

PURPOSE:

This diet is designed to provide the increased nutrients during pregnancy that are essential for the health of the mother and the well-being of the baby.

DESCRIPTION:

Foods from each food group in the Food Guide Pyramid are included in quantities to meet the increased nutrient needs of pregnancy. Nutrient needs that are markedly increased include protein, iron, folate, vitamin B-6 and magnesium. Energy requirements increase by 300 calories a day during the second and third trimesters. Pregnant women need to emphasize foods high in nutrients. Alcohol should be avoided during pregnancy. Caffeine intake should be limited to no more than 2 cups of caffeine-containing beverages per day.

BASIC INFORMATION:

Weight Gain: Recommendations for the range of total weight gain and the pattern of weight gain should be based on prepregnancy weight for height. The pattern of weight gain is as important as total weight gain during pregnancy. Weight gain should be recorded on a chart that shows weight gain by gestational age.

Pregnancy Weight Gain Recommendations

Prepregnancy Weight	Total Weight Gain	Rate of Gain for 2nd and 3rd Trimesters
Normal Weight	25-35 pounds	1.0 pound/week
Underweight	28-40 pounds	more than 1.1 pound/week
Overweight	15-25 pounds	0.67 (2/3) pound/week
Twins	30-35 pounds	1 1/2 pounds/week

Nutrient Supplements

Assessment of dietary intake should be completed for every pregnant woman. The increased nutrient needs of pregnancy can generally be met with slight changes in dietary habits.

Pregnant women should receive daily supplementation of 30 mg ferrous iron in the second and third trimester. All pregnant women should consume 400 mcg folic acid from fortified foods such as folic acid-fortified grain and cereal products and/or supplements, in addition to food folate from a variety of fruits, fruit juices, and leafy green vegetables.

Prenatal vitamin and mineral supplements should be provided for women with inadequate diets and for high risk populations. Excessive vitamin and mineral intakes should be avoided because of potential toxic effects in pregnancy. Vitamin and mineral supplements for use during pregnancy should not contain more than twice the recommended amount for adults.

Anemia

Iron deficiency is the most common cause of anemia in pregnancy. Iron needs markedly increase in pregnancy. Women taking iron supplements of more than 30 mg per day may be prescribed supplements of 2 mg copper and 15 mg zinc per day.

Eat foods high in iron such as beef, pork, lamb and organ meats; iron fortified cereals; dried beans, peas, or lentils; dark green leafy vegetables; peanut butter and molasses. Combine foods high in vitamin C with iron-rich foods. Use cast-iron cookware, if possible.

Caffeine

Studies do not provide significant evidence that caffeine affects pregnancy outcome, however, pregnant women should eliminate or limit consumption of caffeine-containing beverages such as coffee, teas and colas to no more than 2 servings a day.

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Diabetes Mellitus

Pregnant women with any type of diabetes need special medical and nutritional care. Women with diabetes mellitus should achieve good blood sugar control prior to becoming pregnant. All other women should be screened for gestational diabetes at 24-28 weeks of pregnancy. Careful monitoring blood glucose levels are critical for a healthy pregnancy outcome.

Food Safety

Foodborne illness is especially dangerous for pregnant women. To avoid exposure to *Listeria*, pregnant women should avoid unpasteurized milk and soft cheeses; carefully follow “keep refrigerated” and “use by” dates. Avoid eating raw or partially cooked meats, poultry, shellfish and eggs. Wash hands after handling raw foods.

To avoid other foodborne diseases, proper foodhandling procedures should be followed including storing foods at proper temperatures; washing cutting boards and knives after contact with raw meat, poultry and seafood; and careful handwashing before and after handling food.

Hypertension

Immediate referral for medical treatment is essential for pregnant women with increases in blood pressure. A diet to meet the nutrient needs of pregnancy with ample but not excessive amounts of calories and protein should be encouraged. Sodium intake should not be restricted unless specified by a doctor or health care provider.

