

Vegetarian & Alternative Proteins for the Bariatric Patient

Weight loss surgery can change your taste buds as well as your ability (or inability) to eat certain animal protein sources. Exploring plant based protein sources will help increase variety and help adequate protein intake.

Vegetarian Types:

- Lacto-ovo vegetarians eat eggs and dairy, but no meat.
- Lacto-vegetarians eat dairy, but not eggs or meat.
- Vegans abstain from meat, dairy, eggs, and sometimes other animal-derived products such as gelatin and honey.
- Pescatarians, who abstain from meat, but do eat seafood, as well as varying degrees of vegetarianism such as those who eat white meat but not red meat.
- Bariatric: can't tolerate many (or any) animal proteins.



Glossary of Terms

A vegetarian diet can include foods that may be unfamiliar to you. Below is a glossary of terms that are a common part of a vegetarian diet.

- **Casein:** A milk protein sometimes used in otherwise non-dairy products such as soymilk, soy cheese and non-dairy creamer. Vegans do not consume casein.
- **Legumes:** The vegetable family that includes beans, lentils, peas. They are an excellent source of fiber, vitamins and minerals, while being low in fat and having no cholesterol and contain some protein. They can be bought dried, canned, frozen or fresh.
- **Nutritional Yeast:** A health supplement grown on molasses, sugar beets or wood pulp. May be used as a condiment or added to recipes to provide a cheese-like flavor.
- **Seitan:** A vegetarian replacement for meat, made of the protein gluten extracted from wheat.
- **Soybean:** A legume, which is an excellent, inexpensive vegan source of protein and iron. Soybeans are used to make a number of vegetarian and vegan substitutions for meat, dairy and eggs.
- **Plant milk:** A milk-like product made from soybeans, nuts, seeds, grains or coconut. While soy milk is most similar to cow's milk in terms of protein content, most plant milk nutrient profiles are different than that of dairy milk. Some plant milks are fortified with nutrients such as calcium, vitamin D and vitamin B12. Most plant milks contain very little protein but can add flavor.
- **Tempeh:** A replacement for meat, made from fermented soybeans. It's delicious marinated and grilled, as a replacement for bacon in a "B"LT, or chicken in mock chicken salad.

Vegetarian Resources

- **Vegetarian Starter Kit** from the Physicians Committee for Responsible Medicine: Pay \$2 per issue or download for free at <http://www.pcrm.org/health/diets/vsk/vegetarian-starter-kit>
- **Handouts/brochures** from the Vegetarian Nutrition Dietetic Practice Group of the Academy of Nutrition and Dietetics (<http://www.vndpg.org>): *Combining Vegetarian, Vegan, and Gluten-Free Diets; Eat More Plant-based Meals; Plant-based Diets in Diabetes; Protein in Vegetarian and Vegan Diets; Therapeutic Use of Vegetarian/Vegan Diets in Chronic Disease; Vegetarian/Vegan Myths*. (Free consumer resources with the same titles are available at <http://www.vegetariannutrition.net>.)
- **The Vegetarian Resource Group:** <http://www.vrg.org>
- **Oldways Vegetarian Network, Vegetarian Diet Pyramid:** <http://oldwayspt.org/programs/oldways-vegetarian-network/oldways-vegetarian-network>
- **Healthy Eating Tips:** Tips for Vegetarians: <http://myplate.gov/healthy-eating-tips/tips-for-vegetarian.html>
- **Mobile Apps:** HappyCow; VegOut; VeganXpress; How to Cook Everything Vegetarian

Products/Brands

- **Beyond Meat** – uses non-GMO, gluten-free pea protein.
- **Gardein** - offers fishless fish, mini crabless cakes, classic Meatless Meatballs.
- **Tofurky** – offers deli slices, veggie dogs, tempeh bacon, vegan pizza, chorizo-style ground “beef”.
- **Field Roast**- offers vegan sausages, deli slices, roasts, burgers, meatloaf
- **Yves Veggie Cuisine** – offers Vegan Grain Strips with BBQ Sauce, Original Meatless Jumbo Hot Dogs, and Meatless Canadian Bacon, Veggie Brats Classic.
- **Trader Joe’s** – offers a large array of vegan meat products such as Chickenless Crispy Tenders.
- **Lightlife** - offers a variety of vegan meat options, such as The Original Tofu Pups (veggie dogs).
- **Boca Burger** – makes a great veggie burger as well Spicy Chik’n Patties.
- **Sweet Earth Natural Foods** – has seitan, burritos, and veggie burgers, “bacon” and three flavors of vegan ground round.
- **Simply Balanced** - Target’s line of soy-based meatless meat and has 4 varieties: Mushroom Miso Meatless Turkey, Teriyaki Meatless Chicken, Smoky Chipotle Meatless Chicken, and Korean Barbecue Meatless Chicken.
- **MorningStar Farms** – offers a variety of products, Hickory BBQ Riblets.



