

TIPS FOR BEGINNING A VEGETARIAN DIET

THE NEW FOUR FOOD GROUPS

TASTY LOW-FAT, NO-CHOLESTEROL RECIPES

Presented by Vegetarian Times and the Physicians Committee for Responsible Medicine

vegetarian

PCRM



vegetarian foods:

powerful tools for health A vegetarian menu is a powerful and pleasurable way to a

contents

THE WHYS AND HOWS

Vegetarian Foods 2

The Protein Myth 4

Calcium in a Plant-based Diet 6

What About Milk? 7

The New Four Food Groups 8

Achieving and Maintaining a Healthy Weight 10

Vegetarian Diet for Pregnancy 11

Vegetarian Diets for Children 12

TIPS FOR VEGETARIAN DIETS

The 3-Step Way to Go Veg 3

Tips for Making the Switch 4

Egg Free! 5

Dairy Free! 7

The Veganizer 10

Daily Meal Planning 13

LOW-FAT RECIPES

Recipes for Health 14

A vegetarian menu is a powerful and pleasurable way to achieve good health. The vegetarian eating pattern is based on a wide variety of foods that are satisfying, delicious, and healthful. Vegetarians avoid meat, fish, and poultry. Those who include dairy products and eggs in their diets are called lacto-ovo vegetarians. Vegans eat no meat, fish, poultry, eggs, or dairy products. While there is a considerable advantage to a lacto-ovo vegetarian pattern, vegan diets are the most healthful of all, reducing risk of a broad range of health concerns.

A HEALTHY HEART

Vegetarians have much lower cholesterol levels than meat eaters, and heart disease is less common 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 cholesterol is found only in animal products such as meat, dairy, and eggs, vegans consume a cholesterol-free diet.

The type of protein in a vegetarian diet may be another important advantage. Many studies show that 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 lowfat, vegetarian diet has a clear advantage over other diets.

LOWER BLOOD PRESSURE

An impressive number of studies, dating back to the early 1920s, show that vegetarians have lower blood pressure than nonvegetarians. In fact, some studies have shown that adding meat to a vegetarian diet raises blood pressure levels rapidly and significantly. A vegetarian diet also reduces sodium intake: When patients with high blood pressure begin a vegetarian diet, many are able to eliminate the need for medication.

CONTROLLING DIABETES

The latest studies on diabetes show that a vegetarian diet high in complex carbohydrates and fiber (which are found only in plant foods) and low in fat is the best dietary prescription for controlling diabetes. A diet based on vegetables, legumes, fruits, and whole grains, which is also low in fat and sugar, can lower blood sugar levels and often reduce or even eliminate the need for medication. Since individuals with diabetes are at high risk for heart disease, avoiding fat and cholesterol is important, and a vegetarian diet is the best way to do that.

CANCER PREVENTION

A vegetarian diet helps prevent cancer. Studies of vegetarians show that death rates from cancer are only about one-half to three-quarters of the general population's cancer-death rates.

Breast cancer rates are dramatically lower in countries where typical diets are plant-based. When women from those countries adopt a Western, meat-based diet, their rates of breast cancer soar. Vegetarians also have significantly lower rates of colon cancer than meat eaters. Colon cancer is more closely associated with meat consumption than any other dietary factor.

Why do vegetarian diets help protect against cancer? First, they are lower in fat and higher in fiber than meat-based diets. But other factors are important, too. Plants contain other cancer-fighting substances called phytochemicals. For example, vegetarians usually consume more of the plant pigments betacarotene and lycopene. This might help

to explain why they have less lung and prostate cancers. Also, some studies have suggested that diets that avoid dairy products may reduce the risk of prostate and ovarian cancers.

Some of the anticancer aspects of a vegetarian diet cannot 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 and destroy cancer cells.

THE CALCIUM CONNECTION

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 little or no animal protein. A high intake of animal protein 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 typical diet is plant-based have little osteoporosis, even when calcium intake is lower than that in dairy-consuming countries.

PLANNING VEGETARIAN DIETS

It's easy to plan vegetarian diets that meet all your nutrient needs. Grains, beans, and vegetables are rich in protein and iron. Green leafy vegetables, beans, lentils, tofu, corn tortillas, and nuts are excellent sources of calcium, as are enriched soymilk and fortified juices.

Vitamin D is normally made in the body when sun shines on the skin. People who are dark-skinned or live at northern latitudes have some difficulty producing vitamin D year-round. Vitamin D can easily be obtained from fortified foods. Some sources are commercial breakfast cereals, soymilk, other supplemental products, and multivitamins.

Regular intake of vitamin B₁₂ is important. Good sources include all common multiple vitamins (including vegetarian vitamins), fortified cereals, some brands of nutritional yeast, and fortified soymilk. It is especially important for pregnant women and breast-feeding mothers to get enough vitamin B₁₂. When reading food labels, look for the word cyanocobalamin in the ingredients list. This is the form of vitamin B₁₂ that is best absorbed by the body.

the 3-step way to **go veg**

If you are making the switch to a vegetarian diet for its health benefits, you'll be pleased to find that there is a wonderful additional benefit to vegetarian eating: It's a delicious and fun way to explore new foods. A vegetarian meal can be as familiar as spaghetti with marinara sauce, as comforting as a bowl of rich, potato soup, or as exotic as grilled polenta with portobello mushrooms.

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, three-step method to come up with nine vegetarian dinner menus that you enjoy and can prepare easily.

After that, coming up with vegetarian options for breakfast and lunch is easy. Try muffins with fruit spread, cholesterolfree French toast, or cereal for breakfasts. Sandwiches, with spreads like hummus or white bean pate with lemon and garlic, or dinner leftovers all make great lunches.

