

The Ultimate Guide To

A Healthier Pregnancy And Birth



Spire
HEALTH & WELLNESS

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Disclaimer

Spiro Health and Wellness has created this guide to help expectant mothers learn about nutritional research as it pertains to pregnancy and birth. The information found within this guide should not be construed as medical advice. A competent medical professional should be sought for any and all medical advice relating to pregnancy and birth.

Introduction

Welcome to the ultimate guide to a healthy and nutrient rich pregnancy! Many of us do not realize the role that nutrition can play in our pregnancy and the birth of the baby. It seems that the culture of pregnancy has overtaken the science and data. We often justify cravings for unhealthy foods simply because of pregnancy, yet this is the time when we should be eating healthier than ever. In fact, studies indicate that the mother's diet during pregnancy can impact both mother and child for years to come. If there is ever a time to put down the donut and soda, it is now! Doing so will result in an easier pregnancy, birth, and recovery. Additionally, you will have a healthier child with less acid reflux and less developmental, health, and behavioral problems.

So how can we achieve this? Let's dig into the data.

Importance of Diet In Pregnancy

One study found that the diet of the mother during pregnancy has a direct impact on behavioral and mental health of the child later in life.¹ The same study indicated that ADHD in children was significantly impacted by the diet of the mother during gestation. Another study indicated that the epigenetics of a child are determined primarily by the diet of the mother during pregnancy.² In particular, risk of particular MTHFR mutations were predicated upon the mother's diet.

Additionally, diet plays a role in the birthweight of a child, as well as the health of the newborn.³ Another study found that a “Western Diet” focused on meat, dairy, eggs, and refined carbohydrates is directly linked to birth defects.⁴ Yet another study indicated that children whose mothers ate the most animal protein during pregnancy were more likely to become overweight in adulthood, compared with children whose mothers ate the least.⁵ A number of other studies have come to similar conclusions, leading us to believe that the health of our newborn child is directly linked to the diet of the mother before and after pregnancy.

Diet not only impacts the child, but can impact the pregnancy and birth itself. Diet plays a large role in morning sickness (including hyperemesis gravidarum), gestational diabetes, hypertension and preeclampsia, total labor time, birth recovery, and even likelihood of C-section.

1. <https://onlinelibrary.wiley.com/journal/14697610>

2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4758803/>

3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4924183/>

4. https://journals.lww.com/greenjournal/Fulltext/2007/08000/Maternal_Western_Dietary_Patterns_and_the_Risk_of.23.aspx

5. <https://academic.oup.com/ajcn/article/100/4/1139/4576516>

The Ideal Diet During Pregnancy

There is a great deal of conflicting data about what the ideal diet for pregnancy is. The remainder of this guide will share some of the most prolific data and help you to understand how you can best help you and your baby.

For many people, it may be a shock when I tell you that the ideal diet for pregnancy and birth is a plant based diet.⁶ This means that we should be consuming primarily fruits, vegetables, grains, beans, nuts, and seeds while avoiding meat, dairy, eggs, oils, processed food, and refined carbohydrates. Though this may seem a far cry from the average advice that we hear, there is a great deal of science to back up this claim.⁷ However, data shows that diets high in meat and dairy, particularly the Keto diet, causes birth defects and interfere with fetal development.⁸

For those that are concerned about the safety of this diet, let the words of the Academy of Nutrition and Dietetics put you at ease, “Well planned vegan diets are appropriate for all stages of the life cycle, including pregnancy and lactation.”⁹

So how can we safely implement a plant based diet into our pregnancy and ensure that we are meeting all of the nutritional requirements for us and the baby? Let’s explore!

6. <https://www.drmcDougall.com/misc/2011nl/jan/pregnancy.pdf>

7. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4561836/>

8. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3685567/>

9. <https://www.ncbi.nlm.nih.gov/pubmed/19562864/>

True Nutritional Pregnancy Needs



Calorie Needs

Calorie needs will differ each trimester of pregnancy. Many moms believe that as soon as they get pregnant, they need to eat for two. This is simply not the case. However, the needs will increase as the pregnancy goes on.

