium is lost through urine⁴.
- ◆ Alcohol inhibits calcium absorption.

Sources Of Calcium

Good sources of calcium are soy milk with calcium added (eg. *So Good* and *Sungold*), dried figs, soy beans, chick peas, lentils, leafy greens, almonds and tahini (see **Glossary** p15).

Exercise and a diet moderate in protein will help to protect your bones. People who eat plant-based diets and who lead an active lifestyle probably have lower calcium needs. However, calcium is an essential nutrient for everyone. It is important to eat calcium-rich foods every day. ♥

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What About Milk?



- ◆ **Iron-Deficiency:** Children and adults who consume a lot of cow's milk or other dairy products can become anaemic because these foods displace more iron rich foods from their diet.
- ◆ **Diabetes:** Of 142 diabetic children tested in a recent study, 100% had high levels of an antibody to cows milk protein. It is believed these antibodies destroy the insulin-producing cells of the pancreas¹.
- ◆ **Calcium:** Dark green leafy vegetables, raw nuts, seeds, whole grains, legumes, fresh and dried fruit, vegetables, sea vegetables and molasses are healthier sources of calcium than dairy products².
- ◆ **Fat Content:** Other than skim milk varieties, dairy products are high in fat, and the type of fat present is saturated fat, which can cause high cholesterol and heart disease.
- ◆ **Lactose:** Many people of Asian and African heritage are unable to digest the milk sugar, lactose, which then causes diarrhoea and gas. The lactose, when it is digested, releases galactose, a simple sugar which is linked to ovarian cancer and also to cataracts^{3,4}.
- ◆ **Allergies:** Milk is one of the most common causes of food intolerance. Often the symptoms are subtle and may not be attributed to milk for some time⁵.

- ◆ **Colic:** Milk proteins can cause colic - a digestive upset that afflicts one in five infants. Milk-drinking mothers can also pass cows milk proteins to their breast-feeding infants.
- ◆ **Some vegetarians come to depend on dairy, and/or eggs as a substitute. If you are feeling "restricted" without dairy and eggs, then stay with that for a while, and at the same time do more research and learn how you can live without high-fat, high-protein dairy foods. ♥**

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MILK FREE TIP:

Many commercially produced soy milks are fortified with B12. Check the label.

EGG FREE COOKING TIP:

Instead of scrambled eggs for breakfast, how about trying scrambled tofu!

See p16 for a simple, delicious recipe.

Cooking Without Eggs



Many people choose not to eat eggs. More than 50% of the calories in eggs are from fat, and a big portion of that fat is saturated. They are also loaded with cholesterol - about 206 milligrams for an average sized egg.

Eggs are often used in baked products because of their binding and leavening properties. But many cooks have found good alternatives to eggs. Try one of the following the next time you prepare a recipe that calls for eggs:

- ◆ If a recipe calls for just 1 or 2 eggs, you can often skip them. Add a couple of extra tablespoons of water (or liquid) for each egg eliminated, to balance out the moisture content of the product.

- ◆ Eggless egg-replacers are available in many natural food stores and supermarkets. These are different from reduced-cholesterol egg products which do contain eggs. Egg-replacers are egg-free and are usually in powdered form. Replace eggs in baking with a mixture of the egg-replacer and water according to package directions.
- ◆ Use 1 heaped tablespoon of soy flour or corn flour plus 2 tablespoons of water to replace each egg in a baked product.
- ◆ Use ¼ cup of mashed tofu in place of an egg.
- ◆ In muffins, ½ mashed banana can be used instead of an egg, although it will change the flavour of the recipe somewhat.
- ◆ For loaves and burgers, use any of the following to bind ingredients together: tomato paste, mashed potato, tahini, moistened bread crumbs, rolled oats or oat bran, or linseed meal. ♥



Fast Food Tips

The range of vegetarian convenience foods available at health food stores and supermarkets is growing all the time. Remember to eat some fresh vegetables or a tossed salad with a convenience meal.

Health Food Section: burger mixes, *Sanitarium* 'Veggie Delights' range products (vegetarian sausages, burgers, mince, roasts).

Chilled Section: *Sanitarium* 'Veggie Delights' hotdogs, sausages, NotBacon™, vacuum packed burgers, tofu, pizza bases, fresh egg-free pasta, ready-to-go spaghetti sauces, hommus or eggplant dip.

Freezer: *Sanitarium* 'Veggie Delights' range (vegetable patties, lentil patties).

General Section: instant noodle soups, canned beans and vegetables, pasta with spaghetti sauce, sweet and sour sauce, satay sauce, salsa, wholemeal bread and quick-cooking brown rice.

Flavoured rice mixes, like curried rice can be made into a main meal with a can of beans. Try vegetarian baked beans, refried beans, vegetarian burger mixes and meatless spaghetti sauce.

Deli: fresh vegetarian pasties, pies, burgers and dips.