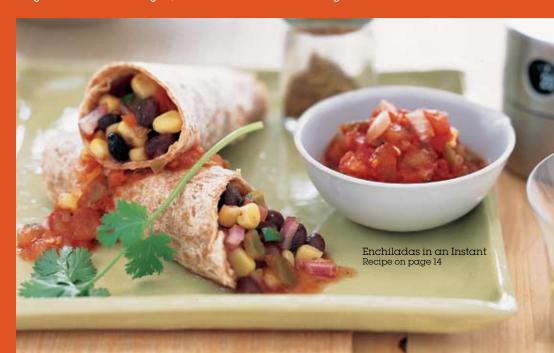
First, think of three vegetarian meals that you already enjoy. Common ones

are tofu and vegetable stir-fries, vegetable stew, or pasta primavera.

2 Second, think of three recipes you prepare regularly that can easily be adapted to a vegetarian menu. For example, a favorite chili recipe can be made with all of the same ingredients; just replace the meat with beans or texturized vegetable protein. Enjoy bean burritos (using canned vegetarian refried beans) instead of beef burritos, veggie burgers instead of hamburgers, and

grilled eggplant and roasted red peppers instead of grilled chicken in sandwiches. Many soups, stews, and casseroles also can be made into vegetarian dishes with a few simple changes.

Third, check out some vegetarian cookbooks from the library and experiment with the recipes for a week or so until you find three new recipes that are delicious and easy to make. Just like that, with minimal changes to your menus, you will have nine vegetarian dinners.



the protein myth

In the past, some people believed one could never get too much protein.

In the early 1900s, Americans were told to eat well over 100 grams of protein a day. And as recently as the 1950s, health-conscious people were encouraged to boost their protein intake. Today, some diet books encourage highprotein intake for weight loss, although Americans already tend to take in twice the amount of protein they need. And while individuals following such a diet have sometimes had short-term success in losing weight, they are often unaware of the health risks associated with a high-protein diet. Excess protein has been linked with osteoporosis, kidney disease, calcium stones in the urinary tract, and some cancers.

THE BUILDING BLOCKS OF LIFE People build muscle and other body proteins from amino acids, which come from the proteins they eat. A varied diet of beans, lentils, grains, and vegetables contains all of the essential amino acids. It was once thought that various plant foods had to be eaten together to get their full protein value, but current research suggests this is not the case. Many nutrition authorities, including the American Dietetic Association, believe protein needs can easily be met by consuming a variety of plant protein sources over an entire day. To get the most benefit from the protein you consume, it is important to eat enough calories to meet your energy needs.

THE TROUBLE WITH TOO MUCH PROTEIN

The average American diet contains meat and dairy products. As a result, it is often too high in protein. This can lead to a number of serious health problems:

- Kidney Disease: When people eat too much protein, they take in more nitrogen than they need. This places a strain on the kidneys, which must expel the extra nitrogen through urine. People with kidney disease are encouraged to eat low-protein diets. Such a diet reduces the excess levels of nitrogen and can also help prevent kidney disease.
- Cancer: Although fat is the dietary substance most often singled out for increasing cancer risk, protein also plays a role. Populations that eat meat

tips for making the switch

- Convenience foods cut cooking time. Supermarkets and natural foods stores stock a huge array of instant soups and main-dish vegetarian convenience items. Many canned soups, such as minestrone, black bean, or vegetable, are vegetarian. Flavored rice or other grain mixes, like curried rice or tabbouleh salad, can be stretched into an entrée with a can of beans. Visit the frozen food section for internationally inspired vegetarian frozen entrées such as corn and bean enchiladas, lentil curry, or vegetarian pad thai. Or try vegetarian baked beans, refried beans, sloppy joe sauce, and meatless spaghetti sauce from the canned goods aisle.
- Ask for it! Even restaurants that don't offer vegetarian entrées can usually whip up a meatless pasta or vegetable plate if you ask. If attending a catered affair, catch the waiter before you are served and ask him or her to remove the chicken breast from your plate and slip on an extra baked potato. Some airlines offer vegetarian meals if you ask in advance; or you can always bring a meal on board with you.
- Order your next pizza without cheese but with a mountain of vegetable toppings.
- Find vegetarian cookbooks at your local library or bookstore and have fun experimenting with new foods and recipes.
- International restaurants are the best bets for finding

- vegetarian food when dining out. Italian, Chinese, Mexican, Spanish, Thai, Japanese, and Indian restaurants all offer a wide variety of vegetarian dishes.
- Texturized vegetable protein (TVP) is fat-free, has a texture like ground beef, and is wonderful in tacos, chili, and sloppy joes. Look for it in the bulk food section of the grocery store.
- Summer barbecues are healthful and fun with meatless hot dogs and burgers. Or, for a real change of pace, grill thick slices of marinated vegetables like eggplant, zucchini, or tomatoes.
- Check out ethnic groceries for special vegetarian foods. Middle Eastern delis offer stuffed grape leaves, falafel, and eggplant spreads. Italian markets are a wonderful place to find hearty homemade breads, sun-dried tomatoes, and fresh pasta. Indian and Asian markets offer many vegetarian delicacies also.
- The simplest dishes are often the most satisfying. Brown rice, gently seasoned with herbs and lemon and sprinkled with chopped nuts or sunflower seeds, is a perfect dish.
- When traveling, pack plenty of vegetarian snacks like instant soups, fresh fruit, raw vegetables, trail mix, granola bars, and homemade oatmeal cookies. Fill a cooler with sandwiches and individual containers of juice and soymilk.

regularly are at increased risk for colon cancer, and researchers believe that the fat, protein, natural carcinogens, and absence of fiber in meat all play roles. The 1997 report of the World Cancer Research Fund and American Institute for Cancer Research, "Food, Nutrition, and the Prevention of Cancer," noted that meaty, high-protein diets were linked with some types of cancer.

Osteoporosis and Kidney Stones:

Diets rich in animal protein cause people to excrete more calcium than normal through their kidneys and increase the risk of osteoporosis. Countries with lower protein diets have lower rates of osteoporosis and hip fractures.

