

NUTRITION

Good nutrition is the single most important thing you can do for your baby. You will probably get tired of hearing us harp on it! This is one case where FOOD IS LOVE! Eating well during pregnancy is quite easy, and pregnancy is a great opportunity to build good food habits for life. A healthy diet does not mean depriving yourself of foods that you like. In fact, learning more about nutrition may open doors to meal combinations you have never considered before!

IMPROVING YOUR NUTRITION

In pregnancy, you must obtain increased calories (about 300 extra calories per day in the average diet), extra calcium, extra protein, extra iron, and extra B-vitamins, as well as other vitamins and minerals. A good prenatal supplement will help you with meeting your needs, but nutrients from healthy food are generally better used by your body than nutrients from pills.

You will need to drink 8-10 glasses of liquid each day, including water, fruit juices, and herb teas. Avoid caffeine as found in colas, black tea and coffee.

Avoid raw meat and foods which are highly processed. Canned vegetables, luncheon meats, many types of bread products and cereals fall into this category. Foods which are highly processed often contain high amounts of salt, sugar, or fats, none of which is healthy in large amounts. In addition, many naturally occurring nutrients are lost in the processing. Adding a few vitamins or minerals back doesn't really make up for what is lost in the refining process.

DAILY DIETARY NEEDS

DAIRY PRODUCTS While not a necessary part of a healthy diet, they are good sources of protein, calcium, B-12, Vitamin A, and zinc. Non-pregnant women need 2 servings per day, and pregnant or nursing women need 4 servings. Here are some examples of what one serving equals:

- 1 cup Milk, yogurt, milkshake
- 1-1/2 cups cream soup made with milk
- 1/3 cup cheeses such as cheddar or jack
- 1-1/2 slices pre-sliced American cheese
- 4 tbs. Parmesan cheese
- 2 cups cottage cheese, 1 cup pudding
- 1-1/2 cup ice cream or frozen yogurt

PROTEINS are excellent sources of B-6, Iron, B-12 (if from animal sources). Vegetable protein is high in fiber, folic acid, and magnesium. Strict vegetarians need to supplement with Vitamin B-12. Non-pregnant women need to have at least 6 servings and pregnant or nursing women need at least 8 servings per day. At least 2 of these servings listed below need to be from vegetable sources:

Animal sources:

- 1 oz. cooked lean meat, fish, poultry, or seafood
- 1 egg
- 1/4 canned seafood (tuna)
- 1 oz. hard or semi-hard cheese or 1/4 cup cottage cheese

Vegetable sources:

- 1/2 cup cooked dry beans
- 3 oz. tofu

1/4 cup peanuts, pumpkin, or sunflower seeds
1/3 cup other nuts
2 tbs., peanut butter

* Note: The quality of vegetable protein can be improved by combining foods such as beans plus grains or dairy or seeds.

BREAD, GRAINS, AND CEREALS provide carbohydrates, some proteins and many vitamins, as well as fiber. Whole grains are best and the majority of servings should come from whole grain products. The recommended serving for non-pregnant women is 6 servings and for pregnant women is 6 to 8 servings.

One serving equals:

1 slice of bread	1 dinner roll
1/2 bun, bagel, or English muffin	1 small tortilla
3/4 cup dry cereal	1/2 cup granola
1/2 c. cooked cereal, noodles, or rice	1, 4 inch pancake or waffle
1 muffin	8 medium crackers
4 graham cracker squares	1 pita bread

VITAMIN A RICH FRUIT & VEGGIES are excellent sources of beta carotene, vitamin A, B-6, folic acid, magnesium, and often rich in fiber. For non-pregnant and pregnant women one serving size from this group is recommended.

One serving equals:

- * 6 oz. Apricot nectar, or vegetable juice cocktail
- * 3 raw or 1/4 cup dried apricots
- * 1/4 cup cantaloupe or mango
- * 1/2 papaya
- * 1 small or 1/2 cup sliced carrots
- * 1/2 cup dark leafy greens: beet, chard, dandelion, kale, mustard, spinach
- * 1/2 cup pumpkin, sweet potato, or winter squash
- * 2 tomatoes

OTHER FRUITS & VEGGIES supply carbohydrates, fibers, smaller amounts of essential vitamins and minerals. For both non-pregnant and pregnant women 3 servings per day are recommended.

