

VEGETARIAN DIETS

Build On The Basics



Vegetarian diets are very common today. This practice has existed through history and continues today in many parts of the world. While being vegetarian means different things to different people, there is a common thread. Vegetarians eat diets based on plants, and avoid one or more of the following: meat, poultry, fish, milk, and eggs.

People are vegetarians for different reasons. These range from food availability to cultural practices, religious or philosophical beliefs, ecological concerns, and economics. Health concerns also may play a factor in choosing a vegetarian lifestyle. Studies have shown a positive link between vegetarian eating and health. In general, the incidence of some health problems, including heart disease, high blood pressure, Type 2 diabetes, cancer, high cholesterol and obesity tend to be lower in vegetarians. However, being vegetarian doesn't ensure healthy eating. Poorly planned, the chance for some nutritional deficiencies can go up.

What's in Vegetarian Diets?

Most vegetarians rely heavily on whole grains, fruits and vegetables and avoid red meat. Vegetarian diets vary considerably. Vegetarian diets are often classified by the foods they include.

- Vegans or total vegetarians avoid all animal products and include only plant food.
- Lacto-vegetarians consume dairy products and plant foods, and avoid all animal products including eggs.
- Ovo-Vegetarians include eggs and plant foods.
- Lacto-ovo-vegetarians eat dairy products, eggs, and plant foods, but avoid fowl, fish and red meat.
- Semi-vegetarians avoid red meat, but may include fish or poultry, dairy, eggs and plant foods.

Variety for Taste and Nutrition

Whether you follow a semi-vegetarian eating plan, a vegan regime, or something in between, it's never been easier to enjoy a vegetarian diet than it is today. Interest in this eating style has led many companies to develop many products geared to American tastes and lifestyles. You don't have to give up your burgers, but rather consume soy, bean or grain based patties. If you can't imagine life without hot

dogs or sausage, tofu now has versions of these favorites.

Supermarkets and specialty health food stores carry a wide range of products that can make a vegetarian lifestyle both easy and delicious. Stay flexible and creative. As with any eating plan, the key is to eat a variety of foods every day and to choose the recommended number of servings from the groups listed in the Daily Food Guide for Vegetarians, adapted from the Food Guide Pyramid.

Teens often experiment with vegetarian diets, which may lead to unhealthy eating behaviors. Parents need to watch and make sure their child is getting proper nutrition, rather than overly restrictive diets and those that cause unhealthy weight loss.

How many servings?

The number of food group servings that are right for you depends on your calorie needs. These are based on your age, activity level, health status and body size. Aim for a calorie intake that will help you maintain or achieve a healthy body weight. It is important to stay hydrated, so make sure to drink plenty of fluids. Also, consume alcohol in moderation.

Note: Teens and pregnant or lactating women may need the higher number of servings from each food group to be sure they get enough nutrients.

If you're not sure about your calorie needs or a healthy body weight, a registered dietitian can help you develop a personal plan.

Attention, Please!

Nutrients that require special attention in vegetarian diets are protein, calcium, iron, zinc, vitamin B-12 and vitamin D.

Protein

You may not get enough protein if you don't eat meat, dairy foods, or eggs. You will, however, if you eat a variety of grains, beans and vegetables each day.

Calcium

Vegetarians who eat no dairy products must get calcium from other foods. Try green, leafy vegetables, like spinach or collard greens, broccoli, figs, fortified soy, tofu (made from calcium sulfate), and calcium-fortified orange juice.

Iron

Many vegetarians don't get enough iron. Fortified cereals, beans, spinach, chard, blackstrap molasses, bulgar and

dried fruit are all good sources of iron. Eat these foods high in vitamin C and your body will absorb more iron. Good sources of vitamin C are orange juice, vegetable juice, greens and kiwi.

Zinc

Without meat, poultry and seafood, vegetarians may become zinc deficient. Whole grains, germ, bran, legumes (such as white or kidney beans), tofu, seeds and nuts are high in zinc. Dairy foods also contain zinc for those lacto-ovo-vegetarians.

Vitamin B12

Vitamin B12 is found only in animal foods. Look for vitamin B12 fortified foods. Breakfast cereals, breads and pasta are good choices.

Vitamin D

To make sure you get enough vitamin D, eat dairy foods like milk, yogurt, cheese, and vitamin D fortified foods. You also make vitamin D when the sun hits your skin.

Watch Fats and Calories

Vegetarian diets are not necessarily low in fats and calories. Build your eating plan around lower-fat, high-nutrient choices from the Vegetarian Food Guide. Add flavor with moderate use of high-fat accents such as shredded cheese, chopped egg, nuts and seeds, or try some of these combinations and create your own.

- Pile extra vegetables on top of cheese pizza
- Toss grapes into a pasta with cheese or shrimp.
- Top a baked potato with salsa and cottage cheese.
- Stir-fry your favorite vegetables with



some tofu.

- Spicy red beans and rice make a great main dish. Serve with your favorite fruit or vegetable.
- Stir grapes or bananas into your favorite low-fat yogurt.
- Dried beans or split peas make great soup. Follow package instructions, then serve with a whole grain roll and some fruit.
- Stuff a tortilla with beans, brown rice and salsa for a filling main dish.
- Add canned beans and some fruit to a veggie salad to make a great meal.