First Trimester: There is no need to increase calorie consumption during the first trimester. However, many women have a difficult time obtaining their own calorie requirements due to symptoms of early pregnancy such as nausea, constipation, and fatigue. It may help during this time to stick to cold foods, that will be less stimulating to your heightened sense of smell. It may also be beneficial to eat 5-6 smaller meals per day as opposed to 3 large meals. During the first trimester it may also help to eat and drink fresh ginger to help with nausea. It is also key to drink plenty of water, eat many high fiber foods, and stay active. These things will help to relieve constipation and fatigue to prevent losing weight during this time.

Second Trimester: By the second trimester your calorie needs increase to approximately 340 additional calories per day.¹⁰ Approximately 60% of your total pregnancy weight will be gained during this trimester, so be sure to get those extra calories in. The baby is rapidly growing and is becoming active, so they will need those calories to flourish as well. Those that are overweight pre-pregnancy can focus on consuming healthy whole foods to obtain the needed calories.

Third Trimester: By the third trimester, you need an additional 450 calories per day.¹¹ At this time many moms may experience acid reflux or heartburn, making it more difficult to get the needed calories. During these episodes 5-6 small meals a day, eating slowly, and staying in an upright position after eating will help to keep these symptoms at bay. Be sure to drink plenty of fluids between meals as well. If you are still finding it hard to get the necessary calories, include more calorie dense foods, such as whole grains, avocados, bananas, beans, and nuts.

10. <https://www.eatright.org/health/pregnancy/prenatal-wellness/healthy-weight-during-pregnancy>

11. Ibid.

Protein Needs

Protein needs do not increase during the first trimester, however they will increase to an additional 28 grams per day starting in the fourth month of pregnancy. The average woman will need approximately 70 grams per day total (after 4 months).¹² That additional requirement will stay the same for the remainder of your pregnancy.

Though this may seem like a lot to obtain, it is more simple than many people think. Here are a few examples of great protein sources that will promote long term health:

- 1 cup cooked soybeans = 29 grams protein
- 1 cup cooked lentils = 18 grams protein
- 1 cup cooked black beans, pinto beans, or chickpeas = 15 grams protein
- 4 oz tofu = 11 grams protein
- 1 cup cooked quinoa = 8 grams protein
- 2 tbsp peanut butter = 8 grams protein
- 1 cup plain soymilk = 7 grams protein
- 1 cup cooked spinach = 5 grams protein
- 1 cup cooked broccoli = 4 grams protein



Eating a healthy diet with a wide variety of fruits, vegetables, grains, and legumes will ensure that you will meet your requirements each day. Eating these plant based sources of protein will also help to protect against anemia and iron deficiency as well.¹³

12. <https://www.mayoclinic.org/healthy-lifestyle/pregnancy-week-by-week/in-depth/pregnancy-nutrition/art-20045082>

13. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3105608/>

Protein Needs

Continued

However, too much protein during pregnancy, particularly animal protein, can prove detrimental to both the baby and the mother.¹⁴ One study found that six additional grams of animal protein per day was associated with “an excess of very early premature births and associated [infant] deaths,” as well as “significant growth retardation” in the babies that survived.¹⁵ Animal protein intake during pregnancy is also associated with an increased risk of the child being overweight later in life.¹⁶ But perhaps the most concerning are studies that link animal protein intake, specifically fish, to infant mortality.¹⁷

14. <https://www.ncbi.nlm.nih.gov/pubmed/25240069>

15. <https://www.ncbi.nlm.nih.gov/pubmed/6988785>

16. <https://www.ncbi.nlm.nih.gov/pubmed/25099541>

17. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3385366/>

Prenatal Vitamin and DHA

Taking a generic prenatal vitamin has been linked to illness in mothers and birth defects in babies.¹⁸ Some prenatal vitamins have also been linked with low birth weights and congenital heart defects.^{19,20} Furthermore, prenatal vitamins containing folic acid have been found to increase the risk of autism and asthma in the child.^{21,22} Therefore, it is important to find a quality prenatal vitamin that does not contain folic acid and is made from real foods.

