



GW Midwifery: Guidelines for Optimal Nutrition, Exercise, and Lifestyle during Pregnancy

Optimal Nutrition in Pregnancy

“Eat foods that your great-grandmother would recognize as food”

“Chop wood, carry water, hunt and gather, and chase the antelope”

Nutrition is an important determinant of a healthy pregnancy. We cannot overemphasize how important it is for you to have a diet rich in healthy foods and devoid of all junk food during your pregnancy. Nutrition affects the outcome of pregnancy and many serious complications of pregnancy, labor, and delivery can be avoided through good nutrition.

Every day, consume the following:

- 10-12 glasses of fresh water
- 8-10 servings of fruits and veggies per day including two leafy greens, one yellow, one, and one orange one: sweet potatoes and kale are excellent food choices!
- 2-4 servings of whole grains per day: brown or wild rice, quinoa, oatmeal, barley: try to minimize wheat, even whole wheat, which is usually quite processed
- 2-4 servings of calcium rich foods per day: plain low-fat yogurt, skim milk, dark green leafy vegetables, wild salmon
- 2-4 servings of protein foods per day: eggs, lean meat, chicken, or legumes
- 2-3 servings of fish per week for optimal Omega 3 intake
- 2-3 servings of healthy fats: avocado, nuts, seeds, olive oil
- 1-2 Tbsp. of flax or chia seeds ground daily as desired

Folate / Folic Acid: We recommend that you consume 600-800mcg daily, especially in the preconception period and first trimester. This nutrient has been shown to decrease the risk of miscarriage, certain brain and spinal cord defects such as Spina Bifida, and possibly cardiac defects. The best food sources include leafy vegetables and legumes. However, to make sure you get enough of this nutrient you may choose to take a supplement, which can be taken separately from a formal prenatal vitamin if you wish.

Multivitamin: Most women will want to take a prenatal vitamin during their pregnancy. If you take a multivitamin, look for one with 400-800mcg of folic acid and 100-250mg of supplemental iodine. We believe you assimilate vitamins best from food, however, and for this reason please focus on optimal nutrition during pregnancy.



If you have nausea and/or vomiting during pregnancy, sometimes prenatal vitamins can be the culprit. Vitamins can be hard to digest and can actually make you feel sicker and give you constipation. Please talk with us if you have these symptoms.

Please minimize, and consider eliminating, the intake of the following foods:

- All refined sugar: baked goods, cookies, pies, cakes, candy, and most processed foods
- All white/processed foods: white bread, white pasta, white rice, white flour, and potatoes
- Fast / fried foods and snack foods
- Whole wheat bread: in many cases, even this type of bread can be quite processed
- Hydrogenated/partially hydrogenated vegetable oil: found in pre-packaged foods
- Corn syrup and corn syrup solids: often a hidden sweetener in pre-packaged foods
- Soda
- Boxed or bagged cereals
- Maple syrup / honey
- Caffeine: aim for a limit of 200 mg per day
- Fruit juice from concentrate: 1 8oz glass 100% orange juice daily is ok

Please eliminate the following foods/substances:

- Nicotine
- Drugs
- Alcohol
- Artificial sweeteners
- Foods that could increase the risk of listeria exposure, which can increase the risk of miscarriage, preterm labor, infection and stillbirth
 - Deli meats
 - Smoked meats/fish
 - Soft/unpasteurized cheese
 - Pate
- High mercury fish which can negatively impact fetal neurological development
 - Tile Fish
 - King Mackerel
 - Swordfish
 - Shark
 - Farm-raised salmon
 - Tuna steaks: 6 oz. light albacore tuna 2-4x/month is ok

Eating seafood during pregnancy is recommended. Eating tuna fish, and how much, remains a controversial subject and we advise you to use your own best judgement. For more information, here is an article for your review:

<http://well.blogs.nytimes.com/2015/03/02/should-pregnant-women-eat-more-tuna/>

A sample Optimal Nutrition in Pregnancy Menu:



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- Breakfast: Stir-fried kale and eggs with fresh fruit or oatmeal cooked with chia and flax seeds with blueberries
- Lunch or Dinner: Spinach salad with cooked salmon, quinoa, and beans
- Snacks: Nuts, dried fruits, carrots, seed or nut butter
- All Day: Lots and lots of fresh filtered water: no need to buy bottled water: invest in a filter instead.

The first trimester of pregnancy can present challenges to eating according to these guidelines. Please do not worry if the only foods you can eat in the first trimester are white foods. It's okay! Focus on getting through the first trimester as best you can and resume the guidelines when you feel able. Again, if you are nauseated or vomiting, please eliminate the prenatal vitamin and be in touch with us as needed.