Remember to keep checking for new products. Every now and then take time to inspect the range of products in a section and read the labels carefully. Remember, convenience foods are no substitute for real food. Always keep them to a minimum and supplement with fresh fruit and vegetables. ♥

Menu Ideas

This menu is a collection of suggestions. Choose one, or a combination. Vary them and add your favourite foods according to the general vegetarian diet guidelines (see **Health Conscious Lifestyle** p13).

Breakfast

- ◆ Porridge with cinnamon and sultanas served with soy milk and rice malt (or honey)
- ◆ Toast with almond butter, peanut butter, or tahini
- ◆ Grapefruit or any favourite fruit
- ◆ Cereal (eg. *Sustain*, *Muesli*, *Special K*, *Lite Start*, *Bran Flakes*, *Weet Bix*, *Organic Vita Brits*) with soy milk
- ◆ Fresh fruit or juice

Lunch

- ◆ Whole wheat pita stuffed with any of hommus, sliced tomatos, lettuce, carrot, cucumber, sprouts, avocado, dates, walnuts, beetroot etc
- ◆ Baked beans on toast
- ◆ Thick vegetable soup with toast
- ◆ Two minute noodles with added fresh vegetables
- ◆ Sandwiches with vegetarian sausage (or smallgoods) and fresh salad fillings
- ◆ Baked sweet potato
- ◆ Veggieburger, vegie sausage (see **Fast Food Tips** p7)
- ◆ Crackers with toppings (see pita above)
- ◆ Fresh garden salad with tahini-lemon dressing
- ◆ Fresh fruit



Dinner

- ◆ Pasta with a sauce made from eggplant, capsicum, onions, garlic, olives and tomatos (sprinkled with almond pieces or sesame seeds)
- ◆ Chinese stir-fry with brown rice: tofu chunks marinated in garlic, ginger and tamari, broccoli, snow peas, water chestnuts, cabbage, spring onions, carrots and red capsicum
- ◆ Bean burritos using kidney beans in corn tortillas, topped with chopped lettuce, tomatos, and salsa or guacamole (mashed avocado and lemon juice)
- ◆ Vegetarian sausages, or burgers, with mashed potato, peas, carrots, broccoli and gravy
- ◆ Steamed greens drizzled with lemon juice
- ◆ Baked apple with soy custard
- ◆ Fresh pineapple or other fruits

Snack

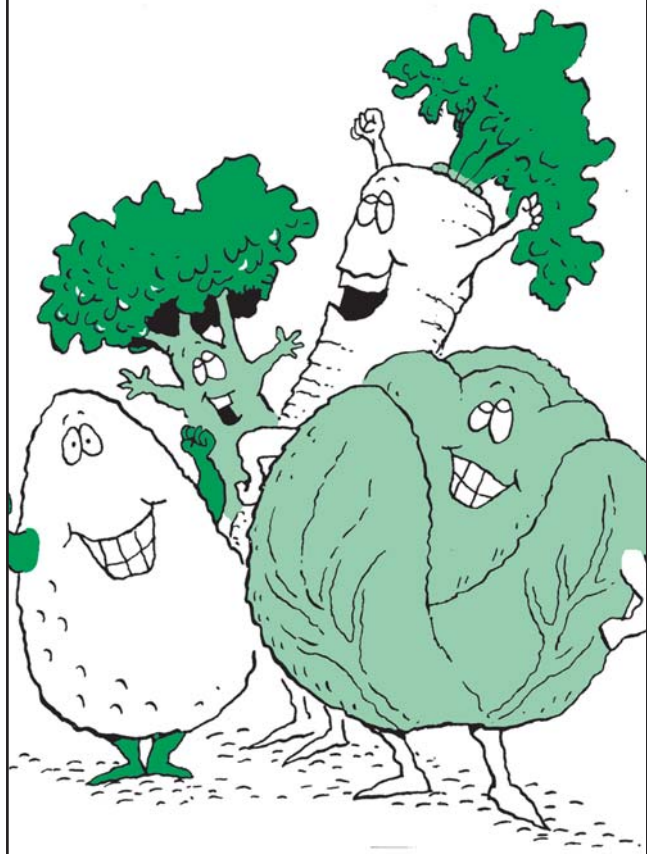
- ◆ Banana soy milk shake
- ◆ Dried fruit and nut mix of chopped apricots, paw paw, sultanas, apple, pepitas and almonds
- ◆ Soy yoghurt
- ◆ Fruit sorbet (try watermelon, it is delicious!) ♥