Consequently, there are very few prenatal vitamins that are safe for consumption during pregnancy. I recommend taking [THIS*](#) prenatal supplement, however you will need to take precautions to eat enough greens and beans in the diet to obtain the necessary folate.

Concerning a DHA supplement, there is no evidence to show that consumption of a DHA supplement in pregnant and lactating women who eat a proper plant based diet have any physiologically significant benefit to the infant.²³ In fact, there is substantial evidence that higher intakes of DHA can have adverse effects on pregnancy for both mother and child.²⁴ One study found that mothers who consumed DHA supplements while breastfeeding, had children with higher blood pressure and body weight, and lower physical activity.²⁵ Therefore, I do not recommend that mothers take a DHA supplement while pregnant or breastfeeding.

The only other supplement that I recommend during pregnancy is vitamin B12, which should be taken in small doses several times a week. [THIS*](#) is the one that I recommend.

18. <https://jamanetwork.com/journals/jama/fullarticle/194525>

19. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2723730/>

20. <https://www.ncbi.nlm.nih.gov/medgen/7806>

21. <https://academic.oup.com/aje/article/170/12/1486/158006>

22. <https://www.ncbi.nlm.nih.gov/pubmed/21048057>

23. http://www.nap.edu/openbook.php?record_id=10490&page=471

24. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3607655/>

25. <https://www.ncbi.nlm.nih.gov/pubmed/19091800>

The Miracle Pregnancy Food

If there is one food that is best for pregnancy, it is dates. A randomized, controlled trial of hundreds of pregnant women found that eating six dates a day for a few weeks before giving birth can significantly improve “cervical ripening”.²⁶ In fact, the study showed that those that ate dates prior to birth used less than half the amount of Pitocin during labor. It also found that those who took dates prior to birth had more successful deliveries.



In fact, dates are associated with a 98% labor progression rate!²⁷ An earlier study found that date consumption shortens labor by an average of more than six hours. This study that these benefits are in part related to the oxytocin-like effects that dates have on the body.²⁸ This led researchers to question whether or not dates would cause preterm births. They found that though dates do not impact delivery dates, it does significantly reduce the use of drugs during labor.²⁹ The study also found that mothers report feeling more “satisfied with their birth experience.”

Dates have also been found to be more effective in managing postpartum bleeding than Pitocin. One study found three hours after delivery, the average blood loss of those who had used dates prior to birth was over a quarter-cup less than their counterparts who used Pitocin. And the best part is that it comes with no side effects like Pitocin!³⁰

Because of these studies, I recommend that mothers eat 6-7 days per day for the last 4 weeks of pregnancy. These can be added to shakes, smoothies, used in desserts, or eaten plain. But, however you get them, they are sure to help when it comes time for baby to make their appearance!

26. <https://www.ncbi.nlm.nih.gov/pubmed/21280989/>

27. <http://eprints.mums.ac.ir/6182/>

28. <https://doaj.org/article/ab2a8565a68e4a3eae1d04e0c46c8c3c>

29.

https://www.researchgate.net/publication/333102314_Effects_of_consuming_date_fruits_Phoenix_dactylifera_Linn_on_gestation_labor_and_delivery_An_updated_systematic_review_and_meta-analysis_of_clinical_trials

30. https://cdn.shopify.com/s/files/1/0820/4871/files/MEDJOULS_-_Comparing_the_Efficacy_of_Dates_and_Oxytocin_in_the_Management_of_Postpartum_Hemorrhage.pdf

Getting Rid of Pregnancy Complications



Morning Sickness

Many doctors believe that nausea and vomiting during the first trimester of pregnancy is there as a protective mechanism to the baby.³¹ The purpose of morning sickness is to cause pregnant women to physically expel and subsequently avoid foods that cause harm to mother and infant.³² In other words, the more foods that we eat that are toxic to the baby, the more morning sickness we will have. But, what would happen if we didn't eat the foods that were toxic to the baby?