Soy



- Soy is rich in vitamins, minerals, calcium, iron, fiber, phytochemicals and protein.
- Studies have found soy can help prevent and improve some of today's top health issues such as heart disease, high blood pressure, osteoporosis, certain cancers; and menopausal symptoms like hot flashes, night sweats, and insomnia.
- Soy foods are popular with vegetarians and vegans who often rely on them for their main source of protein; as soy contains all of the essential amino acids.
- Soy is very versatile and can be eaten as whole beans (edamame) or processed as tofu, tempeh, soy yogurt, miso, soy milk and other soy-based products.

| Soy Products | Calories | Protein grams | Fiber grams | Carbs grams |
|--|----------|---------------|-------------|-------------|
| Soy beans: shelled (1 cup) | 190 | 17 | 8 | 15 |
| Soy nuts: dry roasted (1oz.) | 140 | 10 | 5 | 10 |
| Soy cheese (1 oz.) | 42 | 4 | 0 | 2 |
| Soy NF milk (1 cup) | 68 | 6 | 0 | 10 |
| Soy yogurt (6 oz) | 80 | 6 | 2 | 6 |
| Soy powdered protein: unflavored (1/4 cup) | 60 | 13 | 0 | 0 |
| Tempeh (1 oz.) | 56 | 5 | 1 | 3 |
| Tofu - firm (1 oz.) | 20 | 2 | 0 | 0 |
| soft (1 oz.) | 17 | 2 | 0 | 1 |
| silken (1 oz.) | 15 | 1 | 0 | 0 |

A few types of tofu

- **Firm:** is dense and can be cubed and stir-fried, grilled, scrambled, pickled, smoked, baked, barbecued or served in soups
- **Soft:** is better suited for recipes in which tofu needs to be blended.
- **Silken:** has a creamy structure and is also used in blended dishes.



Tip: the more solid the tofu is, the more difficult it can be to infuse with flavor, so choose a brand and texture based on what you are making.



Vegetables

| Vegetable (1 cup cooked) | Calories | Protein grams | Fiber grams | Carbs grams |
|-----------------------------|----------|------------------|----------------|----------------|
| Artichokes | 89 | 5 | 14 | 20 |
| Arugula* (raw) | 5 | 1 | 0 | 1 |
| Asparagus | 40 | 4 | 4 | 7 |
| Bean sprouts | 57 | 6 | 1 | 6 |
| Beet greens | 39 | 4 | 4 | 8 |
| Broccoli | 55 | 4 | 5 | 11 |
| Broccoli rabe | 56 | 6 | 5 | 5 |
| Brussel Sprouts | 56 | 4 | 4 | 11 |
| Cauliflower | 33 | 3 | 3 | 6 |
| Corn | 157 | 6 | 4 | 35 |
| Green peas | 133 | 9 | 9 | 25 |
| Kale | 36 | 2 | 3 | 7 |
| Mushrooms | 44 | 3 | 3 | 8 |
| Okra | 35 | 3 | 4 | 7 |
| Mushrooms | 44 | 3 | 3 | 8 |
| Spinach | 41 | 5 | 4 | 7 |
| Sugar snap peas | 67 | 5 | 4 | 11 |



Alternative Proteins

| Alternative Proteins | Calories | Protein grams | Fiber grams | Carb grams |
|-----------------------------|----------|------------------|----------------|------------|
| Hemp powder - 1 Tbsp. | 30 | 3 | 2 | 3 |
| Nutritional Yeast - 2 Tbsp. | 30 | 4 | 4 | 5 |
| Seitan - 1 oz. | 35 | 4 | 1 | 8 |