We believe that you can get all the nutrients you need to have a healthy pregnancy by eating real, healthy, whole foods. Healthy food is food that your ancestors would recognize as food. Our dietary guidelines are designed to do several very important things beyond growing a healthy baby, placenta, and umbilical cord. The first is to keep your blood sugar at an even level throughout the day. This will help to minimize nausea, dizziness, and even the syncope (fainting episodes) so common in pregnancy. The second is to expand your blood volume properly so that you can circulate for both yourself and the baby. Not accomplishing these things can make you feel poorly during pregnancy and can lead to serious complications. Following our guidelines will also help you grow a baby that is appropriately sized for your body and pelvis: consuming highly-processed foods so readily available can contribute to the growth of a baby that is larger than your body can deliver. We focus on supporting you to eat a healthy diet and not on weight gain.

Below is an article about how your blood volume expands during pregnancy:

<http://www.uptodate.com/contents/maternal-cardiovascular-and-hemodynamic-adaptations-to-pregnancy>

Here is a link to a current article about nutritional and exercise interventions in pregnancy impacting outcomes: <http://www.bmj.com/content/344/bmj.e2088>

We are often asked for more reading information and recipes to complement our guidelines. We rely on Michael Pollan and his seminal work in *The Omnivore's Dilemma*. If you want fast and easy, we recommend his wonderful short book *Food Rules*. His new book, *Cooked* is an excellent guide to why good food and cooking is essential to human existence. His Pollan Family Cookbook is an excellent source of great recipes.

Another useful book is *Nourishing Traditions* by Sally Fallon.



The Center for Science in the Public Interest has an excellent newsletter called Nutrition Action that is an excellent source of quality nutrition information:

<http://www.nutritionaction.com/free-downloads/what-to-eat-10-best-foods/>

Below are links to short pieces on healthy food and eating while on a budget:

<http://content.time.com/time/covers/0,16641,20121203,00.html>

https://www.washingtonpost.com/lifestyle/wellness/eat-healthy-and-stay-on-a-budget/2013/04/30/68a447be-aced-11e2-b6fd-ba6f5f26d70e_story.html

http://www.huffingtonpost.com/2013/10/07/7-ways-to-eat-good-on-a-hood-budget_n_4057658.html

This is a great article on the foods we need to eat to keep us positive and happy!

“Food to Lift the Spirits”

https://www.washingtonpost.com/national/health-science/10-nutrients-that-can-lift-your-spirits/2014/01/14/05f4e514-7a4d-11e3-b1c5-739e63e9c9a7_story.html?hpid=z1

Here are the most recent nutritional recommendations endorsed by a panel of leading experts, integrating the environmental consequences of our food choices:

https://www.washingtonpost.com/business/economy/think-of-earth-not-just-your-stomach-panel-advises/2015/02/19/b3aab734-b876-11e4-aa05-1ce812b3fdd2_story.html?hpid=z1

And finally, below is a link to the FDA’s Pregnancy Page which contains excellent information:

<http://www.fda.gov/ForConsumers/ByAudience/ForWomen/WomensHealthTopics/ucm117976.htm>

Exercise Guidelines

In addition to following our nutritional guidelines, we recommend that you exercise aerobically OUTSIDE in the fresh air and sunlight every day for at least 30-60 minutes. The sun is essential to our health in so many ways and your brain works better in nature than indoors! Brisk walking is ideal for building the strong legs you will need for an upright labor. We encourage all women to practice prenatal yoga (studio/classes are not required; there are lots of great free videos, see below) and to do squats, lunges, and pelvic rock exercises several times each day.

The American College of Nurse Midwives, The American Congress of Obstetricians and Gynecologists, and the Society for Maternal and Fetal Medicine all endorse exercise during pregnancy.

The American College of Nurse Midwives Exercise in Pregnancy Recommendations (2014):

Most exercise is safe for pregnant women. In fact, daily exercise during your pregnancy can help you and your baby be healthier and might decrease your chance of having some problems during



pregnancy. If you had a medical problem before you became pregnant or have had complications during your pregnancy, you should talk about the safety of exercise with your health care provider before you start any activity.

Exercise in pregnancy can help you in many ways. It can help you feel better and have less back pain, constipation, and fatigue. Exercise can also help you sleep better and improve your mood. Your body will be better prepared for labor. You may have a shorter labor with less chance of having a cesarean birth. You will gain less weight in pregnancy, which will help you get back to your pre-pregnancy weight more quickly after the baby comes.

Exercise in pregnancy may also lower your chance of getting gestational diabetes or high blood pressure during pregnancy. Your baby is more likely to be born with a healthy birth weight. Exercise can also lower the chance of having postpartum depression.

You should try to do moderate exercise for at least 30-60 minutes most days of the week. Moderate exercise means you should start to sweat and your heart rate increases a bit, but you are still able to talk while you are exercising. If you exercised before pregnancy, you can probably continue the same physical activities. If you are not currently exercising, pregnancy is a good time to start. You want to start slow and gradually increase your exercise.