Nausea and vomiting are extremely common during pregnancy in America. Approximately 85% of women report experiencing morning sickness.³³

However, populations that eat plant-based diets report little or no nausea and vomiting in pregnancy.³⁴ Furthermore, for every 15 grams of saturated fat intake, there is a 5-fold increased probability of morning sickness.³⁵

Meat and eggs are the principal source of pathogens for humans and therefore are typically the most common food aversions among pregnant women.³⁶ One study concluded that "meat [has] toxins that are mutagenic, carcinogenic, and teratogenic".³⁷ So, the development of an aversion to meat during pregnancy is a protective mechanism to the baby. Get rid of the harmful food and you have no need to expel it from the baby. That is why a plant based diet is recommended to reduce the risk of morning sickness.³⁸

Hyperemesis Gravidarum is a severe form of nausea, vomiting and weight loss that is far more intense than morning sickness. Each year, more than 50,000 pregnant women are hospitalized from this complication.³⁹ Studies show that reducing our intake of saturated fat will decrease the odds of hyperemesis gravidarum more than five-fold.⁴⁰

31. <https://www.theatlantic.com/health/archive/2016/09/the-protective-power-of-morning-sickness/501551/>

32. <https://www.ncbi.nlm.nih.gov/m/pubmed/10858967/>

33. <https://www.ncbi.nlm.nih.gov/pubmed/23863545>

34. <https://www.ncbi.nlm.nih.gov/pubmed/23863575>

35. <https://www.ncbi.nlm.nih.gov/pubmed/11913097>

36. <https://nutritionfacts.org/video/morning-sickness-may-protect-mother-and-child/>

37. <https://www.ncbi.nlm.nih.gov/pubmed/14992226>

38. <https://www.ncbi.nlm.nih.gov/pubmed/15646303>

39. <http://pennmedicine.adam.com/content.aspx?productId=14&pid=14&gid=000198>

40. <https://www.ncbi.nlm.nih.gov/pubmed/9799174>

Preeclampsia

Preeclampsia is one of the more common complications of pregnancy, impacting over 10% of pregnancies. But it is also a very dangerous condition that is linked with abnormal fetal growth, infant mortality, and various major birth defects.⁴¹ It is virtually non-existent in many developing countries, in large part because new research indicates that preeclampsia is directly linked to improper diet.⁴²

Women who follow a plant based diet have rarely have hypertension or preeclampsia. This is in large part because two of the most protective nutrients against it are fiber and potassium, which are abundant in a plant based diet.⁴³ A plant based diet, high in dietary fiber provides all of the essential nutrients needed to prevent hypertension and preeclampsia.⁴⁴ The same study indicated that a diet high in starches, specifically potatoes and brown rice, are the best foods to prevent preeclampsia.

The small town of Summertown, Tennessee put a plant based diet to the test. In this town, each pregnant woman ate 100% plant based (no animal products) for the duration of their pregnancy. According to records, of over 775 births there were ZERO cases of preeclampsia.⁴⁵

41. https://www.researchgate.net/publication/232207391_Preeclampsia_and_Fetal_Growth

42. <https://reference.medscape.com/medline/abstract/15971482>

43. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3399949/>

44. <https://www.sciencedaily.com/releases/2019/07/190710103203.htm>

45. <https://www.ncbi.nlm.nih.gov/pubmed/3589760>

Gestational Diabetes

Gestational diabetes can be extremely detrimental in pregnancy, because studies have shown that women who develop gestational diabetes are seven times more likely to develop type 2 diabetes later in life.⁴⁶ Furthermore, it is associated with a number of other complications and risks in pregnancy.⁴⁷ Studies have concluded that a low fat plant based diet is the best way to prevent gestational diabetes.^{48 49}