Legumes

| Legumes (½ cup cooked) | Calories | Protein grams | Fiber grams | Carb grams |
|---------------------------|----------|------------------|----------------|------------|
| Beans | | | | |
| Aduki | 110 | 7 | 5 | 19 |
| Black | 100 | 7 | 7 | 21 |
| Cannellini | 90 | 7 | 6 | 18 |
| Fava | 90 | 7 | 5 | 17 |
| Garbanzo | 75 | 4 | 3 | 11 |
| Great Northern | 120 | 9 | 6 | 22 |
| Lima | 95 | 6 | 6 | 18 |
| Lupini | 100 | 13 | 3 | 8 |
| Mung | 112 | 7 | 6 | 20 |
| Navy | 110 | 7 | 8 | 19 |
| Pinto | 100 | 6 | 7 | 18 |
| NF Refried beans | 100 | 6 | 5 | 18 |
| Red kidney | 110 | 7 | 7 | 20 |
| Peas | | | | |
| Black-eyed | 90 | 6 | 4 | 16 |
| Split peas | 115 | 8 | 8 | 21 |
| Lentils | | | | |
| | 110 | 9 | 8 | 19 |



Cheese

| Cheese (1oz.) | Calories | Protein grams | Fiber grams | Carbs grams |
|------------------------------------|----------|------------------|----------------|----------------|
| American | 95 | 5 | 0 | 2 |
| Asiago | 100 | 7 | 0 | 1 |
| Babybel Cheese, original (1 round) | 70 | 5 | 0 | 0 |
| Babybel Cheese, light (1 round) | 50 | 6 | 0 | 0 |
| Bleu | 100 | 6 | 0 | 1 |
| Cheddar | 115 | 7 | 0 | 0 |
| Chevre | 102 | 6 | 0 | <1 |
| Cream cheese – regular | 100 | 2 | 0 | 1 |
| Low fat | 70 | 2 | 0 | 2 |
| Feta | 70 | 5 | 0 | 1 |
| Gouda | 110 | 8 | 0 | 0 |
| Havarti | 110 | 7 | 0 | 1 |
| Laughing Cow - regular (1 wedge) | 50 | 2 | 0 | 1 |
| Laughing Cow - light (1 wedge) | 35 | 2 | 0 | 1 |
| Mascarpone | 130 | 1 | 0 | 0 |
| Monterey Jack | 110 | 7 | 0 | 0 |
| Mozzarella - whole milk | 80 | 6 | 0 | <1 |
| Part skim | 71 | 7 | 0 | 1 |
| Nonfat | 40 | 9 | 1 | 1 |
| Parmesan | 110 | 10 | 0 | 1 |
| Pepper Jack | 106 | 7 | 0 | 0 |
| Provolone | 100 | 7 | 0 | 1 |
| Ricotta - whole | 50 | 3 | 0 | 1 |
| part skim | 40 | 3 | 0 | 1 |
| light | 30 | 2 | 0 | 2 |
| Swiss | 105 | 7 | 0 | 2 |



Low Fat Dairy & Eggs

| Dairy & Eggs | Calories | Protein grams | Fiber grams | Carbs grams |
|---------------------------------|----------|---------------|-------------|-------------|
| Cottage cheese (1 cup) | | | | |
| Nonfat | 160 | 28 | 0 | 12 |
| 1-2% | 180 | 26 | 0 | 10 |
| 4% | 220 | 26 | 0 | 10 |
| Yogurt | | | | |
| Greek yogurt: NF, plain (6 oz.) | 100 | 17 | 0 | 6 |
| Yogurt: NF, plain (8 oz.) | 127 | 13 | 0 | 17 |
| Eggs | | | | |
| Small | 54 | 4 | 0 | 0 |
| Medium | 63 | 5 | 0 | 0 |
| Large | 72 | 6 | 0 | <1 |
| Extra large | 80 | 7 | 0 | <1 |
| Jumbo | 90 | 8 | 0 | 2 |
| Egg whites (large egg) | 16 | 4 | 0 | 0 |
| Egg substitute (1 oz.) | 24 | 4 | 0 | 0 |



NOTE: the charts represent an average value in all of the categories. Values may differ amongst different brands. Read the labels for accurate values.