Pica

Pica is the practice of eating substances with little or no nutritional value. Pica in pregnancy often involves consumption of ice, dirt, clay or cornstarch. Less frequently, matches, hair, charcoal, cigarette ashes, mothballs, baking soda and coffee grounds may be eaten.

Nutritious food may be displaced by pica substances. Items such as starch that provide calories may result in excessive weight gain. Pica substances may contain toxic elements or interfere with mineral absorption, such as iron.

Pica has been associated with iron deficiency. If either iron deficiency or pica is identified during pregnancy, assessment should be initiated to see if other medical or nutritional problems exist.

Sodium

Normal sodium intake is needed during pregnancy to support the large prenatal expansion of tissues and fluids. Sodium should not be restricted unless specified by a doctor or health care provider.

Teen Pregnancy

Teens should gain weight at the upper end of the appropriate weight for height ranges. Teens are at high risk for iron deficiency and inadequate calorie intake. Eating regular meals, choosing healthy snacks and emphasizing foods high in nutrients are especially important for pregnant teenagers.

Vegetarian Diets

Pregnant women consuming vegetarian diets need careful nutritional assessment. The type of vegetarian diet will determine the potential for nutrient deficiencies. A lacto-ova vegetarian diet that includes milk, dairy products, and eggs is more likely to meet the nutrient needs of pregnancy than the highly restrictive vegan diet, which eliminates all foods of animal origin.

Vegan diets will require careful planning to consume adequate protein from complementary plant proteins. Alternate sources of Vitamin B₁₂, zinc, iron and calcium will be needed in a vegan diet. Iron status should be carefully monitored. Low prepregnancy weight and less than optimal weight gain are common problems for vegans. High calorie foods such as nuts, nut butter, wheat germ, avocados, dried fruit, coconut, honey and salad dressings may be needed.

NUTRITIONAL ADEQUACY: This diet is designed to provide adequate amounts of calories, protein, vitamins, minerals and other nutrients to meet the nutritional needs of a pregnant woman.

Daily Food Guide for Pregnant Women

Food Group and Recommended Serving	Serving Size
<p>Dairy Foods (3-4 Servings) Rich in calcium, protein, vitamins A & D, & phosphorus Sources: Milk, yogurt, cheese, salmon, dark leafy greens, cottage cheese; vegan calcium sources: calcium-fortified orange juice, cereal, pasta</p>	1 cup milk or yogurt 1/3 cup dry milk powder 1 1/2 ounces cheese 2 cups cottage cheese
<p>Protein Foods (6-7 Servings) Rich in protein, iron and B vitamins Sources: Beef, pork, lamb, chicken, fish, eggs, cheese, cottage cheese, tofu, peanut butter, dried beans or peas, nuts, seeds</p>	1 ounce meat, chicken, or fish 1/4 cup tuna, cottage cheese or tofu 1 egg, or 1 ounce cheese 2 tablespoons peanut butter 1/2 cup dried beans or peas 1/3 cup nuts, or 1/4 cup seeds
<p>Vitamin A Rich Fruits and Vegetables (1 Serving) Rich in vitamin A and fiber Sources: Carrots, spinach, dark leafy greens, sweet potatoes, winter squash, chili peppers, red and green peppers, tomatoes, cantaloupe, mango, papaya, apricots, vegetable juice cocktail, green onions, nectarine</p>	1/2 cup cooked vegetables 1 cup raw dark leafy greens 2 tablespoons chili peppers 1/2 cup red pepper 2 medium tomatoes 6 ounces vegetable juice cocktail 1/2 cup raw green onions 1/4 cup dried or 3 raw apricots 1/2 medium papaya 1/4 medium cantaloupe or 1 medium mango
<p>Vitamin C Rich Fruits and Vegetables (1 Serving) Rich in vitamin C and fiber Sources: Oranges, grapefruit, tangerines, lemons, cantaloupe, kiwi fruit, strawberries, mango, papaya, broccoli, Brussels sprouts, cabbage, cauliflower, chili peppers, red and green peppers, tomatoes</p>	6 ounces citrus juice 1 orange or lemon 1/2 grapefruit or 2 medium tangerines 1/4 medium cantaloupe or papaya 1 medium kiwi fruit or mango 1/2 cup strawberries 1/2 cup broccoli, Brussels sprouts, or cauliflower 1 cup raw or 1/2 cup cooked cabbage 2 tablespoons raw chili pepper 1/2 cup red or green peppers 2 medium tomatoes
<p>Other Fruits and Vegetables (3-7 Servings) Rich in other vitamins, minerals and fiber Sources: Apples, bananas, grapes, peaches, pears, pineapple, raisins, plums, watermelon, green beans, beets, corn, cucumbers, lettuce, peas, potatoes, radishes, zucchini, dried fruits</p>	1 piece fresh fruit 1/2 cup canned or cooked fruit 1 cup raw fruit 1/4 cup dried fruit
<p>Bread and Cereals (6-11 Servings) Rich in B vitamins, iron and fiber (if whole grain) Sources: Breads, tortillas, crackers, hot and cold cereals, rice, noodles, macaroni</p>	1 slice bread 1 roll 1 tortilla 1/2 cup rice or pasta 3/4 cup cold cereal 1/2 cup cooked cereal 1 ounce cracker
<p>Fats Provide vitamin E and essential fatty acids Sources: Butter, margarine, oils, lard, bacon, salad dressings, olives, avocados</p>	As needed to meet calorie needs. Use in moderation. Fats occur normally in many foods such as meats, poultry, and dairy products.
<p>Fluids</p>	Drink at least 8 glasses of liquids each day. Milk, fruit juices, soups and water. Don't drink beverages containing alcohol.