THE *NEW* FOUR

VEGETABLES

5 OR MORE SERVINGS A DAY

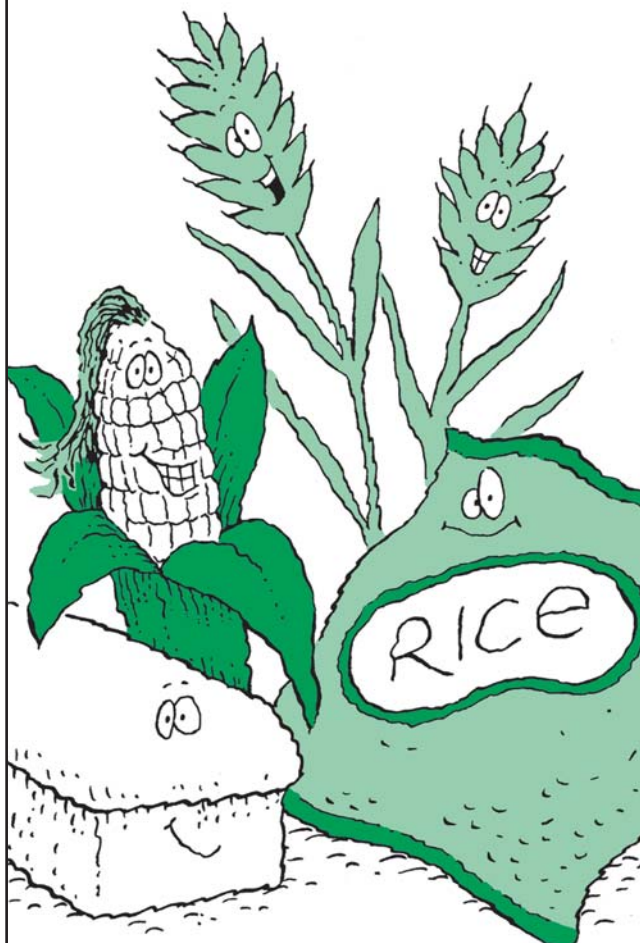
Vegetables are packed with nutrients: they provide vitamin C, beta-carotene, riboflavin, iron, calcium, fibre, and other nutrients. Dark green, leafy vegetables such as broccoli, spinach and silver beet are especially good sources of these nutrients. Dark yellow and orange vegetables such as carrots, squash, sweet potatoes, and pumpkin provide extra beta-carotene. Include generous portions of a variety of vegetables in your diet. Serving size: 1 cup raw vegetables, ½ cup cooked vegetables.



WHOLE GRAINS

3 OR MORE SERVINGS A DAY

Whole grains includes bread, rice, pasta, hot or cold cereal, corn, millet, barley, cracked wheat and tacos. Build each of your meals around a hearty grain dish. Grains are rich in fibre and other complex carbohydrates, as well as protein, B vitamins and zinc. Serving size: ½ cup rice or pasta, ½ cup cereal, 1 slice bread.



Many of us grew up with the 5 food groups taught at school. The passage of time has seen an increase in our knowledge about the importance of fibre, the health risks of cholesterol and fats, and the disease-preventative power of many nutrients found exclusively in plant-based foods.

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We have also discovered that the plant kingdom provides excellent sources of protein and calcium - once only associated with meat and dairy products.

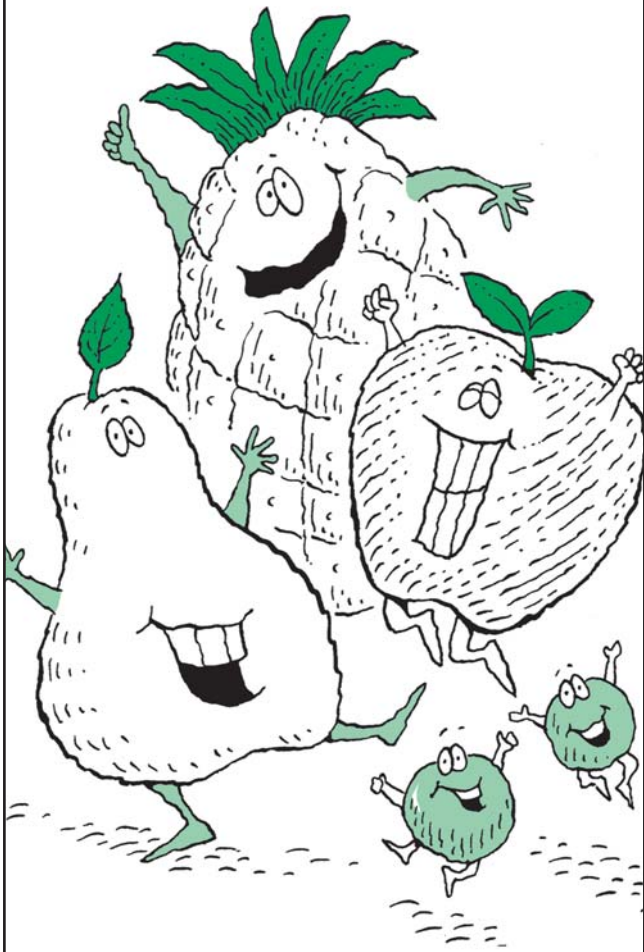
Determining that regular consumption of foods from the meat and dairy product groups (even in small quantities) poses serious, unnecessary health risks,

