



# “Paleo” for Vegetarians and Vegans

If you choose to follow a vegetarian or vegan diet for ethical or religious reasons but you still want to benefit from the Paleo approach, follow the guidelines and tips listed below to ensure adequate intake of essential nutrients.

## VEGETARIANS

### Vitamin B12

- Consume egg yolks, cheese, yogurt, or milk daily
- Talk with practitioner about testing for deficiency. Three tests are ideal; 1) serum vitamin B12, 2) serum or plasma or urine methylmalonic acid and 3) serum homocysteine
- If warranted by testing, the practitioner might recommend supplementing with sublingual methylcobalamin

**Calcium:** recommended daily allowance is 1,000 mg for adults

- Consume two to three cups of leafy green vegetables daily, such as:
  - Collards, turnip greens, kale, broccoli, or bok choy (300 to 500 mg)
- Add in one to two tablespoons of blackstrap molasses daily (135 to 270 mg)
- Snack on figs (1/2 cup contains 120 mg of calcium)
- Consider eating bone-in canned fish like sardines and salmon (pescetarian)
- Speak with practitioner about whole bone meal supplementation

### Iron

- Consume iron-rich plant foods such as:
  - Chard, collard greens, spinach, pumpkin, squash, pine nuts, pistachios, sunflower seeds, cashews, unhulled sesame seeds, white potatoes, chocolate

Note: soaking and drying nuts and seeds improves nutrient bioavailability; *see directions below*
- Consume vitamin C-rich foods paired with non-heme iron-rich plant foods, for example:
  - Spinach & lemon juice, properly prepared lentils & tomatoes, kale & sweet potato
- Consume one to two cups of properly prepared legumes daily (especially lentils); *see directions below*
- Add in one to two tablespoons of blackstrap molasses daily
- Premenopausal women may need a supplement based on iron status lab tested by a practitioner

### Omega-3 Fats (EPA/DHA)

- Consider eating bone-in canned fish like sardines and salmon (pescetarian)
- Supplement with **extra-virgin cod liver oil** or **vegan omega-3s**



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### Vitamin A

- Eat plenty of red, orange, yellow, and green plant foods
- Consider supplementing with vitamin A from extra-virgin cod liver oil (pescetarian)
- Do not supplement with beta-carotene

### Vitamin D

- Get 30 minutes of sun exposure daily
- Use the **dminder app** to help assess need
- Talk with practitioner to test blood and assess if there is need for supplementation
- When supplementing, retest every three to six months

### Zinc

- Eat plant food sources of zinc such as:
  - Sesame seeds, pumpkin seeds, lentils, chickpeas, and cashews

Note: soaking the above for six to eight hours (and redrying in the case of seeds/cashews) will improve nutrient bioavailability; *see directions below*
- Talk with practitioner about supplementing with zinc if blood testing warrants this

## VEGANS

### Vitamin B12

- Speak with practitioner about testing and supporting with an appropriate amount of methylcobalamin. *See testing suggestions above in the Vegetarian section*

**Calcium:** recommended daily allowance is 1,000 mg for adults

- Consume two to three cups of leafy green vegetables daily, such as:
  - Collards, turnip greens, kale, broccoli, or bok choy (300 to 500 mg)
- Add in one to two tablespoons of blackstrap molasses daily (135 to 270mg)
- Snack on figs (1/2 cup contains 120 mg calcium)

### Iron

- Consume iron-rich plant foods such as:
  - Chard, collard greens, spinach, pumpkin, squash, pine nuts, pistachios, sunflower seeds, cashews, unhulled sesame seeds, white potatoes, chocolate
- Consume vitamin C-rich foods paired with non-heme iron-rich plant foods, for example:
  - Spinach & lemon juice, lentils & tomatoes, kale & sweet potato
- Consume one to two cups of properly prepared legumes daily (especially lentils); *see directions below*
- Add in one to two tablespoons of blackstrap molasses daily
- Premenopausal women may need a supplement; refer to a practitioner for testing if experiencing symptoms of low iron such as unexplained fatigue, weakness, pale skin, headaches, cold hands and feet, fast heartbeat, shortness of breath, or heavy menstrual cycles



### **Omega-3 Fats (EPA/DHA)**

- Supplement with **vegan omega-3s**

### **Vitamin A**

- Eat plenty of red, orange, yellow, and green plant foods
- Do not supplement with beta-carotene
- If vitamin A deficiency is suspected (keratosis bumps on arms, night blindness, sensitivity to light, poor eyesight), refer to a practitioner for testing