Greater calcium excretion increases the risk for kidney stones. Researchers in

England found that when people added about 5 ounces of fish (about 34 grams of protein) to a normal diet, the risk of forming urinary tract stones increased by as much as 250 percent.

For a long time it was thought that athletes needed much more protein than other people. The truth is that athletes, even those who strength train, 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.

To consume a diet that contains enough, but not too much, protein, simply replace animal products with grains, vegetables, legumes (peas, beans, and lentils), and fruits. As long as one is eating a variety of plant foods in sufficient quantity to maintain one's weight, the body gets plenty of protein.



Egg free!

Many people choose not to use eggs in their diets. About 70 percent of the calories in eggs are from fat, and a big portion of that fat is saturated. Eggs are also loaded with cholesterol—about 213 milligrams for an average-size egg. Because egg shells are fragile and porous and conditions on egg farms are crowded, eggs are the perfect host for salmonella—the bacteria that is the leading cause of food poisoning in this country.

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

- If a recipe calls for just one or two eggs, you can often skip them. Add a couple of extra tablespoons of water for each egg eliminated to balance out the moisture content of the product.
- Eggless egg replacers are available in many natural food stores. These are different from reduced-cholesterol egg products, which do contain eggs. Egg replacers are egg-free and are usually in a powdered form. Replace eggs in baking with a mixture of the powdered egg replacer and water according to package directions.
- Use 1 heaping tablespoon of soy flour or cornstarch plus 2 tablespoons of water to replace each egg in a baked product.
- Use 1 ounce of mashed tofu in place of an egg. Scramble crumbled tofu with onions and peppers seasoned with cumin and/or curry to replace eggs in breakfast dishes.
- In muffins and cookies, half of a mashed banana can be used instead of an egg, although it will change the flavor of the recipe somewhat.
- For vegetarian loaves and burgers, use any of the following to bind ingredients together: tomato paste, mashed potato, moistened bread crumbs, or rolled oats.



Bean burritos: black beans in corn tortillas, topped with chopped lettuce, tomatoes, and salsa, spinach salad with tahini-lemon dressing

Dinner

Chinese stir-fry over brown rice: tofu chunks, broccoli, pea pods, water chestnuts, and Chinese cabbage (bok choy), cantaloupe chunks drizzled with fresh lime juice

Snack

Dried fig

1 cup oatmeal with cinnamon and raisins, ½ cup fortified soymilk, 1 slice toast with 1 tablespoon almond butter, ½ grapefruit

Whole-wheat pita stuffed with hummus, sliced tomatoes, and lettuce, carrot sticks

Dinne

1 cup baked beans, baked sweet potato, 1 cup steamed collard greens drizzled with lemon juice, baked apple

Snack

Banana soymilk shak

calcium in a plant-based diet

where to get it

(content in milligrams)

VEGETABLES

Broccoli (1 cup, boiled)	62
Brussels sprouts (1 cup, boiled)	56
Butternut squash (1 cup, baked)	84
Carrots (2 medium, raw)	40
Cauliflower (1 cup, boiled)	20
Collards (1 cup, boiled)	266
Kale (1 cup, boiled)	94
Sweet potato (1 cup, baked)	76

LEGUMES

LLOOMLS	
Black turtle beans (1 cup, boiled)	102
Chickpeas (1 cup, boiled)	80
Great Northern beans (1 cup, boiled)	120
Kidney beans (1 cup, boiled)	62
Lentils (1 cup, boiled)	38
Navy beans (1 cup, boiled)	126
Pinto beans (1 cup, boiled)	79
Soybeans (1 cup, boiled)	175
Soymilk (1 cup, calcium-fortified)	368
Tofu (1/2 cup, raw, firm)	253
Vegetarian baked beans (1 cup)	86
White beans (1 cup, boiled)	161

WHOLE GRAINS

Corn tortilla	42	
Rice milk (1 cup, enriched)	300	
Wheat bread (1 slice)	26	
Whole-wheat flour (1 cup)	41	

FRUI

Dried figs (10 figs)	140
Naval orange (1 medium)	60
Orange juice (1 cup, calcium-fortified)	300*
Raisins (²/₃ cup)	53

Source: U.S. Department of Agriculture, Agricultural
Research Service. 2004. USDA National Nutrient Database
for Standard Reference, Release 17. Nutrient Data Laboratory
Web site: nal.usda.gov/fnic/foodcomp
* package information

Many people avoid milk because it contains saturated fat, cholesterol, allergenic proteins, lactose, and frequent traces of contamination, or simply because they don't feel well after consuming dairy products.

Milk is also linked to type 1 (juvenileonset) diabetes and other serious conditions. Happily, there are many 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.

Some cultures consume few or no dairy products and typically ingest fewer than 500 milligrams of calcium per day. 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 does.

CALCIUM IN THE BODY

Almost all of the calcium in the body is in the bones. There is a tiny amount in the bloodstream, which is responsible for important functions such as muscle contraction, maintenance of the heartbeat, and transmission of nerve impulses.

We regularly lose calcium from our bloodstream through urine, sweat, and feces. It is renewed with calcium from bone or from the diet.

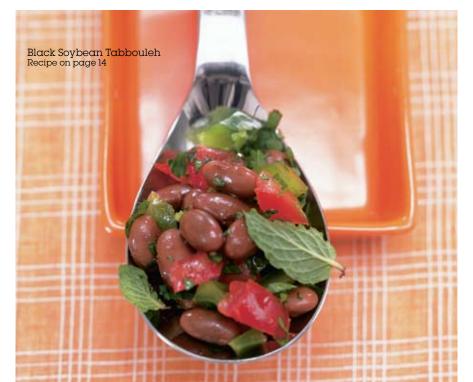
Bones are constantly broken down and made anew. Up until the age of 30 or so, we build more bone than we lose. Later, the bones tend to break down more than build up. The loss of too much bone calcium can lead to fragile bones or osteoporosis.

