

Good Health Before Pregnancy: *Preconceptional Care*

Pregnancy is a major event. If you plan for it, you can make wise choices that will benefit both your health and that of your baby. Good health before pregnancy may lower the risk that either you or your baby will be exposed to things that could be harmful. Also, getting good health care before you become pregnant—sometimes called *preconceptional care*—will help you throughout your pregnancy.

This pamphlet will tell you about:

- *Guidelines for achieving good health before pregnancy*
- *What to expect at your doctor's visit*
- *Lifestyle factors that may affect you*



Keep fit, eat wisely, avoid things that could be harmful, and visit your doctor. This way you have done the most you can to prepare for a normal pregnancy and a healthy baby.

A Preconceptional Visit

If you are planning to become pregnant, you should let your doctor know. You may wish to arrange a special visit.

At the visit, your doctor will try to identify things that may pose risks to you or any children you may have. Your doctor will ask about your medical history, diet and lifestyle, use of birth control methods, past pregnancies, and family health. Your honest and open answers will help you increase the chance of a healthy pregnancy and healthy baby.

Special Concerns

Medical Conditions

Some women have medical problems, such as diabetes (high blood sugar), high blood pressure, and cardiovascular (heart and blood vessel) problems, that may increase risks for them or their fetus. Your doctor will discuss your current treatment with you before you are pregnant. The problem likely will need special care during pregnancy. Your treatment may need to be changed.

Try to get any health problem you may have under control before you become pregnant. This will help keep you and your baby healthy. For instance, women with diabetes are two or three times more likely to have babies born with major birth defects. However, these women can increase their chances of having healthy babies if they eat right, exercise, and maintain normal blood sugar levels both before and during pregnancy. If you have a medical problem, keep using birth control until you talk with your doctor.

You should tell your doctor if you are taking medications, either prescribed or bought over the counter. Some can harm your fetus. These include some blood thinners and medications that control acne (isotretinoin), high blood pressure (ACE inhibitors), and seizures.

Infections and Vaccinations

Infections can harm both the mother and the fetus. Some infections during pregnancy can cause severe birth defects or illnesses in the fetus.

Vaccination can prevent some infections (see box). If you have not been vaccinated for diseases such as measles, mumps, and rubella, tell your doc-

Are Your Immunizations Up-to-Date?

Women in their reproductive years should have immunizations as a routine part of preventive care:

Tetanus–diphtheria booster (every 10 years)

Measles, mumps, rubella (once if not immune)

*Chicken pox (once if not immune)

*Hepatitis A vaccine

*Hepatitis B vaccine

*Influenza vaccine

*Lyme disease

*Pneumococcal vaccine

*These immunizations are given as needed based on risk factors. Check with your health care provider.

tor. If you're vaccinated before you become pregnant, it will protect you and your future children. The vaccine should be given at least 3 months before you try to conceive. Use a birth control method for those 3 months.

Infections passed through sexual contact—sexually transmitted diseases (STDs)—also are harmful during pregnancy. Many types of STDs may affect your ability to become pregnant. They also may infect and harm your baby. Some STDs include:

- *Chlamydia*
- *Gonorrhea*
- *Genital herpes*
- *Syphilis*
- *Human immunodeficiency virus (HIV)*

The use of some birth control methods, such as condoms and spermicides, can lower the risk of getting some STDs. When a woman is trying to get pregnant, she will be at a higher risk of getting an STD because she will not be using birth control. The risk of getting an STD increases if you have more than one sexual partner.

If you think you may have an STD, get tested and treated right away. Your partner also should be treated. Neither of you should have sex until you have both finished treatment.

Infection with HIV can cause harm to mother and baby. Early treatment may help prevent infection from being passed to the fetus. Because of this, your doctor will test you for HIV, even if you have no symptoms.

Past Pregnancies

Some problems with past pregnancies can occur again. Therefore, your doctor will ask questions about any past pregnancies. If you have had more than one **miscarriage** or a previous baby with a birth defect, your doctor may suggest studies to find out the cause.

Family Health History

Some conditions occur more often in families. If a close member of your family has a history of a disorder, you may be at greater risk of having it, too. You may be asked whether any member of your family has had diabetes, high blood pressure, or seizures, for instance.

Certain disorders can be inherited. These are called genetic disorders. Some genetic disorders are more common in certain ethnic groups.

Based on your age, family history, and ethnic group, you may be offered genetic counseling—a meeting with someone who is specially trained in genetics. Genetic counseling can help couples find out their chances of having a child with a birth defect. It involves a detailed family history. In some cases, you also will have a physical exam and lab tests.