FOOD GROUPS

FRUIT

3 OR MORE SERVINGS A DAY

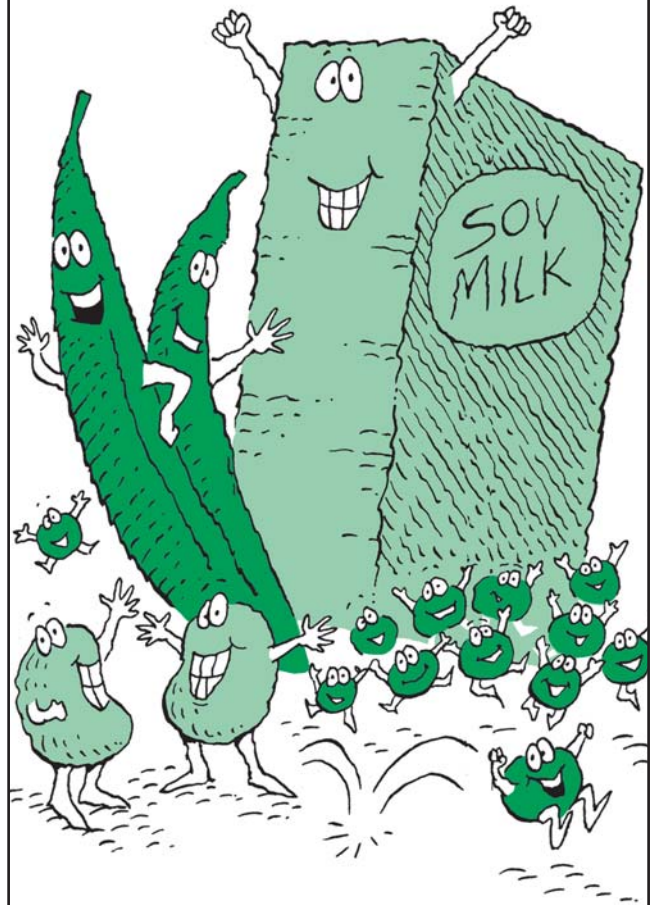
Fruits are rich in fibre, vitamin C, and beta-carotene. Be sure to include at least 1 serving each day of fruits that are high in vitamin C eg. citrus fruits, melons, and strawberries. Choose whole fruit over fruit juices, which do not contain very much fibre. Serving size: 1 medium piece of fruit, ½ cup cooked fruit, ½ cup juice.



LEGUMES

2 OR MORE SERVINGS A DAY

Legumes - which is another name for beans, peas, lentils - are all good sources of fibre, protein, iron, calcium, zinc, and B vitamins. This group also includes chickpeas, baked and refried beans, soy milk, tofu, tempeh, and texturised vegetable protein. Be sure to include soy milk (fortified with vitamin B12) every day. Serving size: ½ cup cooked beans, 120grams tofu or tempeh, 1 cup soy milk.



Be sure to include a good source of vitamin B12, such as fortified soy milk or vitamin supplements

the Physicians Committee for Responsible Medicine (USA) developed the New Four Food Groups in 1991. This no-cholesterol, low-fat plan supplies all of an average adult's daily nutritional requirements.

The major killers - heart disease, cancer, and stroke - have a dramatically lower incidence among people

consuming primarily plant-based diets. Weight problems, a contributor to a host of health problems, can also be brought under control by following the New Four Food Group recommendations.

Try the New Four Food Groups and discover a healthier way to live! ♥

Vegetarian Diets for Pregnancy



During pregnancy your need for many nutrients increases. For example, you will need more calcium, more protein, and more folic acid. It is important to eat foods that are rich in nutrients, but not high in fat or sugar, or excessive in calories.

Vegetarian diets, based on nutritious whole foods, are healthful choices for pregnant women^{1,2}. Use the Meal Planning Chart below to plan your meals.

MEAL PLANNING CHART

Whole Grains, Breads, Cereals

6 or more servings

Serving = 1 slice of bread, ½ bread roll (wholemeal), ½ cup cooked cereal, rice, pasta; ½ cup ready-to-eat cereal.

Dark Green Leafy Vegetables

1 or more servings

Serving = ½ cup cooked or 1 cup raw baby spinach leaves, spinach, silver beet or broccoli.

Other Vegetables and Fruits

4 or more servings

Serving = ½ cup cooked, 1 cup raw, 1 piece of fruit, ½ cup fruit juice, ¼ cup dried fruit.

Beans and Soy Products

3 or more servings

Serving = ½ cup cooked beans, 120 grams tofu or tempeh, 1 cup soy milk. Note: it is recommended to consume 2-3 cups of soy milk with added vitamin B12 and calcium (low-fat if excess weight is a problem) per day.

