

Meeting Dietary Requirements as a Pregnant Vegetarian

In recent years, plant-based diets have become more and more popular. People choose to go vegetarian for a variety of reasons including health benefits, sustainability concerns, and ethical motivations. Whatever the reason, this type of diet can be **healthy and nutritionally adequate**, even during the reproductive years. However, during pregnancy, a bit of planning may be required to make sure the developing baby is getting all the nutrition necessary from a plant-based mom.

First, let's talk about different plant-based diets. Some people choose to avoid meat on occasion such as those who participate in "Meatless Mondays." Others commit fully to a vegetarian lifestyle, which means avoiding all forms of meat. Lacto-vegetarians also exclude eggs from their diet, while ovo-vegetarians also avoid dairy. Vegans have more restrictions, avoiding any products that come from animals such as eggs, dairy, gelatin, and honey. The good news is that there are still many food groups available to vegetarians and vegans. Fruit, vegetables, grains, nuts, legumes, meat substitutes, and dairy alternatives are all still on the table.

During pregnancy, nutritional requirements change to meet the needs of the developing baby. Most women can easily meet these new requirements by taking a prenatal vitamin with 100% of the daily value (DV) to get all the important vitamins and minerals. However, vegans and vegetarians may require a different approach to keep mom and baby as healthy as possible.

Let's take a look at B12 first. Vitamin B12 is involved in the development and function of the central nervous system, formation of red blood cells, and DNA synthesis. During pregnancy the recommended dietary allowance (RDA) for B12 is 2.6 mcg for everyone. However, vegetarians and vegans are at risk of deficiency since this vitamin only occurs naturally in products that come from animals. To ensure that enough is consumed, plant-based moms-to-be should focus on eating foods fortified with B12. Blood work can also help to identify any deficiencies, and if a woman is found to have low B12 during pregnancy, a higher dose supplement may be recommended by the health care provider.

Iron is another vitamin that requires a second look for those with a veggie diet. During pregnancy, iron requirements increase due to a rise in plasma volume and red blood cell concentration. For women who eat meat, an **RDA** of 27 mg is advised. However, for vegetarians the RDA is 1.8 times higher, meaning 48.6 mg per day is needed. Iron can be obtained from plant-based foods but it is not as bioavailable as iron from meat, so supplementation is usually required.

Around 90-95% of pregnant women don't consume enough choline, regardless of what diet they follow. An **RDA** for choline of 450 mg is suggested for every pregnant woman. Soybeans, wheat germ, kidney beans, and eggs are some of the best plant-based forms of choline, but this vitamin can also be obtained from a dietary supplement. Choline has been shown to improve liver health, memory, mood, and other brain and nervous system functions.

What about calcium? Vegetarians who still consume milk, cheese, and yogurt may not be too worried about this one. However, it's known that certain plant foods contain large amounts of oxalates, a naturally occurring compound that can reduce the amount of calcium absorbed from food. For example, a cup of spinach contains about 30 mg of calcium, however because this food has a high oxalate content, the calcium is not well absorbed by the body. Another interesting point about calcium is that **smaller doses** are better absorbed. This means that spacing out a supplement and calcium rich foods throughout the day may be a better approach than taking it all at once. Lastly, it's important to note that calcium should always be taken with vitamin D since the body needs vitamin D to absorb calcium. An **RDA** for calcium of 1,000 mg/day is advised for women over the age of 18 during pregnancy, regardless of diet type.

The term “**Omega 3s**” commonly refers to alpha-linolenic acid (ALA), eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA). It is suggested that pregnant women get 1.4 grams/day of ALA, however, there is no official dose for DHA or EPA that has been established for pregnancy. ALA is present in plant oils, such as flaxseed, soybean, and canola oils. Walnuts and chia seeds are also good sources of ALA. The problem is that ALA does not easily convert to DHA in the body, so even when a woman who is plant-based consumes a good amount of ALA they can still have low DHA levels. Although there is no official recommendation in place to take a DHA supplement during pregnancy, vegetarians and vegans can talk to a health care provider to determine if it makes sense to take an algae based one.

A blog about nutrition wouldn't be complete without talking about folic acid, especially during January's **National Birth Defects Awareness Month**. When folic acid is taken for at least one month prior to pregnancy, this important vitamin reduces the chance of neural tube defects (a type of birth defect affecting the baby's brain and spinal cord) by as much as 50-70%! Like everyone else, vegetarians and vegans should get 400 mcg/day prior to pregnancy and 600-800 mcg/day during pregnancy from a supplement.

As a vegetarian myself, if I had a dollar for every time someone asked me about protein I'd be a millionaire by now! For some reason, well intentioned friends and family seem to be very concerned about this topic – especially during pregnancy! A general recommendation of **71 grams of protein/day** is currently in place for everyone during pregnancy. Vegetarians can easily meet this requirement by consuming foods like yogurt, chia seeds, quinoa, beans, eggs, and certain vegetables. Vegans can focus on many of the above foods as well as tofu, lentils, soy milk, and nut butters. Although most women can meet the RDA with the right attention to diet, if you're concerned about not getting enough protein during pregnancy, your health care provider can refer you to a nutritionist to help further.

Pregnancy as a vegetarian or vegan doesn't have to be stressful, but some additional planning may be needed. When possible, focus on getting nutrients from your diet. However, to meet RDAs during pregnancy, or if a deficiency is noted by blood work, supplementation can be beneficial. If you ever have any questions about vitamins, minerals, omega 3s, or protein during pregnancy, **contact** a MotherToBaby specialist to receive individualized counseling. With the right approach, a plant-based mom and baby can get all the nutrients they need!

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