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 from the body:

- 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 eaters.
- Diets high in sodium increase calcium losses in the urine.
- Caffeine increases the rate at which calcium is lost through urine.
- Smoking increases the loss of calcium from the body.



A number of factors increase bone building in the body:

- Exercise is one of the most important factors in maintaining bone health.
- Exposure to sunlight allows the body to make the bone-building hormone vitamin D.
- Eating plenty of fruits and vegetables helps to keep calcium in bone.
- Consuming calcium from plant-based sources, especially green vegetables and beans, provides one of the building blocks for bone building.

SOURCES OF CALCIUM

Exercise and a diet moderate in protein will help to protect your bones. People who eat plant-based diets and are active probably have lower calcium needs. However, it is still important to eat calcium-rich foods every day.

The "Where to Get It" chart on page 6 gives the amount of calcium found in some excellent plant sources. A quick glance shows how easy it is to meet calcium needs. The sample menus on page 5 each provide approximately 1,000 milligrams of calcium.



dairy free!

If you are curious whether dairy foods are contributing to your allergies, skin problems, asthma, stomach upset, gas, diarrhea, or constipation, or you'd like to see how your body feels when it is dairy-free, just give it a try for three weeks. It takes about three weeks to break or create a habit. And in that short time, many people experience major benefits, such as a drop in blood cholesterol levels, weight loss, relief from allergies, asthma, indigestion, or chronic stomach problems. Here are some simple ideas to get you started:

- Top your oats or cold cereal with fortified rice or almond milk.
- Make smoothies with enriched vanilla soymilk or drink an ice cold glass of your favorite soymilk with your meal or snack.
- "Leave off the cheese, please."
 Order your entrée or salad with no cheese. Many dishes can be easily made cheese-free. Ask for guacamole, rice, or extra salsa in your burrito or on your tostada instead of the cheese. Put more vegetables on a dinner salad or add some beans, nuts, or baked tofu chunks instead of cheese.
- Most recipes calling for milk can be made with soymilk instead. If it's a soup or other savory dish, be sure to purchase plain soymilk for cooking.
- Make creamy dips and desserts using silken tofu in place of sour cream or cream cheese.
- Sprinkle nutritional yeast on popcorn or pasta for a cheesy flavor instead of Parmesan.

what about milk?

- Calcium: Green vegetables, such as kale and broccoli, are better than milk as calcium sources.
- Fat content*: Dairy products—other than skim varieties—are high in fat, as a percentage of total calories.
- Iron deficiency: Milk is very low in iron. To get the U.S. Recommended Dietary Allowance of 11 milligrams of iron, an infant would have to drink more than 22 quarts of milk each day. Milk also causes blood loss from the intestinal tract, depleting the body's iron.
- Diabetes: In a study of 142 children with diabetes, 100 percent had high levels of an antibody to a protein in cow's milk. It is believed that these antibodies may destroy the insulin-producing cells of the pancreas.

- Contaminants: Milk is frequently contaminated with antibiotics and contains excess vitamin D. In one study of 42 milk samples tested, only 12 percent were within the expected range of vitamin D content. Of ten samples of infant formula, seven had more than twice the vitamin D content reported on the label, and one had more than four times the label amount.
- Lactose: Three out of four people from around the world, including an estimated 25 percent of individuals in the United States, are unable to digest the milk sugar lactose, which then causes diarrhea and gas. The lactose, when it is digested, releases galactose, a simple sugar that is linked to ovarian cancer and cataracts.

- Allergies: Milk is one of the most common causes of food allergy. Often the symptoms are subtle and may not be attributed to milk for some time.
- Colic: Milk proteins can cause colic, a digestive upset that bothers one in five infants. Milk-drinking mothers can also pass cow's milk proteins to their breast-feeding infants.

Fat Content of Dairy Products*

*based on percentage of calories from fat

Source	Percentage	
Butter	100%	
Cheddar chees	e 74%	
Whole milk	49%	
"2%" milk	35%	
(It is 2% fat only by	v weight.)	

the DCV four food groups

*Be sure to include a good source of vitamin B_{12} , such as fortified cereal or a vitamin supplement.

Many of us grew up with the USDA's old "basic four" food groups, first introduced in 1956.

The passage of time has seen an increase in our knowledge about the importance of fiber, the health risks of cholesterol and fats, and the disease-preventive power of many nutrients found exclusively in plant-based foods. We also have discovered that the plant kingdom provides excellent sources of the nutrients once only associated with meat and dairy products—namely, protein and calcium.

The USDA revised its recommendations with the Food Guide Pyramid, a plan that reduced the prominence of animal products and vegetable fats. But because regular consumption of such foods—even in lower quantities—poses serious health risks, PCRM developed the New Four Food Groups in 1991. This no-cholesterol, low-fat plan supplies all of an average adult's daily nutritional requirements, including substantial amounts of fiber.

The major killers of Americans—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 Groups recommendations.

Try the New Four Food Groups and discover a more healthful way to live!

