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NURITION DURING PREGNANCY

Introduction

Proper nutrition during pregnancy plays a vital role in determining the health of the newborn child. Through the quantity and quality of what a pregnant woman eats, she provides the nourishment necessary to begin and maintain the growth and development of her fetus.

How Much Weight to Gain?

Pregnancy is not the time to diet. In fact, a woman should increase her caloric intake. Most pregnant woman requires an additional 300 calories a day over their pre-pregnancy needs and gain weight during pregnancy. For a woman of average weight-for-height before pregnancy, the suggested weight gain is 25 to 35 pounds.

An underweight woman should aim for a 28 to 40-pound weight gain. For an overweight woman, the suggested range is 15 to 25 pound. All woman should discuss appropriate weight gain with their health care providers.

In the first three months, most women gain only 2 to 4 pounds. After that, the average weight gain is nearly 1 pound per week. When the child is born, most women lost 12 to 14 pounds. The extra weight can be lost within a year, with good nutrition and normal activity.

How Nutrients Affect Fetal Development

Since developing fetuses get their nutrition directly from their mothers, a woman who is pregnant needs to know which foods will provide proper nutrition for her growing baby. Good foods contain carbohydrates, protein, vitamins and minerals and come from the following food groups: fruits, vegetables, grain products, milk and milk products, meat or other protein foods. Fatty or overly sugared foods or drinks, such as pastries, doughnuts, and soda, contribute little but extra calories.

One of the most important nutrients for pregnant women is protein, which provides the growth element for body tissues, including the growing baby, the placenta, the increase in the mother's blood volume and the amniotic fluid. During pregnancy, a total of 3 to 3 servings a day is

recommended. One serving of protein is 3 ounces. Lean meats, eggs, and other foods such as beans and tofu are excellent sources of protein.

Three other nutrients that are essential to the health of a mother and her growing baby are calcium, iron and folic acid. These require special attention, because most women don't get enough through their normal diet.

Calcium, which makes bones and teeth strong, is found primarily in milk and milk products, although broccoli and canned fish also are good sources. Iron is needed for both mother's and baby's blood. Although good sources of iron are available in such foods as liver, red meats, and dried fruits, most pregnant women cannot obtain enough iron from their diet alone. The National Academy of Sciences recommends that pregnant women take a supplement containing 30 mg of iron daily during the second and third trimesters.

The third nutrient is folic acid, a vitamin essential for the process of cell division and the development of healthy tissues. Like iron, folic acid can be found in many foods, including leafy green vegetables, liver and eggs. Because studies show that folic acid can help prevent certain birth defects of the brain and spine called neural tube defects. The United States Public Health Service recommended in September 1992 that all women of childbearing age who are capable of becoming pregnant should consume 0.4 mg (400 micrograms) of folic acid a day. This is the current Recommended Daily Allowance of folic acid for non-pregnant women and is contained in many multivitamins.

Fluids also are essential, and the recommended daily intake of 6 to 8 glasses can be met by drinking water, juice or milk.

Guidelines for Daily Choices

For most women, a balance diet during pregnancy will consist of three meals a day.

Meals should contain nutrient rich foods from each of the following foods groups: proteins, fruits, vegetables, grain products, and milk and milk products.

Protein rich foods have the added advantage of containing iron and B vitamins. Two or three servings of protein foods a day will meet the requirement. Good choices are lean meats, fish, eggs, beans and tofu. Poorer choices, because they contain a high percentage of fat, are hot dogs, sausage, spare ribs, and especially bacon.

Three to five daily servings of vegetables and two to four servings of fruits are necessary to supply vitamins, particularly A and C. Recommended fruits include citrus (oranges, grapefruits) as well as apples, bananas, guavas, mangos and dried fruit. Vegetables may be dark green, such as broccoli, spinach or kale, or a variety of others including carrots, cabbage, squash or baked white or sweet potato. Pure fruit juice should be chosen over fruit drinks which contain added sugar and provide little nutritional value. While fresh fruits and vegetables are best, frozen or canned may be substituted.

Among the grain products, whole grain and whole wheat are best. 6 to 11 servings daily are recommended. Any of the following counts as a serving: 1 slice of whole grain bread, $\frac{3}{4}$ cup ready to eat enriched cereal, $\frac{1}{2}$ cup oatmeal, $\frac{1}{2}$ cup enriched or brown rice, 2 tortillas, or $\frac{1}{2}$ cup spaghetti or other noodles.

Four servings a day of milk and milk products are suggested. These may include: 1 cup of milk, yogurt or cottage cheese, two 1 inch cubes of cheese, 1 cup pudding or custard, 1-1/2 cups soup made with milk, or 1 cup ice milk or ice cream.

For women who can't digest the sugar in milk or are lactose intolerant, modified milk products are available in the dairy section of the supermarket. These include yogurt, milk in cultured form, and low lactose substitutes. A woman who feels she is not getting enough milk products should talk with her health care provider about other sources of calcium

Adjustments in diet may be necessary to deal with some of the common discomforts of pregnancy. If nausea is a problem (usually during the first trimester), smaller more frequent meals may help, along with crackers as snacks and liquids between, rather than with meals. Heartburn also can be eased by frequent small meals and avoiding greasy or heavily spiced foods and caffeine. For constipation, which may occur at any time during pregnancy but is more common during the latter part, helpful remedies include increased fluid intake, high fiber foods such as whole grains, and naturally laxative foods such as dried fruits (especially prunes and figs), and other fruits and juices, particularly prune juice.

Substances to Avoid

Alcohol, drugs and smoking all may harm the developing baby and should be avoided during pregnancy.

Excessive consumption of alcohol can lead to fetal alcohol syndrome (FAS), characterized by abnormalities of the face, heart, and central nervous system, accompanied by small head size and retardation in growth and mental development. Even moderate drinking may contribute to spontaneous abortion and low birthweight, and produce offspring with more subtle features of AS.

Many drugs, ranging from crack to seemingly harmless aspirin, can be dangerous for the unborn child. Crack, cocaine and other "recreational" drugs can kill an unborn baby or cause any number of major birth defects and/or childhood problems. Many prescription or over-the-counter drugs cross the placenta and may adversely affect a fetus. A pregnant woman should check with her health care provider before using any medication.

Cigarette smoking should be avoided completely. Infants of mothers who smoke during pregnancy have proven to be smaller than infants of comparable mothers who do not smoke. Babies of smoking women also experience a higher rate of stillbirth and neonatal death.

Caffeine is found in tea, coffee, soft drinks, and chocolate. Too much caffeine may not be safe for your baby.

Foods you should consider giving up for reducing intake of include:

Canned Fish You should not eat canned fish more than 1-2 times a week because it can contain mercury and aluminum, which may harm the baby. Canned tuna has been known to lead to mercury poisoning in unborn babies.

Soft Cheese Feta and the soft Mexican cheeses should be avoided during pregnancy because they can carry the bacteria Listeria, which can cause a serious infection that can result in miscarriage or still birth.

Packaged/Junk Foods These foods often have long lists of ingredients that the average person can't pronounce. We really do not know the effect that all those artificial colors, flavors, and preservatives might have on the unborn baby and if you are not concerned about that, realize that the more "empty" calories you take in, the less room you have for foods with more nutritional value. If you must eat a candy bar, pick on with nuts for protein! If you need a frozen sweet, pick frozen yogurt instead of a popsicle!

Other Fish You should pay careful attention to local warnings about fish in our area. Fish is a healthy food for pregnancy as long as it is not contaminated. Avoid raw fish, especially shellfish (oysters, clams).