Testing can be done to detect some genetic disorders, such as mental retardation. In some cases, parents can be tested before pregnancy to see if there is a chance that the disorder could be passed to their children. Disorders for which testing is available include:

- Canavan disease
- Cystic fibrosis
- **Fragile X** (a cause of mental retardation)
- Sickle cell disease
- Tay-Sachs disease

Lifestyle

Your doctor may ask about your family life, work, and lifestyle to learn of any behaviors and exposures that could be a risk. He or she may ask about hobbies, habits, as well as things at home and work that could affect your pregnancy.

Diet and Nutrition

Your doctor will review your diet. He or she may suggest changes in areas such as:

- Your weight
- Your use of vitamins and other food supplements
- Your eating habits, such as a vegetarian diet or fasting
- Any eating disorders you may have

If you're planning to have a baby, you should try to reach a healthy weight before you become pregnant. You should not weigh too little or too much. To reach a healthy weight, it helps to plan your diet.

A balanced diet is basic for good health at all times in your life. Because what you eat supports the growth of your fetus, it is even more key before and during your pregnancy. An average woman needs about 2,200 calories per day. When you are pregnant, you need about 300 calories more each day and extra nutrients to stay healthy and help the fetus grow.

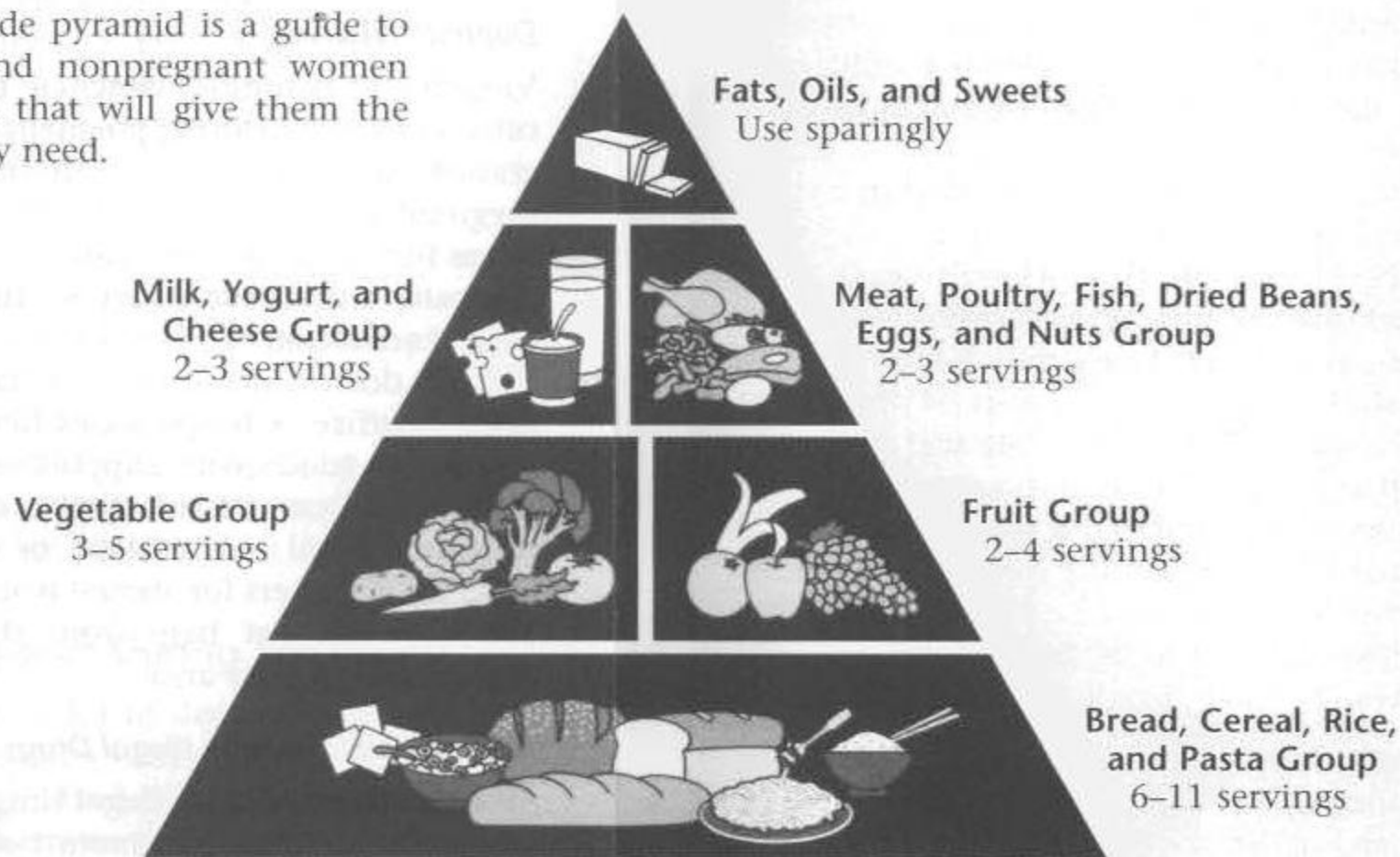
To eat wisely, choose your meals from the food pyramid (see box). If you already have a good diet, it is easy to make changes during pregnancy to get the extra calories and nutrients you need.