FRUIT····· 3 or more servings a day Fruits are rich in fiber, vitamin C, and beta-carotene. Be sure to include at least one serving each day of fruits that are high in vitamin C-citrus fruits, melons, and strawberries are all good choices. Choose whole fruit over fruit juices, which do not contain much fiber.

serving size: 1 medium piece of fresh fruit, ½ cup cooked fruit, 4 ounces juice





LEGUMES

2 or more servings a day

Legumes, which is another name for beans, peas, and lentils, are all good sources of fiber, protein, iron, calcium, zinc, and B vitamins. This group also includes chickpeas, baked and refried beans, soymilk, tempeh, and texturized vegetable protein.

serving size: 1/2 cup cooked beans, 4 ounces tofu or tempeh, 8 ounces soymilk

VEGETABLES

4 or more servings a day

Vegetables are packed with nutrients; they provide vitamin C, beta-carotene, riboflavin, iron, calcium, fiber, and other nutrients. Dark green leafy vegetables such as broccoli, collards, kale, mustard and turnip greens, chicory, or cabbage are especially good sources of these important nutrients. Dark yellow and orange vegetables such as carrots, winter 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, 1/2 cup cooked vegetables

WHOLE GRAINS

5 or more servings a day

This group includes bread, rice, tortillas, pasta, hot or cold cereal, corn, millet, barley, and bulgur wheat. Build each of your meals around a hearty grain dish—grains are rich in fiber and other complex carbohydrates, as well as protein, B vitamins, and zinc.

serving size: ½ cup rice or other grain, 1 ounce dry cereal, 1 slice bread





chieving and maintaining a healthy weight

Of the many ways to lose weight, one stands out as by far the most healthful.

When you build your meals from a generous array of vegetables, fruits, whole grains, and beans—that is, healthful vegetarian choices—weight loss is remarkably easy. And along with it come major improvements in cholesterol, blood pressure, blood sugar, and many other aspects of health. The message is simple: Cut out the foods that are high in fat and devoid of fiber, and increase the foods that are low in fat and full of fiber. This low-fat, vegan diet approach is safe and easy—once you get the hang of it.

Changing eating habits is the cornerstone of achieving and maintaining a healthy weight. There is no way to "lose 20 pounds in two short weeks" and make it last. Very-low-calorie diets or low-carbohydrate, high-protein diets may cause major health problems and are very difficult to maintain for the long term.

The old myth was that pasta, bread, potatoes, and rice are fattening. Not true. In fact, carbohydrate-rich foods are perfect for permanent weight control. Carbohydrates contain fewer than half the calories of fat, which means that replacing fatty foods with complex carbohydrates automatically cuts calories. But calories are only part of the story.

The body treats carbohydrates differently than fat calories. The difference comes from how the body stores the energy of different food types. It is very inefficient for the body to store the energy of carbohydrates as body fat. When your body tries to turn carbohydrate into fat, it wastes 23 percent of the calories of the carbohydrate. But fat is easily converted into body fat. Only 3 percent of the calories in fat are burned in the process of conversion and storage. It is the type of food that affects body fat the most.

Although protein and carbohydrates have almost the same number of calories per gram, foods that are high in protein—particularly animal products are also usually high in fat. Even "lean" cuts of meat have much more fat than a healthy body needs. And animal products always lack fiber. Fiber helps make foods more satisfying without adding many calories, and it is only found in foods from plants.

Exercise helps, too. Aerobic exercise speeds up the breakdown of fat and makes sure that muscle is not lost. Toning exercises and weight lifting help firm muscles and increase muscle mass. The trick is to find activities that you enjoy and that fit your lifestyle. Walking is a good way to start. You can do it anywhere at just about any time.

The best weight control program is a high-complex-carbohydrate, low-fat, vegetarian diet complemented by regular exercise. This is the best choice for a healthier, longer, happier life.

the veganizer see how to change your regular meals into low-fat vegan meals.

If your regular breakfast is:	Try this breakfast instead:	If your typical lunch is:	Try this lunch instead:
Cereal with milk Orange juice Strawberries	Cereal with nonfat soy- or rice milk Orange juice Strawberries	Turkey sandwich with lettuce, tomato, and mayo Yogurt	Sandwich with hummus or black bean spread, lettuce, and tomato Applesauce
Donut Coffee with cream Banana	Cinnamon raisin toast with jam Coffee with nonfat, nondairy creamer Banana	Potato chips Chicken noodle soup Bread Green salad with Russian dressing Last night's leftovers (roast beef, mashed potatoes, gravy, and peas) Orange	Fat-free chips or crackers Vegetable soup or minestrone Bread
Scrambled eggs Home fries English muffin Sausage Hot tea	Scrambled low-fat tofu Oven-roasted potatoes English muffin Gimme Lean fat-free sausage Hot tea		Creen salad with fat-free dressing Last night's leftovers (veggie burger, mashed potatoes, mushroom gravy, corn, and peas) Orange
Bagel with cream cheese Latte	Bagel plain or with fruit spread Soy latte made with nonfat soymilk	Chicken burrito Rice Refried beans	Seasoned tofu and sweet potato burrito with lettuce, tomato, and onion (hold the cheese) Rice Vegetarian black beans

vegetarian diet for **pregnancy**

During pregnancy your need for nutrients increases. For example, you will require more calcium, more protein, and more folic acid, although your calorie needs increase only modestly. 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.

GUIDELINES FOR GOOD HEALTH DURING PREGNANCY

- Begin a healthful diet before you become pregnant. Your body's store of nutrients supports the early growth and development of your baby.
- Maintain a steady rate of weight gain.
 Aim for about three to four pounds total during the first trimester and then about three to four pounds each month during the second and third trimesters.
- See your health care provider regularly.
- Limit 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: All of the new four food groups include foods that are rich in calcium. Be certain to include plenty of calcium-rich foods in your diet. These include tofu, dark green leafy vegetables,

kale, broccoli, beans, figs, sunflower seeds, tahini, almond butter, calciumfortified soymilk (try Silk or Vitasoy brands or others that use whole organic soybeans), and calcium-fortified cereals and juices.

Vitamin D: The normal source of vitamin D is sunlight. You'll want to get at least 20 to 30 minutes of direct sunlight on your hands and face two to three times weekly.

If you do not get regular sunlight, vitamin D is also available in multiple vitamins and in fortified foods. Many brands of ready-to-eat cereals and soyand rice milks are fortified with vitamin D.