Nuts, Seeds, Wheat Germ

1 to 2 servings

Serving = 2 tablespoons nuts or seeds, 2 tablespoons peanut butter, 2 tablespoons wheat germ. ♥

Guidelines For Good Health During Pregnancy

- ◆ Begin a healthful diet *before* you become pregnant. The early growth and development of your baby is supported by your body stores of nutrients.
- ◆ Maintain a steady rate of weight gain. Consult with a health professional on this issue.

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- ◆ See your health care provider (knowledgeable in vegetarian lifestyle requirements) regularly.
- ◆ Limit your consumption of the empty calories found in highly processed foods and sweets. Make your calories count!

Nutrients

To make certain that you are getting adequate nutrition, pay particular attention to these nutrients:

Calcium: The suggested meals (see p11) include foods that are rich in calcium. Be certain to include at least 4 servings of calcium-rich foods in your diet every day. These include tofu, dark green leafy vegetables, bok choy, broccoli, beans, figs, sunflower seeds, tahini, almond butter, calcium-fortified soy milk, and calcium-fortified breakfast cereals.

Vitamin B12: This vitamin is not found in most plant foods. To get enough of this important nutrient, be certain to consume one serving every day of a food that is fortified with vitamin B12 (some brands of soy milk, *Sanitarium* 'Veggie Delights' range)³. Be certain to read the label to find out which foods are fortified. Seaweed and products like tempeh and mushrooms are generally not reliable sources of vitamin B12. Vitamin B12 is also in all standard multi-vitamins and in vegetarian supplements.

Iron: This nutrient is abundant in all plant-based diets⁴. Beans, dark green vegetables, molasses, nuts and seeds, and whole grain or fortified breads and cereals all contain iron. Some fresh fruit or juice (or other source of Vitamin C) with your meal helps your body to absorb more of the iron in foods. However, women in the second half of pregnancy have very high iron needs and may need to take a supplement regardless of the type of diet they follow. Your health care provider will discuss iron supplements with you.

Protein: Needs increase by about 30% during pregnancy. However, since most people consume abundant amounts of protein anyway, the average pregnant woman already consumes more protein than is needed. Whole grains, vegetables, legumes and soy products are all protein-rich foods. The **Meal Planning Chart** (see this page) provides plenty of protein for pregnancy.

Menu Ideas

- ◆ Plan meals around nutritious whole grains, beans, and vegetables. Add sesame seeds, wheat germ, or nutritional yeast for flavour and nutrition.
- ◆ Cooked leafy green vegetables are a powerhouse of nutrition. Add them to soups and casseroles.
- ◆ Snack on dried fruits and nuts to boost your intake of iron and important trace nutrients.

Breast Feeding

The guidelines for breast feeding mothers are similar to those for pregnant women. Milk production requires more calories so you may need to boost your food intake a little bit. It is important to have plenty of fluids at this time. ♥

Adapted for Australia by Amanda Benham, Nutritionist, MDAA. References. See p16.

SAMPLE MENU FOR PREGNANCY

Breakfast

Cereal topped with fruit and fortified soy milk, Toast with peanut butter/baked beans/tomatos/asparagus/vegemite. Juice.

Lunch

Tofu spread on whole grain bread with lettuce, tossed salad with herbs and lemon juice, fruit.

Dinner

Lentil and rice casserole flavoured with nutritional yeast (torula yeast tastes great!) and chopped tomatos, steamed broccoli, spinach and sunflower seed salad
Soy milk with added vitamin B12 and calcium

Snacks

Dried fruit and nut mix with almonds and raisins (or sultanas)
Fruit, tofu and fruit shakes, wholegrain or rye crispbreads with peanut butter or salad toppings, raw vegetables (eg. carrots) ♥

Vegetarian Diets for Children: Right from the Start

Eating habits are set in early childhood. A well balanced vegetarian diet gives your child the chance to learn to enjoy a variety of wonderful, nutritious foods. It provides excellent nutrition for all stages of childhood from birth onwards^{1,2,3,4,5,6,7} (see p16), and sets the stage for great adult health.

Infants

The best food for newborns is breast milk. If your baby is not being breast-fed, soy formulas are a good alternative. *Do not use commercial soy milk.* Babies have special needs and require a soy formula that is developed especially for those needs.

Infants do not need any nourishment other than breast milk or soy formula for the first several months of life. Infants need about 2 hours a week of sunlight exposure to make vitamin D. Breast milk or infant formula should be used for the first year.

At about 4 to 5 months of age, or when your baby's weight has doubled, other foods can be added to the diet. Add one new food at a time, at one to two week intervals. The following guidelines provide a flexible plan for adding foods to your baby's diet.

4 To 5 Months

- ◆ Introduce fruits first. Try mashed bananas, avocados, strained peaches, or cooked apples.
- ◆ Introduce iron-fortified infant cereal. Try rice cereal



first since it is least likely to cause allergies. Mix it with a little breast milk or soy formula.