The Last Word

Follow the basics and let your diet work for you. Be sure it provides essential nutrients and adequate calories to support your lifestyle. Make wise choices from each food group and select an appropriate number of daily servings to achieve that right balance of carbohydrates, fat and protein.

References

- Vegetarian diet: How to get the best nutrition. Mayo Clinic, Jan 5, 2008. <http://www.mayoclinic.com/health/vegetarian-diet/HQ01596>
- Vegetarian Diets. American Heart Association, 2008. <http://www.americanheart.org/presenter.jhtml?identifier=4777>
- Calcium in the Vegan Diet. The Vegetarian Resource Group, March 28, 2006. <http://www.vrg.org/nutrition/calcium.htm>
- Iron in the Vegan Diet. The Vegetarian Resource Group, April 26, 2006. <http://www.vrg.org/nutrition/iron.htm>

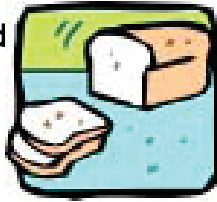
Any products, services, or organizations that are mentioned, shown, or indirectly implied in this publication do not imply endorsement by The University of Arizona.

A Daily Food Guide for Vegetarians

Bread, Cereal, Rice and Pasta Group

6 – 11 servings

1 slice bread; ½ bagel, pita pocket or English muffin; ½ cup cooked cereal, rice or pasta; 1 oz ready-to-eat cereal; 3 – 4 crackers; 1 tortilla



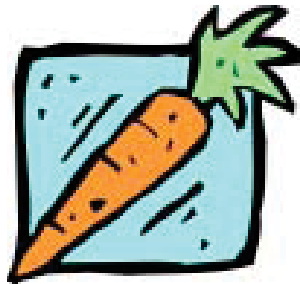
- Include some whole-grain choices for fiber
- Pack crackers for complex carbohydrates on the go.

Vegetable Group

3 – 5 servings

½ cup cooked or chopped vegetables; 1 cup raw leafy vegetables; ¾ cup juice

- Eat dark-green leafy or deep-orange vegetables often.
- Use fresh, frozen, canned and dried vegetables for year-round variety.



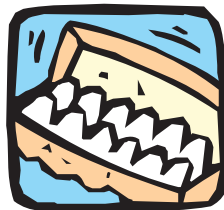
Dry Beans, Nuts, Seeds, Eggs (optional) and Meat Alternatives

2 – 3 servings

½ cup cooked dry beans†, peas† or lentils†; 1 oz nuts or seeds†; 2 tablespoons peanut butter†; 1 egg†; 2 egg whites†; or ¼ cup egg substitute†; 4 oz tofu; 1 cup soy milk or 1 ½ oz soy cheese; 3 oz vegetarian “burger” patty

- Use beans, peas and lentils in soups, pasta dishes or sandwich fillings
- Snack on nuts or add them to muffins, salads and stir-fries.

† Count each of these as about ½ of a serving.



Milk, Yogurt and Cheese (optional*)

2 – 4 servings

1 cup milk or yogurt; 1-1/2 oz natural cheese or 2 oz process cheese



- Select lower-fat or nonfat dairy products most of the time.
- Prepare soups with milk or top casseroles with grated cheese for calcium.

*If you avoid milk products, select other food sources of calcium. Try calcium-fortified foods, calcium-processed tofu, legumes, almonds and some dark-green vegetables, such as broccoli, kale, collards or mustard greens.

*Women who are pregnant or breast-feeding, teenagers and young adults to age 24 need three to four servings.

Fruit Group

2 – 4 servings

1 medium fresh fruit (orange, banana); ½ cup chopped, cooked or canned fruit; ¾ cup juice

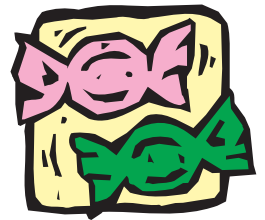


- Enjoy vitamin C-rich citrus fruits, melons or berries daily.
- Choose some whole fruits; they have more fiber than juice.

Fats, Oils and Sweets

Use in moderation

Vegetable oils, margarine products, mayonnaise, salad dressings; soft drinks, candies, jellies.



- Choose Vegetable oils and soft margarine products most often. They are lower in saturated fat than solid shortenings.
- Try some lower-fat or lower-calorie versions of foods in this group.



THE UNIVERSITY OF ARIZONA
COLLEGE OF AGRICULTURE AND LIFE SCIENCES
TUCSON, ARIZONA 85721

SCOTTIE MISNER, Ph.D., R.D.
Associate Nutrition Specialist

CAROL CURTIS, M.S.
Department of Nutritional Sciences

EVELYN WHITMER, M.S.
Associate Agent, FCS/EFNEP/FSNEP

CONTACT:
SCOTTIE MISNER
misner@ag.arizona.edu

This information has been reviewed by university faculty.
cals.arizona.edu/pubs/health/az1231.pdf

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, James A. Christenson, Director, Cooperative Extension, College of Agriculture & Life Sciences, The University of Arizona.

The University of Arizona is an equal opportunity, affirmative action institution. The University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, veteran status, or sexual orientation in its programs and activities.