Vitamin B₁₂: Vitamin B₁₂ is not found in most plant foods. To get enough of this important nutrient, be certain to include vitamin B₁₂-fortified foods in your daily routine. These foods include many breakfast cereals, some meat substitute products, some brands of soymilk, and Vegetarian Support Formula nutritional yeast. Be certain to



check the ingredient label for cyanoco-balamin, the most absorbable form of vitamin B_{12} . Seaweed and products like tempeh are generally not reliable sources of vitamin B_{12} . Vitamin B_{12} is also in all standard multivitamins and in vegetarian supplements.

diets. Beans, dark green vegetables, dried fruits, blackstrap molasses, nuts and seeds, and whole grain or fortified breads and cereals all contain plenty of iron. However, women in the second half of pregnancy sometimes need to take a supplement regardless of the type of diet they follow. Your health care provider will discuss iron supplements with you.

A word about protein... Protein needs increase by about 30 percent during pregnancy. While there may be concern over whether protein intake is adequate at such an important time, most vegetarian women eat more than enough protein to meet their needs during pregnancy. With ample consumption of protein-rich foods such as legumes, nuts, seeds, vegetables, and whole grains, protein needs can easily be met during pregnancy.

BREAST-FEEDING

The guidelines for breast-feeding mothers are similar to those for pregnant women. Milk production requires more calories, so you will need to boost your food intake a little bit.

If your typical dinner is:

Fettuccine alfredo or spaghetti with meatballs

Green salad with ranch dressing Garlic bread with butter Butter-pecan ice cream

Broiled salmon

Boiled new potatoes with Parmesan cheese Asparagus with hollandaise

Hot and sour soup Beef and broccoli

Chicken fajita Rice Refried beans

Rice

Try this dinner instead:

Pasta primavera with mixed vegetables and garlic or spaghetti with marinara sauce Green salad with fat-free balsamic vinaigrette Toasted French bread without butter Chocolate sorbet

Broiled portobello mushrooms Boiled new potatoes with basil and black pepper Asparagus with orange sauce

Vegetarian tofu soup Stir-fried Chinese vegetables (hold the oil) Broccoli with garlic sauce Lots of rice

Vegetable fajita (hold the oil) Rice Vegetarian black beans

vegetarian diets for

Eating habits are set in early childhood. Vegetarian diets give your child the chance to learn to enjoy a variety of wonderful, nutritious foods. They provide excellent nutrition for all stages of childhood, from birth through adolescence.

INFANTS

The best food for newborns is breastmilk, and the longer your baby is breastfed, the better. If your baby is not being breast-fed, soy formulas are a good alternative and are widely available. Do not use commercial soymilk for infants. 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 six months of life, and they should continue to receive breast milk or formula at least throughout their first 12 months. Breast-fed infants also need about two hours a week of sun exposure to make vitamin D-a great motivator for Mom to get back into a walking routine. Some infants, especially those who are dark-skinned or who live in cloudy climates, may not make adequate amounts of vitamin D. In these cases, vitamin D supplements may be necessary.

Vegetarian women who are breastfeeding should also be certain to include good sources of vitamin B₁₂ in their diets, as intake can affect levels in breast milk. Foods fortified with cyanocobalamin, the active form of vitamin B₁₂, can provide adequate amounts of this nutrient. A multivitamin may also be

taken as directed by your doctor. Breast milk or infant formula should be used for at least the first year of your baby's

At about 6 months of age, or when baby's weight has doubled, other foods can be added to the diet. Pediatricians often recommend starting with an ironfortified cereal because, at about 4 to 6 months, infants' iron stores, which are naturally high at birth, begin to decrease. Add one simple 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.



• Introduce iron-fortified infant cereal. Try rice cereal first, mixed with a little breast milk or soy formula, since it is the least likely to cause allergies. Then, offer oat or barley cereals. Most pediatricians recommend holding off on introducing wheat until the child is at least 8 months old, as it tends to be more allergenic.

6 TO 8 MONTHS

• Introduce vegetables. They should be thoroughly cooked and mashed. Potatoes, green beans, carrots, and

peas are all good choices.

- Introduce fruits. Try mashed bananas, avocados, strained peaches, or applesauce.
- Introduce breads. By 8 months of age, most babies can eat crackers, bread, and dry cereal.
- Introduce protein-rich foods. Also, by about 8 months, infants can begin to eat higher protein foods like tofu or beans that have been cooked well and mashed.

CHILDREN AND TEENS

Children have a high calorie and nutrient need but their stomachs are small. Offer your child frequent snacks.

Teenagers often have high energy needs and busy schedules. Keeping



delicious, healthful snack choices on hand and guiding teens to make lower fat selections when eating out will help to steer them away from dining pitfalls that often cause weight gain and health problems for adolescents.

Caloric needs vary from child to child. The guidelines at right are general ones.

food groups

WHOLE GRAINS

- Whole grains include breads, hot and cold cereals, pasta, cooked grains such as rice and barley, and crackers.
- One serving equals ½ cup of pasta, grains, or cooked cereal, ¾ to 1 cup of ready-to-eat cereal, ½ bun or bagel, or 1 slice of bread.

VEGETABLES

- "Dark green vegetables" include broccoli, kale, spinach, collards, turnip, mustard and beet greens, bok choy, and Swiss chard.
- "Other vegetables" refers to all other vegetables, fresh or frozen, raw or cooked.
- One serving of vegetables equals ½ cup cooked or 1 cup raw (unless an amount is specified).

LEGUMES

- Legumes include any cooked bean, such as pinto beans, kidney beans, lentils, split peas, navy beans, and chickpeas, as well as soy products such as tofu, veggie burgers, soy "hot dogs" or sandwich slices, and tempeh.
- One serving of legumes equals ½ cup

- of beans, tofu, or other item (unless an amount is specified).
- Nondairy milks include breast milk and soy formula for infants and toddlers, and rice, soy-, and other vegetable-based milks for children at least 1 year of age. Choose fortified soymilk, such as Westsoy Plus, Enriched VitaSoy, or Edensoy, whenever possible, or use other fortified vegetable-based milks.
- One serving of nondairy milk equals 1 cup.
- Nuts include whole or chopped nuts, nut butters, whole seeds, and seed
- One to two servings of nuts may be included in a healthful diet, but they are optional. One serving of nuts or nut butters equals 1 tablespoon.