6 To 8 Months

- ◆ Introduce vegetables. They should be thoroughly cooked and mashed. Potatoes, green beans, carrots, and peas are all good first choices.
- ◆ By 8 months of age most babies can eat crackers, bread, and cereal.

9 To 12 Months

- ◆ By about 8 months, gradually introduce a wide range of foods from the 4 food groups. Beans should be cooked well and mashed.
- ◆ Soy milk, with added vitamin B12, should be introduced at 12 months of age.

Children

Children have a high calorie and nutrient need, but their stomachs are small. Offer your child frequent snacks, and include some less "bulky" foods like refined grains and fruit juices. Do limit juices however, since some children may fill up on them, preferring their sweetness to other foods. Refer to the **Sample Menu for Children** below for more ideas. ♥

Sample Menu for Children

Calorie needs vary from child to child. The following guidelines are general.

Breakfast

Organic wholemeal cereal (wheat biscuit, bran flakes) or porridge with fortified soy milk, and/or toast with peanut butter, yeast extract or baked beans
Fresh fruit or juice

Lunch

Bread or pita or whole grain crackers with some of hummus, peanut butter, tofu loaf, nutmeat or vegetarian sausage
Salad vegetables (eg. tomato, carrot sticks)
Soy milk (fortified with vitamin B12)
Fresh fruit

Dinner

Potatoes, rice, pasta or another grain-based plant food
Vegetables or salad including greens
Beans, lentils, tofu or tempeh (for protein)
Dessert - fresh/stewed fruit with soy custard

Snacks

Fresh/dried fruit, crackers, raw vegetables, soy yoghurt, bread with hummus or peanut butter.

Special Guidelines

- ◆ Serving sizes should be appropriate for the child's age and physical needs.
- ◆ For safety reasons, young children should avoid whole nuts.
- ◆ Young children need some high fat foods. Use full-fat soy milk, peanut butter, tahini, avocado, and perhaps some vegetable oils and margarine.
- ◆ Encourage children to drink water when thirsty. It is recommended to have 2 to 3 cups fortified soy milk each day. ♥

12 Go Vegetarian!



Iron Rich Food

This vital mineral, necessary for healthy blood, is found in lentils, beans, tofu, tempeh, soy milk, nuts, many plants (including parsley, spinach, broccoli, silver beet, corn and cabbage), whole grains, fruit and sea vegetables. Studies show that vegetarians *do not* have a higher incidence of iron deficiency than non-vegetarians.

Iron absorption is increased markedly when iron rich foods are eaten in conjunction with vitamin C rich foods, such as fresh fruit and vegetables. Commonly eaten combinations, such as vegetable stir fries containing tofu, result in generous levels of iron absorption. The iron from plants (non-haem) is not as readily absorbable as haem iron (from meats), but exists in far greater quantities in well balanced meals. The body naturally increases iron absorption rates if your iron stores are lower than required. ♥

Vitamin B12

Very low Vitamin B12 intakes can cause anaemia, heart disease and nervous system damage. The only reliable vegan sources of B12 are foods fortified with B12 and B12 supplements, Vitamin B12, whether in supplements, fortified foods, or animal products, comes from micro-organisms.

To get the full benefit of a vegan diet, vegans should do one of the following:

1. Eat fortified foods two or three times a day to get at least three micrograms (mcg) of B12 a day, or
2. Take one B12 supplement daily providing at least 10 micrograms, or
3. Take a weekly B12 supplement providing at least 2000 micrograms.

If relying on fortified foods check the labels carefully to make sure you are getting enough B12. For example, if a fortified plant milk contains 1 microgram of B12 per serving then consuming three servings a day will provide adequate vitamin B12. Others may find the use of B12 supplements more convenient and economical.

The less frequently you obtain B12 the more B12 you need to take, as B12 is best absorbed in small amounts. The recommendations above take full account of this. There is no harm in exceeding the recommended amounts or combining more than one option. ♥

Essential Fatty Acids

Essential Fatty Acids (EFAs) are fats which have crucial roles in human health but which cannot be made by the body and should be eaten regularly. EFAs have a number of very important roles which include the formation and function of membranes, lipoproteins, lecithin and prostaglandins. These are the so-called 'good fats', as opposed to processed fats, trans-fats and some saturated fats.

There are two kinds of EFAs – Omega-6 fatty acids (polyunsaturated) and Omega-3 fatty acids (superpolyunsaturated). Both are ideally found in healthy, natural foods. Omega-6 fatty acids are in fresh, raw nuts, unprocessed peanut butter, sunflower and pumpkin seeds, soya lecithin and cold-pressed oils (e.g. soya bean, safflower, sunflower or evening primrose oil). Vegetarian sources of Omega-3 fatty acids are flaxseed (or cold-pressed flaxseed oil) and walnuts.