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Suggested Meal Plan	Suggested Foods and Beverages
BREAKFAST Citrus Fruit or Juice Cereal Meat or Meat Substitute Bread/Margarine Milk/Beverage	Orange Juice (1 cup) Oatmeal (1/2 cup) Scrambled Egg (1) Slice Whole Wheat Toast/Jelly/Margarine (1 tsp each) Skim (Fatfree) Milk (1 cup), Decaffeinated Coffee
DINNER - NOON OR EVENING Meat or Meat Substitute Potato/Substitute Vegetable and/or Salad Dessert Bread/Margarine Milk/Beverage	Baked Chicken (3 oz) Sweet Potato (1/2 cup) Green Beans, Coleslaw (1/2 cup each) Strawberries (1/2 cup) Whole Wheat Roll (1)/Margarine (1 tsp) Skim (Fatfree) Milk (1 cup), Water
AFTERNOON SNACK Milk/Fruit	Fruited Yogurt (1 cup)
SUPPER - EVENING OR NOON Soup or Juice Meat or Meat Substitute Potato/Substitute Vegetable and/or Salad Dessert Bread/Margarine Milk/Beverage	Vegetable-Bean Soup (1 cup) Meatballs (3 oz) with Spaghetti Sauce (1/2 cup) Spaghetti (1/2 cup) Spinach Salad (1 cup)/Dressing (1 Tbsp), Zucchini (1/2 cup) Rice Pudding (1/2 cup) Garlic Bread (2 slices) Skim (Fatfree) Milk (1 cup), Decaffeinated Iced Tea
EVENING SNACK Meat, Bread, Fruit	Turkey Breast (1 oz), Slice Whole Wheat Toast Apple Juice (1/2 cup)

Nutrient Analysis

Calories	2724 Kcal	Riboflavin	2.9 mg
Protein	135 gm	Thiamin	1.4 mg
Carbohydrate	358 gm	Folate	345 mcg
Fat	64 gm	Vitamin B-6	2.1 mg
Saturated Fat	22 gm	Vitamin B-12	6.4 mcg
Monounsaturated Fat	21 gm	Calcium	2040 mg
Polyunsaturated Fat	16 gm	Phosphorus	2052 mg
Cholesterol	394 mg	Zinc	13 mg
Dietary Fiber	34 gm	Iron	21 mg
Vitamin A	5297 IU	Sodium	3401 mg
Vitamin C	768 mg	Potassium	6626 mg
Niacin Equivalents	17 mg		

Adapted from the Southwest Diet Manual 1999