

# VEGANSTRENGTH.org

As veganism continues to enter the mainstream, more and more ultra-fit vegan athletes, including massive bodybuilders and powerlifters, are muscling onto the scene. Vegans are increasingly demonstrating that they are capable of equal, or greater, strength than nonvegans. The once common misconception that veganism comes packaged with a loss of strength and poor health is becoming embarrassingly outdated, and the irony is that many of the people who complain the loudest about veganism being unhealthy are often some of the unhealthiest people out there.

Recent evidence has strongly suggested that Roman gladiators, hardly a group you would associate with poor health and loss of strength, ate vegan. Carl Lewis—ranked by many as the greatest athlete of all time—trained as a vegan while winning multiple Olympic gold medals. Vegans around the world are starting to win powerlifting meets and strongman competitions. Even mountain gorillas—some of the strongest animals in the world—are predominantly, often completely, vegan!

This guide covers some of the basics of gaining mass and strength on a vegan diet. To do this successfully, you need to ensure that you train intelligently and get enough calories to build muscle.

## NUTRITION

This section deals with the nutritional aspect of the vegan strength game. To get big and strong involves eating larger amounts of food, or more calorie-dense food, than would your ordinary couch dweller. As a rough guide, beginner strength athletes should aim to consume about 40 calories per kilogram of bodyweight each day (the more advanced should aim for about 50 calories).<sup>(2)</sup> The formula for beginners is: bodyweight (kg) x 40 = calories per day, i.e., CPD, where CPD equals the amount of calories you need per day to pack on mass and gain strength.

Eating this amount of food is going to build muscle in combination with solid training, but it's also unavoidably going to pack on a little chub (except for beginners, who, along with drug users, can gain muscle *and* lose fat at the same time). A good way to combat this is to eat heavy on heavy training days and light on light training days, making sure that your *average* amount of calories per day matches the CPD figure you worked out as described above. This is thought to ramp up your metabolism and reduce your chances of gaining fat on non-active days.<sup>(3)</sup>

The other important consideration relating to your CPD intake is to make sure that you're getting the *right* calories, which come in the form of carbohydrates, proteins, and fats.

**Carbohydrates:** Carbohydrates are the body's main fuel source for energy and for packing on size, and they

should provide the bulk of a strength trainer's caloric intake. About 50 to 60 percent of your CPD should come in the form of carbs (each gram of carbohydrate has 4 calories). Complex carbohydrates, such as oats, legumes, broccoli, spinach, tomatoes, berries, and soy, are your friend. They keep blood sugar levels stable, giving you more energy and helping promote muscle growth.<sup>(3)</sup>

**Protein:** Protein is the stuff that builds muscle, and there is some controversy over how much you need. A starting guide for strength trainers is to get about 2 to 3 grams for every kilogram of bodyweight, or about 20 to 30 percent of your CPD. The human body cannot typically absorb more than 30 grams of protein within a two-hour period, except directly after training, so try to spread your protein intake throughout the day. There are numerous high-protein sources available for vegans, including tofu, tempeh, seitan, lentils, chickpeas, black beans, nuts, peanuts, peanut butter, veggie burgers, and other vegan meats.

It is also important to get a wide variety of protein to ensure the adequate intake of all the essential amino acids (components of protein necessary for muscle growth). To do this, you can combine foods from the three sources of vegan protein (nuts and seeds, legumes, and cereals) or just ensure that you get a good supply of each throughout

the day. Some good combinations include black beans and rice, peanut butter sandwiches, and almond milk and oats. There are also numerous completely vegan soy, pea and rice protein isolate powders with good amino acid profiles available that can contribute greatly to muscle growth, especially taken in an energy shake after training).

**Fat:** It is important to include sources of "good" fat in your diet, despite the macronutrient's bad reputation. About 20 percent of calories should come from good fats<sup>(3)</sup> such as extra virgin olive oil, avocados, nuts, seeds, and coconut milk (a "nice" saturated fat, in moderation). Good fats contribute to healthy skin and energy levels.<sup>(1)</sup> Avoid saturated and trans fats, which contribute to heart disease and other health complications. It is *especially important* that vegans get a regular source of omega-3 fatty acid oils, which contribute to cardiovascular health and have a range of other health benefits.<sup>(2)</sup> The best sources of omega-3 are freshly ground flaxseeds (also known as linseed) and flaxseed oil.

Over the page are some useful formulas to work out daily carbohydrate, protein, and fat intake amounts. This is just a general guide, and you should experiment to find out what works best for you (i.e., upping carbs and lowering protein intake might be effective for some).