Processed oils – such as those found in margarine and refined vegetable oils – can contain high levels of chemically altered trans-fatty acids. While cold-pressed olive oil is suitable for cooking, never heat EFA oils as this generates toxic free radicals in large quantities, greatly increasing the requirement for antioxidants to neutralise them. Eat them on their own or add them to salads or over steamed vegetables, etc. ♥

Iodine in a Vegetarian Diet

Iodine is vital for good thyroid function. In vegetarian adults, low iodine intake may lead to hypothyroidism which in turn may cause fatigue, dry or yellowish skin, anaemia, weight gain, personality changes, depression and prolonged and heavy menstruation. On the other hand excessive iodine consumption by vegetarians carries other risks.

Vegetarian sources of iodine include dairy products, iodised salt and seaweeds. Vegetarians and vegans may also obtain iodine from ordinary vegetables but this depends on how rich the soil is in iodine. Australian soils are low in iodine.

Iodine Uptake in Vegetarian Diets

A low zinc intake worsens the effect of low iodine intake. Also, certain otherwise healthy foods interfere with regular iodine intake. Such foods include cabbage, brussels sprouts, broccoli, cauliflower, soy beans, sweet potatoes, lima beans, corn and millet. ♥

Health Conscious Lifestyle

A health conscious lifestyle is "based around proper foods, moderate exercise, adequate sunshine, pure air and water, and surroundings comfortable for your well being at home and work"¹.

An easy way to plan meals is to include generous quantities of a starch food (ie. rice/pasta/potato etc) with some high protein food (eg. tofu, tempeh, lentils, kidney beans, vegetarian burgers etc), plus generous serves of fresh salad and/or vegetables, including green vegetables. Pregnant, or breast feeding women can choose from the same menu, adding nutritious snacks and at least 2 cups of fortified soy milk, eating plenty of greens and including other calcium rich foods (tofu, almonds, tahini).

"No portions (ie. fixed serving sizes, ed.) are recommended, except that a starch should provide most of the calories. The quantity to be consumed each day is variable among individuals and is governed by our highly efficient hunger drive"¹.

Regular exercise has many beneficial effects on your health. It tends to promote weight loss in over weight people, develops muscles into good shape, relieves stress and lowers blood pressure. Most of these benefits are accomplished with exercise as simple as regular brisk walking (3 times per week for 20 minutes each). Consult a health professional before beginning any strenuous exercise program. ♥

References

1. Dr. John McDougall, McDougall's Medicine, New Win Publishers, 1985.

Check Labels!

You need to carefully read labels when buying vegetarian foods. Many animal ingredients are hidden by unusual names or number codes. An "Additive Code Breaker" is ideal for understanding the code numbers. Write to the manufacturer and ask them about any ingredients you suspect. Some tips:

Ingredients

Anchovies - a type of fish
Collagen - connective tissue from meat
Animal fats and oils
Marine oils - from fish
Gelatin - from bones
Whey - from milk
Fatty acids - may be animal derived
Glycerine - may be animal derived
Lecithin - usually soya, can be from eggs
Casein - from milk
"Flavour" & "Natural Flavour" - may be animal origin.

Recipes For Health

Here are just a few simple, delicious recipes for you to try. If you don't recognise an ingredient, ask at your local health food store (see **Glossary** p15).

Tofu Loaf¹

500g	block of tofu, mashed
1 large	onion, finely chopped
1 stick	celery, finely sliced
2 cloves	garlic, crushed
1 cup	breadcrumbs
1 cup	rolled oats
2 Tbs	tahini [†]
2 Tbs	tamari or soy sauce [†]
2 Tbs	mirin, or 1 Tbs brown sugar
2 tsp	curry powder
½ cup	tomato sauce [†] , or paste
½ cup	fresh parsley, chopped
½ cup	tomato sauce, extra
1 Tbs	mirin, or brown sugar, extra

Combine all ingredients thoroughly except last two and press into a lightly oiled baking dish. Combine extra tomato sauce and mirin and spread over the top of the loaf, then sprinkle with sesame seeds. Bake 1 hour in a medium oven. Stand 10 minutes before cutting. Serve hot with vegetables and gravy or cold with salad and garlic bread. Use as a filling for sandwiches, jaffles, pies, pasties and rolls. Serves 6.

Gardener's Pie²

This is the pure vegetarian version of Shepherd's Pie.

1 cup	brown lentils
1 tsp	onion powder
1 Tbs	cold pressed oil, or vegetable stock
1 large	onion, finely chopped
1 clove	garlic, crushed
1 cup	mushrooms, sliced
1 stick	celery, sliced
1	carrot finely sliced
½ cup	broccoli florets
1 Tbs	Vecon [†] , or Vegemite
1 Tbs	tamari or soy sauce [†]
¾ cup	vegetable stock [†]
1 tsp	mixed herbs
½ tsp	oregano
3 Tbs	tomato paste
2 ½ cups	mashed potato

Soak the lentils for 2 hours or overnight. Drain and rinse. Add fresh water and bring to the boil in a large saucepan with the onion powder. Simmer 15 minutes or until tender. Drain.

