

Building Baby's Brain

What to Eat When You're Expecting

Pregnancy is a great time to pay more attention to the foods you eat. After all, you are now "eating for two." You can help your baby get a healthy start in life by eating a variety of nutritious foods.

Your diet is important throughout your pregnancy. However, there are some special needs to consider during each trimester.

► The First Trimester

During the first three months of pregnancy, it's very important to get enough of a B vitamin called folic acid. The baby's nervous system is now developing, and folic acid is needed for it to develop properly. Getting enough folic acid reduces the risk that the baby will develop neural tube defects that affect the development of the spine and brain. The most common kind of defect affects the spine and is called spina bifida.

An additional 400 micrograms of folic acid are needed during pregnancy, which is twice the normal amount. All women of childbearing age should take a multivitamin supplement containing 400 micrograms of folic acid a day, even before they become pregnant. Women who have had a child with a neural tube defect or who are taking certain drugs need much higher doses of folic acid (4 milligrams daily) and should take it as a separate supplement, not as part of a multivitamin.

Excellent natural sources of folic acid are leafy green vegetables and orange juice. Many breakfast cereals and other products made from flour are fortified with folate, which is another form of folic acid. However, it may be hard for pregnant women to get enough folic acid without taking a vitamin supplement. Ask your health care provider if he or she has not recommended a folate supplement.

Some women have "morning sickness." This problem may occur more often right when you get up, but it can happen any time during the day. Before you rise each morning, eat a few crackers that you keep next to your bed and then get up slowly. Keep a window cracked to air the bedroom.

You may find relief by eating small, frequent meals that are lower in fat throughout the day. Eat your food cold to minimize food odors. Brush your teeth after meals to remove any lingering flavor of food. Drink fluids between meals, and be sure to drink at least a quart a day, especially if you are vomiting. Sports drinks may replenish sodium and potassium lost during vomiting. If prenatal vitamins make you sick, take them before bed with a small snack. If nausea and vomiting becomes severe, talk to your health care provider about medicine to control it. Usually morning sickness goes away by the second trimester.

► The Second Trimester

During the second trimester, about half of the weight you gain goes directly to the baby. The other half is needed for changes in your body. During pregnancy, your body must increase the amount of blood that it makes by about a half-gallon. This extra half-gallon of blood weighs about 3 pounds.

In order to make more red blood cells, your body needs iron. Iron is part of hemoglobin, which carries oxygen and other nutrients to the baby, and takes waste products out of the baby's system. Iron deficiency anemia can be harmful to both you and your baby. You are your baby's only source of oxygen, and iron carries oxygen through the blood.

The recommended daily amount of iron you should consume while pregnant is 27 milligrams. It's not possible to get enough iron to meet your baby's needs during pregnancy through food alone, so iron supplements are routinely prescribed. Be sure to take them! If they irritate your stomach, tell your health care provider. There are many different types of iron supplements available, and changing brands may help. Try taking iron supplements in the evening if you have morning sickness, and with food to help reduce stomach irritation. Also, be sure to drink plenty of fluids because iron supplements may cause constipation.

Your baby's organs, including her brain, are growing rapidly during the second trimester, so be sure to eat a well-balanced diet.



► The Third Trimester

During the last trimester, almost all of your weight gain goes to the baby. The last month of pregnancy is a critical time for the baby's growth. Mothers who don't get enough calories during the last trimester have an increased risk of their babies being born prematurely.

You can expect to gain about one pound a week during the last trimester. Pay attention to your rate of weight gain. Sudden increases in weight during the third trimester can be a sign of preeclampsia, which can lead to pregnancy-induced high blood pressure (PIH). If you notice a sudden increase in your weight or extreme swelling, let your health care provider know right away.

► Why Do I Need to Gain so Much Weight?

Many women wonder why they are told to gain 25 to 35 pounds when the average newborn baby weighs only about 7.5 pounds. The extra weight is not just body fat, although you do need some extra body fat to cushion the baby and provide energy for breastfeeding. Let's take a look at where the weight gain of pregnancy goes, on average.

Gaining enough weight during your pregnancy is one of the healthiest things you can do for your baby. It decreases the chances that your baby will be born with a low birth weight. Babies who weigh over 5.5 pounds are healthier than smaller babies.

If you are overweight when you become pregnant, your doctor may recommend less weight gain, especially during the earlier part of your pregnancy. For you, gaining a half-pound each week during the second and third trimester may be enough.

Similarly, if you are underweight when you get pregnant, your doctor may want you to gain slightly more weight than average—even up to a total of 40 pounds by the end of your pregnancy. This averages about a pound a week. Only you and your doctor can decide how much weight gain is right for you and your baby.

Since the baby is growing and pressing on your stomach, you may have heartburn. Different foods cause heartburn in different people. Keep track of the foods that bother you and remove them from your diet. Common causes are soft drinks, caffeine, chocolate, acidic foods, spicy foods, high-fat foods, and peppermint.

Eat solid foods at your meals and drink your fluids in between. Small, frequent meals and not eating within two to three hours of bedtime may help. Chewing gum may also neutralize the acid. Prop yourself up in bed with pillows and wear loose clothing around your waist all the time. Definitely do not smoke.

| For | Lbs. |
|----------------------|--------------|
| Baby | 7.83 |
| Placenta | 1.48 |
| Uterus | 2.47 |
| Amniotic fluid | 1.98 |
| Breasts | 0.99 |
| Blood (mom and baby) | 2.96 |
| Body fluids | 7.05 |
| Body fat | 7.72 |
| Total | 32.48 |

► How Do I Make Sure I Include the Right Foods Each Day?

If you are a normal weight before pregnancy, you need only an average of 300 extra calories per day to fuel your baby's growth and keep you healthy during pregnancy—the amount in a glass of non-fat milk and half a sandwich. The U.S. Department of Agriculture's MyPlate (found at www.choosemyplate.gov) can help you plan your meals and snacks. Include foods from each food group every day to make sure your baby gets the nutrients he needs to grow properly. The MyPlate website also includes an online interactive diet-planning program called SuperTracker. This program gives you a personalized plan that includes the kinds of foods in the amounts that you need for each trimester of pregnancy.

Selected References:

American College of Obstetricians and Gynecologists. (2012). *Frequently asked questions: Pregnancy*. Retrieved from <http://www.acog.org/~media/For%20Patients/faq001.pdf?dmc=1&ts=20130218T1547321959>.

Brown, J. E. (2014). *Nutrition through the life cycle (5th ed.)*. Stamford, CT: Cengage Learning.

Food and Nutrition Information Center (U.S.). (2013). *Nutrition during pregnancy*. Beltsville, MD: National Agricultural Library USDA.

Institute of Medicine. (2009). *Weight gain during pregnancy: Reexamining the guidelines*. Washington, DC: National Academies Press.

Koletzko, B., Godfrey, K. M., Poston, L., Szajewska, H., van Goudoever, J. B., de Waard, M., ... Zalewski, B. M. (2019). Nutrition during pregnancy, lactation and early childhood and its implications for maternal and long-term child health: The early nutrition project recommendations. *Annals of Nutrition & Metabolism*, 74(2), 93-106.

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