Folic acid can help reduce the risk of **neural tube defects**. Because of this, the U.S. Public Health Service suggests all women of childbearing age take 0.4 mg of folic acid daily (see box). If you cannot consume enough folic acid through your diet, you should take supplements of this vitamin.



The Food Guide Pyramid

The food guide pyramid is a guide to help men and nonpregnant women choose foods that will give them the nutrients they need.



Source: Modified from the U.S. Department of Agriculture and U.S. Department of Health and Human Services.

Food Choices

When making your daily choices from each food group, pick those that are low in fat and high in fiber.

One serving is:

- *Bread, cereal, rice, and pasta group.* 1 slice of bread; 1 ounce of cereal; 1/2 cup of cooked cereal, rice, or pasta
- *Vegetable group.* 1 cup of raw, leafy vegetables; 1/2 cup of other cooked or raw vegetables; 3/4 cup of vegetable juice
- *Fruit group.* 1 medium apple, banana, or orange; 1/2 cup of cooked or canned fruit; 3/4 cup of fruit juice
- *Milk, yogurt, and cheese group.* 1 cup of milk or yogurt; 1 1/2 ounces of natural cheese; 2 ounces of processed cheese
- *Meat, poultry, fish, dried beans, eggs, and nuts group.* 2-3 ounces of cooked lean meat, poultry, or fish; for other foods in this group, 1 ounce of meat equals 1/2 cup of cooked dried beans, 1 egg, or 2 tablespoons of peanut butter

Folic Acid: The Vital Vitamin

Women who might get pregnant should have 0.4 milligrams of folic acid daily. Pregnant women should have at least 0.4 milligrams each day during the first 3 months of pregnancy.

Women who have had a child with a spine or skull defect are more likely to have another child with this problem. These women need higher doses of folic acid—4 milligrams daily. It should be taken 1 month before pregnancy and during the first 3 months of pregnancy. These women should take folic acid alone, not as a part of a multivitamin preparation. To get enough folic acid from multivitamins, a woman would be getting an overdose of the other vitamins.

This vitamin can be found in many food sources:

- Dark, leafy greens and vegetables (such as spinach, collard and turnip greens, Romaine lettuce, broccoli, and asparagus)
- Whole-grain breads and cereals
- Citrus fruits and juices (such as strawberries, oranges, and orange juice)
- Organ meats (such as liver)
- Dried peas and beans (such as pinto, black, navy, and lima beans, chickpeas, and black-eyed peas)
- Folic acid-fortified breakfast cereals

Keeping Fit

Good health depends on both a proper diet and exercise. If you follow a fitness routine before you conceive, you can improve your chances of having a comfortable and active pregnancy. The sports and exercise you can do during pregnancy depend on your health and how active you were before you became pregnant.

Swimming and walking are good forms of exercise. Jogging, cycling, and some strenuous sports may be fine during pregnancy if you are in shape and were used to them before you became pregnant.

If you need to lose weight, you should do so before pregnancy and again after giving birth. You should not try to lose weight during pregnancy.

Domestic Violence

Victims of domestic violence before pregnancy often are victims during pregnancy. If you are being abused, tell your doctor. Physical abuse against pregnant women not only harms the woman, it can harm her fetus as well. Miscarriage, injury to the placenta, and direct injury to the fetus from the blows can occur.

Your doctor, nurse, or a social worker at your doctor's office or hospital can help. They can help you get in touch with support services for abused women, such as crisis hotlines, domestic violence programs, legal aid services, or counseling. Most areas have shelters for abused women and children. You also can get help from the social services department in your area.

Alcohol, Tobacco, and Illegal Drugs

Alcohol, tobacco, and illegal drugs can harm both you and your fetus. No amount of these substances has been proven safe to use during pregnancy.