**Total Daily Calories:** \_\_\_\_\_ kg (your bodyweight) x 40 = \_\_\_\_\_ CPD

**Total Daily Carbohydrates:** ( \_\_\_\_\_ CPD x 0.5) ÷ 4 = \_\_\_\_\_ grams of carbs per day

**Total Daily Protein:** ( \_\_\_\_\_ CPD x 0.3) ÷ 4 = \_\_\_\_\_ grams of protein per day

**Total Daily Fat:** ( \_\_\_\_\_ CPD x 0.2) ÷ 9 = \_\_\_\_\_ grams of fat per day

**When to Eat:** A good plan for growth is to eat three big meals throughout the day and three snacks. It's also very important to get a good hit of carbohydrates and protein as soon as possible after training, which is the time when your muscles absorb the most nutrients and when they need lots of energy to grow (without the energy provided by carbohydrates, muscles will eat themselves, which is the last thing you want). Aim for 1 to 1.5 grams of carbohydrates per kilogram of bodyweight and a 20- to 30-gram dose of protein.<sup>(3)</sup> A good way to accomplish this is with an energy shake (e.g., soy milk, soy protein isolate, and a banana).

**Other Important Nutrition Info:**

**Water:** It probably doesn't need saying, but drinking lots of water is vital. **Micronutrients:** Getting an available source of B<sub>12</sub> is a particular concern because the vitamin is not reliably available from any plant source. Therefore it is **essential** to supplement B<sub>12</sub> in a vegan diet, either through fortified foods (soy milk, nutritional yeast, marmite, berocca) or through vegan B<sub>12</sub> tablets. Getting enough iron can be a concern for many vegan women because of regular blood loss. Good sources of iron include dark leafy greens, lentils, chickpeas, figs, and vegan iron tablets. To increase absorption, a vitamin C source should be taken

with iron. All other micronutrients are easily covered by a balanced vegan diet. **Creatine:** Creatine is the only nutritional supplement that has been consistently shown to improve strength and muscle mass.<sup>(2)</sup> It's almost always vegan, and there are even some studies indicating that vegetarians benefit more from creatine supplementation than meat-eaters.<sup>(2)</sup> That said, there have been no studies on the long-term effects of creatine, and for about a third of the population, studies have shown that creatine has no effect.<sup>(4)</sup> And of course, it is also possible to make huge progress without creatine just by eating well and training hard.

## TRAINING

None of the nutritional advice above counts for anything if it's not combined with a solid training routine. Vegans don't need to train any differently than anyone else—the same routines that work for the general population will be effective for vegans. In general, the most intelligent way to pack on size and strength is to focus on compound exercises that work several muscle groups: squats, dead lifts, bench presses, military presses, chin-ups, rows, and dips are good examples. A good solid routine is the "5x5"—five sets of five repetitions, lifting heavy, but not quite to failure (beginners should lower the weight and do more repetitions for a month or so to strengthen tendons and ligaments). If you absolutely need to do isolation work such as bicep curls, leave it to the end. Free weights are ideal; they work stabilizing muscles that are ignored by weight machines, thus providing more real-world strength.

It's vital to get a training professional to make sure you are performing your exercises correctly, and never sacrifice good form to hoist more iron. Stop lifting *immediately* if you think you have an injury. Always warm up prior to lifting. Get plenty of rest; it cannot be overemphasized that you need sleep and time off training to build muscle. Three or four training sessions a week of less than an hour are enough to get you big and strong, provided that you are consistent. To get more help with planning your routine, explore some of the vegan strength forums and information sites in the resources section below.

In summary, nail the nutrition, get a solid routine, train consistently, and you're gonna be huge and strong. *Vegan power!*

## SOURCES

1. Mahler, M. *Getting Big and Strong on a Vegan Diet*. <http://www.bodybuilding.com/fun/mahler53.htm>
2. Norris, J. *Vegan Weightlifting: What Does the Science Say?* <http://www.vrg.org/journal/vj2003issue4/vj2003issue4weight.htm>
3. McClure, A. *Vegetarian Body Builder and Powerlifter FAQ* <http://www.geocities.com/alanmcclure3/index.html>
4. Ryan, P. *Vegan Nutrition Basics* <http://www.tinyurl.com-/veganbasics>

## RESOURCES

Melbourne Vegan Strength - [www.veganstrength.org](http://www.veganstrength.org)  
Vegan Fitness - [www.veganfitness.net](http://www.veganfitness.net)

For any further information or to join the Melbourne Vegan Strength e-mail list please write to [mvs@veganstrength.org](mailto:mvs@veganstrength.org)