FRUIT

- Fruits include all fruits, fresh or frozen, raw or cooked, and fruit juices.
- One serving equals ½ cup cooked fruit, ½ cup fruit juice, ¼ cup dried fruit, or 1 piece of fresh fruit (unless an amount is specified).

SAMPLE

AGES 1 TO 4 YEARS

BREAKFAST: Oatmeal with applesauce, calcium-fortified orange juice
LUNCH: Hummus on crackers, banana, soymilk, carrot sticks

DINNER: Corn, mashed sweet potatoes, steamed kale, soymilk

SNACKS: Peach, Cheerios, soymilk

AGES 5 TO 6 YEARS

BREAKFAST: Whole-grain cereal with banana and soymilk, orange wedges LUNCH: Tofu-salad sandwich, apple juice, carrot sticks, oatmeal cookie DINNER: Baked beans with soy "hot dog" pieces, baked potato, spinach, soymilk, fruit salad SNACKS: Trail mix, graham crackers, soymilk

AGES 7 TO 12 YEARS

BREAKFAST: Strawberry-banana smoothie, toast with almond butter, calcium-fortified orange juice
LUNCH: Main-Dish Lentil-Vegetable
Soup, green salad, bread
DINNER: Steamed broccoli with nutritional yeast, steamed carrots, oven fries, Lower Calorie Peanut Butter Cookies, soymilk

SNACKS: Popcorn, figs, soy "ice cream"

AGES 13 TO 19 YEARS

BREAKFAST: Bagel with apple butter, banana, calcium-fortified orange juice LUNCH: Bean burrito with lettuce, tomato, and guacamole; rice, baked tortilla chips, and salsa DINNER: Braised broccoli, carrots, yellow squash, and mushrooms; spaghetti with marinara sauce; cucumber salad; soymilk

SNACKS: Hummus and baby carrots, fruit smoothie, Luna or Clif Bar

daily meal planning

	1-TO 4-YEAR-OLDS	5-TO 6-YEAR-OLDS	7 - TO 12-YEAR-OLDS	13-TO 19-YEAR-OLDS
GRAINS	4 servings	6 servings	7 servings	10 servings
CHICK TO THE PROPERTY OF THE P	2 to 4 tablespoons dark green vegetables 1/4 to 1/2 cup other vegetables	1/4 cup dark green vegetables 1/4 to 1/2 cup other vegetables	1 serving dark green vegetables 3 servings other vegetables	1 to 2 servings dark green vegetables 3 servings other vegetables
	⅓ to ⅓ cup	1/2 to 1 cup legumes 3 servings soymilk or other nondairy milk	2 servings legumes 3 servings soymilk or other nondairy milk	3 servings legumes 2 to 3 servings soymilk or other nondairy milk
2	³ /4 to 1 ¹ /2 cups	1 to 2 cups	3 servings	4 servings



Banana Buckwheat Pancakes

Serves 6 (makes 18 3-inch pancakes) • Vegan

Egg replacer keeps these breakfast treats tender without dairy or extra oil.

2 cups plain soymilk, divided
2 tsp. fresh lemon juice
1 cup buckwheat flour
1 cup flour
1½ tsp. baking powder
½ tsp. salt
¼ tsp. baking soda
2 tsp. egg replacer powder
2 Tbs. canola oil
1 Tbs. maple syrup, plus more for serving
2 bananas, thinly sliced

- **1.** Mix 1³/₄ cups soymilk with lemon juice in small bowl. Let stand 5 minutes.
- **2.** Combine flours, baking powder, salt and baking soda in medium bowl.
- **3.** Whisk egg replacer and remaining ½ cup soymilk in small bowl. Add to soymilk mixture. Whisk in oil and syrup.
- **4.** Stir flour mixture into soymilk mixture. Fold in bananas.
- **5.** Lightly oil griddle, and heat over medium heat. Pour 2 Tbs. batter onto griddle for each pancake, and cook 2 minutes, or until batter bubbles and pancakes begin to brown around edges. Flip, and cook 2 minutes more. Serve with maple syrup.

PER SERVING: 258 CAL; 8 G PROT; 7 G TOTAL FAT (0.5 G SAT. FAT); 44 G CARB; 0 MG CHOL; 412 MG SOD; 4 G FIBER; 9 G SUGAR

recipes

Enchiladas in an Instant

Serves 6 • Vegan • 30 minutes or fewer

The stir-together filling of these healthful enchiladas gets a fresh flavor boost from diced red onion and chopped cilantro. Makes 12 enchiladas.

- 2 15-oz. cans black beans, drained and rinsed
- 1 cup frozen corn kernels
- ³/₄ cup prepared salsa, divided
- 1/2 cup diced red onion
- 12 8-inch flour tortillas, preferably whole-wheat
- 1 Hass avocado, peeled and diced2 Tbs. chopped cilantro
- **1.** Combine, beans, corn, 3 Tbs. salsa and onion in large bowl. Season to taste with salt and pepper.
- **2.** Spread about 1/3 cup filling across top third of each tortilla. Roll up, and set seam-side down on microwavable platter. Repeat to assemble remaining enchiladas.
- **3.** Spread a thick ribbon of salsa along the length of each tortilla. Heat in microwave on high power 3 to 5 minutes, or until hot. Sprinkle with diced avocado and cilantro, and serve. PER SERVING: 325 CAL; 12.5 G PROT; 5 G TOTAL FAT (0.5 G SAT. FAT); 61 G CARB; 0 MG CHOL; 933 MG SOD; 33 G FIBER; 4 G SUGAR





Black Soybean Tabbouleh

Serves 4 • Vegan • 30 minutes or fewer

Canned black soybeans, high in protein and fiber, replace the traditional bulgur. Combining them with crunchy, highfiber fresh veggies makes a perfect lunch.