Using alcohol and illegal drugs may cause damage that can last a lifetime. These substances can be linked to problems such as mental retardation and birth defects.

Cigarette smoking can cause premature birth, **low birth weight, premature rupture of membranes**, and problems with the placenta. The risk of the baby dying from sudden infant death syndrome (SIDS) also is increased.

For the sake of your own health and that of your baby, now is a good time to quit your use of alcohol, tobacco, and illegal drugs. If you find it is too hard to quit, at least cut down your use. If you need help, tell your doctor. He or she can refer you for counseling or treatment. It's better for your pregnancy if your partner quits smoking also.

Environment

Some substances found at home or work may harm your fetus if you become pregnant (see table). These substances can prevent normal growth of the fetus. This may cause physical and mental defects.

Radiation is used in some jobs. X-rays are a form of radiation used to diagnose and treat disease.

Exposure to high levels of some kinds of radiation can affect the fertility of men and women. It also can harm the fetus.

The amount received in a chest X-ray, though, will not hurt fertility or a fetus. If you need X-rays, including those for dental work, be sure to tell your health care team if you are pregnant or think you are pregnant. Often, steps can be taken to protect the fetus.

If you could be exposed to a harmful substance, take steps to avoid it. Before you accept a new job, find out whether you might be exposed to chemicals or radiation.

Your partner's fertility can be affected, too. Exposure to chemicals used in photography, solvents, heavy metals such as lead and mercury, and some pesticides can damage his sperm.

Planning for Support During Pregnancy

Pregnancy may put a lot of demands on you and your family. As you plan your pregnancy, talk with your family about it. Find out if they will provide the emotional support you and your baby will need.

Table 1. Agents That Can Harm the Fetus

Agent	Reasons Used
Alcohol	Social reasons, dependency
Anticonvulsants	To treat seizure disorders and irregular heartbeat
Cancer drugs	To treat cancer and psoriasis (skin disease)
Isotretinoin	Treatment for cystic acne
Lead	Industries involving lead smelting, paint manufacture and use, printing, ceramics and pottery glazing
Lithium	To treat the manic part of manic-depressive disorders
Tetracycline	An antibiotic used to treat infection

Also, having a baby can cost a lot. As part of your plans, find out whether your health insurance pays for the cost of prenatal care, birth, and well-baby care. If coverage will not start until a certain date, you may want to think about delaying your pregnancy until then. Being aware of what your health insurance covers is a good start to making a financial plan to pay for the costs of pregnancy and childbirth.

Find out how much time your employer allows for maternity leave for pregnancy—whether complicated or uncomplicated—and after birth. The Family and Medical Leave Act requires that most employers give long-term employees 12 weeks of unpaid, job-protected leave after childbirth.

Finally...

Becoming a parent is a major commitment filled with challenges, rewards, and choices. Make a few changes now: keep fit, eat wisely, avoid things that could be harmful, and visit your doctor. This way you have done the most you can to prepare for a normal pregnancy and a healthy baby.

Fetal Effects

Growth restriction and mental retardation

Growth and mental retardation, developmental abnormalities, neural tube defects

Increased rate of miscarriage, various abnormalities

Increased risk of miscarriage, developmental abnormalities

Problems in development of the fetal central nervous system

Congenital heart disease

Underdevelopment of tooth enamel, incorporation of tetracycline into bone

Glossary

Chlamydia: A sexually transmitted disease that can cause pelvic inflammatory disease, infertility, and problems during pregnancy.

Fragile X: A genetic disease of the X chromosome that is the most common inherited cause of mental retardation.

Genital Herpes: A sexually transmitted disease caused by a virus that produces painful, highly infectious sores on or around the sex organs.

Gonorrhea: A sexually transmitted disease that may produce no symptoms in women but can lead to pelvic inflammatory disease, infertility, and arthritis.

Human Immunodeficiency Virus (HIV): A virus that attacks certain cells of the body's immune system and causes acquired immunodeficiency syndrome (AIDS).

Low Birth Weight: Weighing less than 5 1/2 pounds.

Miscarriage: The spontaneous loss of a pregnancy before the fetus can survive outside the uterus.

Neural Tube Defect: A birth defect that results from improper development of the brain, spinal cord, or their coverings.

Premature Rupture of Membranes: A condition in which the membranes that hold the amniotic fluid rupture before labor.

Syphilis: A sexually transmitted disease that is caused by an organism called *Treponema pallidum*; it may cause major health problems or death in its later stages.