### **Vitamin D**

- Get 30 minutes of sun exposure daily
- Use the **dminder app** to determine need; talk with practitioner if there is a need for supplementation
- When supplementing, retest every three to six months

### **Zinc**

- Eat sesame seeds, pumpkin seeds, lentils, chickpeas, and cashews  
Note: soaking the above for six to eight hours (and redrying in the case of seeds/cashews) will improve nutrient bioavailability; *see directions below*
- Talk with practitioner about testing blood levels and supplementing with 15 mg daily, balanced with copper, as in Jarrow Zinc Balance

## **Additional Considerations**

### **PROTEIN SOURCES**

#### **Legumes, Nuts, and Seeds**

- Common protein sources for vegetarians and vegans such as legumes, nuts, and seeds are high in phytic acid, which is an anti-nutrient that impairs the absorption of zinc, which is key for proper absorption of fat-soluble vitamins. Other nutrients are also bound to phytic acid, causing impaired absorption.
- Properly preparing legumes, nuts, and seeds decreases phytic acid content, even though it does not eliminate it completely
- When relying on legumes, nuts, and seeds regularly, it is important that they be properly prepared as follows:

#### **Legumes:**

- Cooked: Rinse well, soak in filtered water for six to eight hours minimum, such as overnight; throw away water; add more water and bring to boil for two minutes; discard water once again; and proceed with cooking with preferred method

Note: legumes such as beans can be soaked for up to four days, changing the soaking water at least twice daily

- Sprouted: Rinse well, soak overnight, strain water, and sprout in a large, clear jar covered with a cloth. Rinse twice a day and more often in the summer. Use them in cooking after sprouts grow to desired length. When cooking, bring to boil for two minutes, discard water once again, and proceed with cooking with preferred method



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- **Fermentation:** Rinse well, soak overnight, rinse once again until water is clear, process in blender until creamy, place it in jar with 1/3 of space at the top, and cover lightly for one to two days, depending on outside temperature. Prepare (cook) based on recipe instructions
- Soy is a common legume consumed on a vegetarian or vegan diet as a protein source. Tempeh is a fermented version of soy and is a recommended version of soy with higher bioavailability of nutrients. Organic is preferred. Note that some scientific evidence suggests soy is a significant source of cadmium (absorbed from the soil into the plant) and may contribute to poor health outcomes such as chronic kidney disease. For more information see these study examples: 1, 2, 3. Therefore, it may be prudent to include other plant sources of protein and limit soy products to two to three times a week.

### **Nuts and Seeds:**

- **Sprouting:** Rinse well, soak overnight, strain water, and sprout in a large clear jar covered with a cloth. Rinse twice a day and more often in the summer. Use after sprouts grow to desired length. In general, nuts and seeds will not grow long sprouts. Place them in fridge for consumption after one to three days. Consume within five to seven days.
- **Dehydration:** Rinse well, soak overnight, strain water, and place in dehydrator until completely dried and crunchy, in general, two days. Another option is to dry in an oven at a very low temperature, under 200 degrees, for two to six hours, depending on desired crunch. Pink sea salt or other seasonings or spices may be added to nuts or seeds just prior to drying for added flavor and nutrients.

### **Whey and Other Protein Powders**

- Vegetarians who consume dairy might decide to consume whey powder as a source of protein. Grass-fed, undenatured whey is preferable, since it is closer to a whole-food product than whey isolate.
- Additionally, some clients who are intolerant to casein may be able to consume whey isolate, as it is more of a supplement than a food and may not cause intolerance. It might be worth a trial for some clients.
- It is common to see allergies developing through consumption of processed products. It is preferable to rotate amongst different sources of vegetarian proteins, such as pea protein (if tolerated), egg white, and goat milk whey rather than staying with only one source.
- Vegan sources of powdered protein include pea, hemp, and rice, as examples. Some tolerate sprouted versions of these grain-based proteins better. One example is Garden of Life protein powders.

## **VITAMIN B12 SOURCES**

### **Nutritional yeast, spirulina, seaweed, and fermented soy**

- There is a belief that nutritional yeast, spirulina, seaweed, and fermented soy products, such as tempeh and miso, supply vitamin B12. These foods contain cobamide, a B12 analogue, not the true B12 cobalamin. Cobamide blocks absorption and increases the need for true B12. These studies can be useful resources for some clients who would like to study further: **1, 2, 3.**