One of the largest nutritional studies ever conducted in the United States found that eating meat before pregnancy significantly increases the risk of developing gestational diabetes in pregnancy.⁵⁰ Higher pre-pregnancy intake of dietary heme iron (an iron found only in animal products) is also associated with an increased risk of gestational diabetes.⁵¹ In fact, one study found that by substituting in 5% animal fat for 5% carbs, there was an associated 13% increased risk of gestational diabetes.⁵² In conjunction with these findings, studies have indicated that pregnant women who eat vegetarian have a significantly reduced risk of developing gestational diabetes in pregnancy or diabetes after pregnancy.⁵³

Meat consumption isn't the only thing linked to gestational diabetes. Sweets and refined sugars are also linked to gestational diabetes.⁵⁴ So are eggs. One study found that the more eggs a woman eat before and during pregnancy, the higher their risk of developing gestational diabetes.⁵⁵

46. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4360417/>

47. <https://www.mayoclinic.org/diseases-conditions/gestational-diabetes/symptoms-causes/syc-20355339>

48. <https://journals.sagepub.com/doi/abs/10.1177/1559827611434401>

49. <https://care.diabetesjournals.org/content/39/1/16.short>

50. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5037559/>

51. <https://www.ncbi.nlm.nih.gov/pubmed/21709295>

52. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3120196/>

53. <https://www.ncbi.nlm.nih.gov/pubmed/22462760>

54. <https://www.sciencedirect.com/science/article/pii/S019566631000512X>

55. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3105262/>

Other Pregnancy Complications

There are many other pregnancy symptoms that are alleviated or completely eliminated by the proper diet. A plant based diet is also a surprising cure for leg cramps in pregnancy. Studies have indicated that the magnesium found in plant based foods can cure leg cramps during pregnancy.⁵⁶ A plant based diet is also associated with better sleep quality.⁵⁷ And some may be surprised to learn that a plant based diet has even been found to reduce muscle soreness and pain as well.⁵⁸ Suffice it to say, if you are experiencing negative pregnancy symptoms, it can likely be remedied through diet.

56. <https://www.ncbi.nlm.nih.gov/pubmed/15454974/>

57. <https://link.springer.com/article/10.1007/s40675-018-0103-x>

58. <https://www.ncbi.nlm.nih.gov/pubmed/22564864>

Recommendations

- Eat a whole food plant based diet throughout pregnancy and avoid meat, dairy, eggs, and processed foods
 - Eat a wide variety of food and focus on high fiber foods
- Do not increase calorie consumption during the first trimester. Increase an additional 340 calories during the second trimester. Increase to 450 additional calories during the third trimester.
 - Some tips to obtaining these calorie increases are having 5-6 small meals a day, not eating before laying down, eating calorie dense foods (ie. brown rice, oats, beans, avocados, bananas, and mangoes) and utilizing fresh ginger to reduce nausea.
- Starting in the 4th month of pregnancy, increase protein an additional 28 grams per day for a total protein intake of approximately 70 grams per day.
 - Utilize foods like soybeans, lentils, black beans, pinto beans, chickpeas, tofu, quinoa, and peanut butter to meet these needs.
- Eat plenty of natural folate in greens and beans.
- Take [THIS](#)* prenatal supplement
- Take [THIS](#)* B12 supplement
- Consume 6 dates per day for the last 4-6 weeks of pregnancy

*Advertiser disclosure: The links in this guide are affiliate links wherein I may receive compensation for any purchase made. However, any monetary compensation does not influence my preference or recommendation of these products in any way.

If this information has been helpful and you find yourself interested in learning how to implement a plant based diet, feel free to reach out to me at **cassidy@spirohealthandwellness.com**. I offer a free consultation for nutrition services and would be happy to answer any questions you might have!