[†] Use low-salt varieties wherever possible or adjust quantities.



Heat oil, or stock, in a large saucepan and sauté onion, garlic and mushrooms for 5 minutes. Add remaining vegetables and sauté a further 5 minutes. Add lentils, *Vecon*, tamari, vegetable stock, herbs and tomato paste. Stir over heat until combined and simmer 5 minutes. Mixture should be fairly thick. Turn into a 5 cm deep dish, top with mashed potato. Mark attractively with a fork and brown in a hot oven 15 minutes. Serve with side vegetables or salad. Serves 6.

Pasta and Bean Casserole

1 810 gm can	tomatos
1 cup	canned tomato puree
1	medium onion, chopped
1 clove	garlic, crushed
1 cup	chopped olives
1 810 gm can	red kidney beans, drained
1	bay leaf
½ tsp	vegie salt
½ tsp	oregano
½ tsp	basil
1 Tbs	chopped parsley

Simmer all ingredients 20 minutes. Cook and drain 2 cups eggless noodles. Remove bay leaf from sauce and combine with noodles in a casserole dish. Bake at 180°C for 20 minutes. Serves 6.

Tomato and Lentil Soup³

1 large	onion
1 810 gm can	tomatos or fresh, skinned
125 grams	red lentils (dry weight)
2 cups	vegetable stock
Salt to taste	
Freshly ground black pepper	
Fresh basil leaves	

Peel and finely chop the onion. Simmer the onion

until just softened in a little water. Add the tomatoes and break them up slightly. Rinse the lentils, drain and add to the tomatoes. Stir in the stock. Season to taste with salt and pepper. Bring to a boil, cover and simmer for 30 minutes until the lentils are tender. Remove from the heat, tear the basil leaves into small pieces and add to the soup. Blend until smooth. Return to the pan and heat through for a few minutes. Serve garnished with basil leaves, with fresh bread. Makes 4 ½ cups.

Carob Chocolate Cake⁴

This one can be consumed by healthy people on special occasions!

1 cup	wholemeal self raising flour
1 cup	unbleached self raising flour
½ cup	carob powder
1 cup	raw sugar
1 tsp	cinnamon
pinch	sea salt
1 ¼ cups	water
½ cup	canola oil
1 tsp	vanilla essence
1 Tb	cider vinegar or white vinegar

Preheat oven to 180°C. Line a medium cake tin with *Gladbake* paper. Sift dry ingredients and mix together. In a separate bowl, combine liquid ingredients with a whisk. Add to dry ingredients and mix only until combined. Pour into cake tin and bake 45 minutes or until cooked. Stand 5 minutes then turn onto a rack, remove paper and cool completely. Ice with **Carob Icing** (see below).

Carob Icing

½ cup	soy carob chips
2 Tbs	rice malt, or honey

In a small saucepan, melt the carob chips over low heat and add rice malt. Stir gently until smooth. Pour over cooled cake and spread. If desired, sprinkle with desiccated coconut. ♥

Glossary Of Ingredients

Carob - chocolate-like powder from carob beans
 Lentils - red and brown variety of legume
 Mirin - sweet rice wine
 Miso - fermented soy bean paste
 Rice Malt - honey-like malt derived from rice
 Tahini - ground sesame seeds (high calcium)
 Tamari - type of soy sauce
 Tempeh - fermented soy beans (strong flavour)
 Tofu - high protein soy bean curd (absorbs flavour)
 Vegie Salt - salt combined with ground vegetables

References

1,2,4. from PASSIONATE, Christine Lehmann, The Vegetarian Lifestyle, Australia, 1994
 3. from VEGAN VARIETIES, Sheffield Vegan Society, UK

Resources

Websites

www.veg-soc.org
 (Australian Vegetarian Society)

www.ivu.org
 (International Vegetarian Union)

www.vrg.org
 (Vegetarian Resource Group)

www.vegsources.com
 (Veg Source)

www.vegan.org
 (Vegan Action)

www.natural-health.org.au
 (Natural Health Directory)

www.health.org.au
 (Natural Health Society)

Books

Diet for a New America, John Robbins.

The Silent Ark, Juliet Gellatley.

The Livewire Guide to Going, Being and Staying Veggie!, Juliet Gellatley.

A Vegetarian Source Book, Keith Akers.

The China Study, T. Colin Campbell, PhD.

Food for Life, Neal D. Barnard, M.D.

Plant Based Nutrition and Health, Stephen Walsh.

Cookbooks

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Garden of Vegan, Tanya Barnard & Sarah Kramer.

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DVDs

A Diet for all Reasons, Michael Klaper, M.D.

Food Without Fear, Vegetarian Society (UK).

Diet for a New America, Earthsave.

Devour The Earth, Vegetarian Society (UK).

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Magazines

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