- 1 15-oz. can black soybeans, rinsed and drained
- 2 large plum tomatoes, seeded and chopped
- 1 medium-size green bell pepper, seeded and chopped
- 1 packed cup chopped Italian parsley leaves

Juice of 1 lemon

1 tsp. salt

1/8 tsp. cayenne pepper, or to taste

- 1 Tbs. extra virgin olive oil
- 1 packed cup mint leaves, cut into thin strips
- **1.** Combine soybeans, tomatoes, bell pepper and parsley in mixing bowl.
- **2.** In small bowl, whisk lemon juice with salt and cayenne. Mix in oil. Pour over bean mixture; toss well. Mix in mint. Let sit 20 minutes so flavors meld. Will keep in refrigerator 24 hours, tightly covered.

PER SERVING: 180 CAL; 12 G PROT; 5 G TOTAL FAT (0.5 G SAT. FAT); 20 G CARB; 0 MG CHOL; 650 MG SOD; 10 G FIBER; 3 G SUGAR



Asian Pear Salad with Fennel and Pistachios

Serves 6 • Vegan • 30 minutes or fewer

To slice an Asian pear into matchsticks, stand it on a cutting board and cut it into thin slices on each side of the core. Lay the slices flat on top of one another and cut into thin strips.

- 4 Asian pears, cut into matchsticks (3 cups)
- 1 bunch watercress, trimmed (2 cups)
- 1 medium-size fennel bulb, thinly sliced (2 cups)
- 1 small red bell pepper, diced (1 cup)
- 4 green onions, sliced (1/4 cup)
- ¹/₄ cup chopped pistachios
- 3 Tbs. fresh lime juice
- 2 Tbs. vegetable oil
- **1.** Combine pears, watercress, fennel, bell pepper, green onions, and pistachios in large salad bowl.
- **2.** Whisk together lime juice and vegetable oil in small bowl. Season with salt and pepper. Add dressing to salad, and toss to coat. Adjust seasonings if necessary, and serve.

PER SERVING: 127 CAL; 3 G PROT; 7 G TOTAL FAT (1 G SAT. FAT); 16 G CARB; 0 MG CHOL; 125 MG SOD; 3 G FIBER; 2 G SUGAR

Main-Dish Lentil-Vegetable Soup

Serves 4 • Vegan

This flavorful soup with its protein-rich lentils is substantial enough to enjoy as a main dish. One note: Even though most lentils today are picked clean, sort through them just in case to remove any debris. To add some greens with no extra cooking, chop some baby spinach, and stir it in just before serving. The heat from the soup will just wilt the spinach.

- 1 Tbs. olive oil
- 1 medium-size yellow onion, chopped
- 2 cloves garlic, minced
- 2 to 3 carrots, peeled and cut into ¹/₄-inch dice
- 1 parsnip, peeled and cut into 1/4-inch dice
- 1 small celery root, peeled and cut into 1/4-inch dice
- 1 1/4 cups dried brown lentils, sorted and rinsed
- 6 cups low-sodium vegetable broth or water
- 1 Tbs. low-sodium tamari minced fresh parsley for garnish
- **1.** Heat oil in a 5- to 6-quart pot over medium heat. Add onion and garlic. Cover, and cook 5 minutes to soften. Add carrots, parsnip, celery root, lentils, broth, tamari, and season with salt and pepper.
- 2. Reduce heat to low. Cover and cook, stirring from time to time, until lentils and vegetables are tender, 1 to 1½ hours. Taste and adjust seasonings, if necessary. Garnish with parsley, and serve.

PER SERVING: 360 CAL; 19 G PROT; 4.5 G TOTAL FAT (0.5 G SAT. FAT); 65 G CARB; 0 MG CHOL; 450 MG SOD; 19 G FIBER; 12 G SUGAR

Lower Calorie Peanut Butter Cookies

Makes about 60 cookies • Vegan 30 minutes or fewer

These are very tender cookies, and they break easily, so handle carefully.

- 1 cup creamy, well-stirred peanut butter, preferably all-natural
- 1 cup apple juice concentrate, thawed and undiluted
- ¹/₂ cup sucralose-type sweetener
- 2 tsp. vanilla extract
- 1 cup whole-wheat flour
- 11/2 tsp. baking soda
- **1.** Preheat oven to 350°F. Lightly spray 2 baking sheets with cooking spray, or line with baking parchment, and set aside.
- **2.** Mix peanut butter, apple juice, sweetener, and vanilla until blended but not smooth. In second bowl, whisk together flour and baking soda, and fold into peanut butter mixture. Stir until thick. Drop dough by rounded teaspoons onto baking sheets, about 2 inches apart. Use fork dipped in flour to make crisscross marks on top of each cookie.
- **3.** Bake 12 minutes, or until light brown. Remove from oven; cool on sheets.

PER COOKIE: 40 CAL; 1 G PROT; 2 G FAT (0 G SAT. FAT); 5 G CARB; 0 MG CHOL; 50 MG SOD;



For more recipes, visit vegetariantimes.com.

Vegetarian starter kit

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Note to the Reader: This booklet does not take the place of individualized medical care or advice. If you are overweight, have any health problems, or are on medication, you should consult with your doctor before making any changes in your diet or exercise routines. A diet change can alter your need for medication. For example, individuals with diabetes, high blood pressure, or high cholesterol levels often need less medication when they improve their diets. With any dietary change, it is important to ensure complete nutrition. Be sure to include a source of vitamin B_{12} in your routine, which could include any common multivitamin, fortified soymilk or cereals, or a vitamin B_{12} supplement of 5 micrograms or more per day.

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