

The vegan food pyramid is an adaptation of the USDA food pyramid, which focuses on foods recommended for vegans in order to reach their nutritional goals. The original vegan pyramid was created in 2003 by the American Dietetic Association, although there are a few different versions circulating now. You can use the pyramid as a guide to vegan meal-planning, and as a checklist to ensure you're getting the right foods each day.

### **The Basic Vegan (No Meat or Dairy) Pyramid**

The original vegan pyramid is made up of five different vegan food groups, and includes a range of servings you should enjoy each day to maximize nutritional value.

#### **Whole Grains**

The whole grains group occupies the base of the pyramid, with a recommended intake of six to eleven servings per day. Foods in the whole grains group include:

- Bread
- Rice
- Pasta
- Cereals
- Tortillas
- Barley
- Corn
- Oats
- Millet
- Bulgur

It's important to note that the grains should be unprocessed and whole. For example, whole wheat breads and pasta, brown rice, and slow-cooking oatmeal.

#### **Legumes, Nuts, Soy, and Other Protein Sources**

The next food group in the pyramid includes sources of protein and calcium, with the recommended daily consumption of five to eight servings. These foods include:

- Cooked peas, beans, or lentils
- Nuts or nut butters
- Tofu
- Fortified soy milk or soy cheese
- Seeds
- Meat analog (vegan meat substitute, such as meatless burger patties)
- Hummus or tahini

#### **Vegetables**

The vegetable group includes fresh, canned, or frozen veggies. You should eat at least four servings of vegetables each day. Some suggestions for vegetable choices are:

- Raw or cooked vegetables (carrots, broccoli, cauliflower, etc.)
- Vegetable juices
- Fortified tomato juice
- Salad greens
- Pickled vegetables (dill pickles, beets, onions, etc.)

## **Fruits**

Two or more servings of fruit are recommended each day. There are a number of easy ways to get your fruit servings in, including:

- Fresh fruits (apples, oranges, berries, etc.)
- Canned or frozen fruit
- Dried fruit
- Fruit juice or smoothies

## **Fats and Oils**

Believe it or not, most food pyramids include fats and oils as an essential group. Despite the bad rap fats have, they are necessary in any healthy diet. The tricky part is distinguishing between the good fats and the bad ones. Two servings are recommended daily. Good fats and oils can be found in:

- Olive or canola oils
- Nuts and nut butters
- Green or black olives
- Avocados
- Flax seeds and flax seed oil

## **The Modified Vegan Pyramids**

---

Newer editions of the vegan pyramid have been developed by various organizations to further break down the food groups and add supplements. In several of these modified pyramids, the group that includes legumes, nuts, and soy has been broken down into two separate groups. One group is based on nuts, legumes, and other protein-rich foods, while the other includes only soy-based products that are high in calcium.

As for supplements, the newer food pyramids recommend that vegans take supplemental vitamin B12, which is found in animal products and is essential to the functions of the brain and nervous system, as well as blood formation. Vegans who don't get a lot of natural sunlight should also take a vitamin D supplement. Vitamin D is absorbed through the skin from direct sunlight, and aids in bone formation along with calcium.

## **Water and Exercise**

---

While not featured in the pyramid itself, most versions of the vegan pyramid include recommendations for water and exercise, as well as a small list of foods to avoid.

- Water: Drink six to eight 8-ounce glasses of water each day
- Exercise: At least one hour of physical activity each day
- Avoid: Saturated or concentrated fats and oils, added sugar

## **Serving Sizes**

---

Looking at the food pyramids, it's easy to be overwhelmed at the sheer amount of food that is recommended for daily consumption. Serving sizes are small, however. For example:

- Bread: one slice
- Grains, pasta, rice: 1/2 cup
- Cooked beans: one cup
- Nuts: 1/4 cup
- Nut butters: two tablespoons
- Soy milk: 1/2 cup
- Cooked vegetables: 1/2 cup
- Raw vegetables: one cup
- Fruit or vegetable juices: 1/2 cup
- Oils: one teaspoon
- Fruits: one small fruit, or 1/2 cup berries or chopped fruit pieces

## TOP 5 WAYS TO HAVE A BALANCED DIET WITHOUT DAIRY:

### 1. Protein

Adults and teens require fifty to sixty grams of protein daily. Children's needs range from nine to 34 grams, depending on age. People who eat meat even infrequently are likely to far exceed their minimum protein needs. Six ounces of lean ground beef has over 45 grams of protein. It's not difficult for vegetarians to get enough, either. Great vegetarian sources of protein include:

- Tofu (ten grams per serving);
- Legumes like kidney beans, chickpeas, or nuts (seven to nine grams per serving);
- Eggs (six grams per egg);
- Whole grains (quinoa has thirteen grams per serving; wheat and oats have six each)

### 2. Calcium

Calcium is a vital mineral for building bone mass, and milk is a rich source. Adult women have the highest calcium needs, at 1,000 to 1,500 mg per day, while children require between 500 and 1,300 mg. There are two ways to replace dairy calcium in the diet. The first is to eat foods that have been supplemented with calcium or to take supplements. Common calcium-fortified foods include orange juice, cranberry juice, breakfast cereals, and soy milk. The second is to eat nondairy foods that are especially high in calcium. Some good sources are kale, collard greens, tofu, shellfish, salmon, legumes, and amaranth.

### 3. Vitamin D

Vitamin D is used in the body to help absorb dietary calcium. Vitamin D deficiency can cause serious disorders of the bones like rickets and osteomalacia. These are very rare disorders, however, since vitamin D can be produced naturally by the body upon exposure to the sun. Ten to 15 minutes per day of direct sunlight is sufficient to prevent vitamin D deficiency. Good nondairy dietary sources of vitamin D include eggs, fish, oysters, fortified cereals, and cod liver oil.

### 4. Riboflavin

Riboflavin, or vitamin B2, is one of the B-complex of vitamins vital for processing carbohydrates in the body. It has recently become popular as a treatment for migraine headaches, as it has been clinically shown to reduce their frequency. While riboflavin is available in supplement form, it is not particularly difficult to get vitamin B2 from an otherwise well-balanced diet. The RDA (recommended daily allowance) for riboflavin is 0.5 mg per thousand calories eaten on a daily basis. Leafy greens, sweet potatoes, whole grains, and meat are good sources. Some cereals and breads are enriched with riboflavin as well.

### 5. Phosphorus

Milk is among the richest dietary sources of phosphorus, a mineral that helps regulate cell function in the body. It is a major component of bones and teeth. Meat eaters should easily get adequate phosphorus in the diet without dairy; fatty fish, in particular, are an efficient way to meet your phosphorus needs. Vegetarians' best options for phosphorus are legumes, which are high in phosphorus but not absorbed as easily in the body as the phosphorus found in animal products. Another good source is bread, especially if the bread has been leavened with yeast.

## DAIRY-FREE FOODS:

- ❖ **Fruits and Vegetables:** You may be worried about your calcium consumption if you are eliminating dairy, but vegetables such as kale, swiss chard, broccoli and cooked spinach, are high in calcium that is easily utilized by your body. According to the "Asian Pacific Journal of Nutrition," the calcium in low oxalate dark green leafy vegetables is absorbed efficiently and prevents calcium loss. Fruit and vegetables are also naturally free of dairy and the proteins such as casein and whey, which are the proteins that can cause dairy allergies.
- ❖ **Meat and Eggs:** Although meat does not naturally contain dairy, check the ingredient label or check with the butcher because casein may have been added for its binding properties. Also, if you are purchasing marinated meat, check the marinade to ensure casein, butter or other dairy products were not added. Otherwise, unprocessed meat is a dairy-free, source of protein, vitamins and minerals. Eggs, especially the yolks, are a non-dairy source of protein and fat-soluble vitamin A and vitamin D that can replace the vitamins you may have been ingesting from dairy.
- ❖ **Beans and Nuts:** Incorporating beans and nuts such as Brazil nuts, almonds, cashews and walnuts, into your diet in place of dairy provides you with protein. Raw almonds provide you with a sufficient level of calcium, and walnuts have high levels of the heart healthy omega-3 fatty acids.
- ❖ **Dairy Substitutes:** Some substitutes for cow's milk include rice milk, almond milk, coconut milk and cashew milk. Rice milk can also be used to make rice yogurt. Certain ice creams have a base of coconut milk rather than cow's milk. Some packaged food items such as brown rice pasta are dairy-free, but always check the ingredient list for milk, cheese, yogurt, casein, whey or any other dairy item to ensure you are avoiding hidden sources of dairy.