Walking is a good exercise to start with. You will get moving and have less strain on your joints. Swimming, biking, yoga, and low-impact aerobics are also good choices. Light weight training is okay too. Being creative with your exercise will help you stay motivated. Hiking, dancing, and rowing can be fun activities to try. You do not need to pay money for an exercise class or activity. Walking up and down stairs or doing exercises at home are all good, free activities.

Be sure to stretch your muscles first and warmup and cool down each time you exercise. Drink water throughout your exercise so you can stay well hydrated. Make sure you do not get too hot, and do not overdo your exercise, especially on a hot day. During pregnancy, your balance changes as the baby grows, so it is important to move carefully and always make sure you are not in danger of falling. Listen to your body for warning signs. See the following list for specific warning signs that tell you to stop your exercise.

You should not do exercises that put you at risk for getting hit or kicked in the stomach or falling. Use common sense. If you are not sure about an exercise, you should talk to your health care provider first.

Please stop exercising if you:

- Have bleeding or are leaking fluid from your vagina
- Have trouble breathing
- Feel dizzy or lightheaded
- Have pain in your chest
- Have pain or swelling in your calf
- Have contractions before you are 37 weeks pregnant
- Are feeling the baby move less than normal



The American Congress of Obstetricians and Gynecologists (ACOG) Committee Opinion on Physical Activity and Exercise during Pregnancy (2015): Woman with uncomplicated pregnancies should be encouraged to engage in aerobic and strength conditioning exercise before, during, and after pregnancy. Regular physical activity during pregnancy improves or maintains physical fitness, helps with weight management, reduces the risks of gestational diabetes in obese women, and enhances psychologic well-being.

<https://www.acog.org/-/media/Committee-Opinions/Committee-on-Obstetric-Practice/co650.pdf?dmc=1&ts=20160414T2312145666>

The Journal of Maternal-Fetal and Neonatal Medicine (2012) entitled: Exercise during pregnancy reduces the rate of cesarean and instrumental deliveries: results of a randomized controlled trial. This paper concludes that a program of moderate-intensity exercise performed throughout pregnancy was associated with a reduction in the rate of cesarean, instrumental deliveries and can be recommended for healthy women in pregnancy. <http://www.ncbi.nlm.nih.gov/pubmed/22715981>

And finally, here is an interesting article from The New York Times about exercise and your offspring: http://well.blogs.nytimes.com/2016/04/06/are-we-born-to-run/?_r=0

Lifestyle Guidelines

Decades of research in neuroscience have identified a robust link between aerobic exercise and subsequent cognitive clarity. This is one of the many reasons we recommend regular exercise daily. But other lifestyle considerations are equally important during pregnancy to optimize your health and your experience.

It is important that you are sleeping as many hours as you need to feel rested. We recommend that you nap when you are tired, and slow your mornings down so you can rise later, especially if you experience insomnia, which is quite common in pregnancy. Honor your body's rhythms and allow your body to rest deeply when it is tired.

We recommend that you keep stress to a minimum, love and laugh frequently, and most importantly, avoid negative feelings. Psychologists and medical providers have long believed that positive thinking helps with stress management and can even improve your health and self-esteem.

In their book, *The Confidence Code*, Kay and Shipman define NATs as negative automatic thoughts that come up in a recurrent fashion, constantly buzz around in your head, demand your attention, and hijack your sense of self-confidence, power, and calm. Our society reinforces NATS and fear-based thinking during pregnancy, labor, breastfeeding, and mothering, and women are especially vulnerable during this time. NATs undermine pregnant women's confidence in the healthy normal process of pregnancy and undermine a woman's innate power. Lack of confidence translates into fear and anxiety and can undermine a woman's pregnancy, labor, delivery, breastfeeding, and mothering experiences.



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Instead of NATs, we recommend you engage in Positive Affirming Thoughts (PATs). Thinking and saying positive things to yourself is giving yourself a PAT. Give yourself a PAT any time you find the NATs entering your head and undermining your sense of confidence. Say “my body is healthy and strong,” “my baby is healthy and strong,” “my body knows just what to do,” or “I trust my body.” The act of saying PATs to yourself, and asking those around you to do so as well, will increase your sense of confidence and calm in this truly remarkable experience.

For more information about this, review this nice article from The Mayo Clinic:
<http://www.mayoclinic.org/healthy-lifestyle/stress-management/in-depth/positive-thinking/art-20043950>

In conclusion, remember what Ina May Gaskin tells us in her Guide to Childbirth: “Remember this, for it is as true as true gets: Your body is not a lemon. You are not a machine. The Creator is not a careless mechanic. Human female bodies have the same potential to give birth well as aardvarks, lions, rhinoceri, elephants, moose, and water buffalo. Even if it has not been your habit throughout your life so far, I recommend that you learn to think positively about your body.”

Enjoy yourself and witness the miracle that is happening within you!