One serving equals:

- * 6 oz. Fruit juice
- * 1 medium or 1/2 cup sliced fruit (banana, apple, berries, cherries, grapes, peach, or pear)
- * 1/2 cup pineapple or watermelon
- * 1/4 cup dried fruit
- * 1/2 cup sliced vegetable: sliced asparagus, beets, green beans, celery, corn, mushrooms, peas, potatoes, summer squash
- * 1/2 artichoke
- * 1 cup of lettuce

VITAMIN C RICH FRUITS & VEGGIES are good sources of vitamin C and fiber, folic acid, B-6, and vitamin A. For non-pregnant women 1 serving per day and for pregnant women 2 servings per day are recommended.

One serving size equals:

- * 6 oz orange, grapefruit, tomato, vegetable juice cocktail, or fruit juice enriched with vitamin C.
- * 1 orange, kiwi, or mango
- * 1/4 papaya
- * 2 tangerines, tomatoes
- * 1/2 cup strawberries, broccoli, brussel sprouts, cabbage, cauliflower, sweet peppers, or tomato puree

IMPROVING YOUR NUTRITION

- * Increase your intake of beans, and whole grain foods. Not only do these foods supply high quality protein when eaten in combination or with small amounts of dairy products or meat, but they provide much needed vitamins as well as fiber in our diets which can prevent problems with constipation. The intake of complex carbohydrates found in whole grains is essential in helping maintain optimal, stable blood sugars which is crucial should you develop gestational diabetes, and may play a role in preventing this problem.
- * Increase your intake of fruits and vegetables.
- * Avoid calorie restricted diets during pregnancy and lactation. This can harm both your health and that of your baby. Your nutritional needs are also higher when you are breastfeeding, but since you use more calories, it will be easier to lose weight. If you need guidance, please let us know.
- * A good multi-vitamin supplement is reasonable especially when you are trying to improve your diet, or if you are pregnant or breastfeeding. During pregnancy, we recommend that you supplement with a high quality prenatal vitamin. If you start pregnancy in a state of anemia, then you will surely need a supplement from the outset. Ferrous sulfate is a commonly prescribed supplement because a high percentage of it is used by the body and it is inexpensive. However, many women find that this form of iron causes digestive upset and increased constipation. An alternative is to use ferrous gluconate, ferrous citrate, or an herbal iron may be used. Iron pills must always be kept away from small children as they can be dangerous! We also recommend supplementing your diet with extra calcium, magnesium, and zinc (1000 mg. Calcium, 500 mg. Magnesium, and 15 mg. Zinc) in a chelated form to be taken at a different time than your iron.

NAUSEA AND CONSTIPATION

Nausea is a common problem for many women in early pregnancy. The cause is not completely understood, and for most women the queasiness will pass by the time they are three months pregnant. Nausea, often referred to as morning sickness, can strike at any time of the day. Vomiting may accompany nausea. In general, the nausea of early pregnancy is not harmful but it can be debilitating for some women and nausea that continues after the first three months of pregnancy can be very serious. If you are nauseated to the point that you cannot function or cannot keep anything down, please contact us immediately. There is a condition called hyperemesis of pregnancy which sometimes must be treated with medication and intravenous hydration. Remedies for nausea and constipation are covered in our handouts on Pregnancy Comfort.

Constipation is another fairly common discomfort in pregnancy and the early postpartum time. Including bran cereal or bran muffins, whole grain and fibrous fruits and vegetables in your diet can be very helpful in preventing and alleviating constipation. Try the following recipe:

ANEMIA PREVENTION AND REMEDIES

Anemia is often protein deficiency and B vitamin deficiency related, as well as iron-intake related. In pregnancy, your blood volume increases to provide for the needs of your baby and yourself. Some of the increased blood volume is plasma (fluid), and a smaller part is extra red blood cells needed to carry oxygen and other nutrients. In order to build the increased blood you need, you must take extra iron, protein, and B-vitamins. Many women will experience a drop in their hemoglobin by 28 weeks which is normal, but should not fall below 10% in late pregnancy. Signs of anemia may include decreased energy level, paleness, and easily bruised skin. Unfortunately, by the time your blood count drops to a level recognizable as anemia, your iron and/or folic acid stores have been depleted for quite a while. The iron cost of pregnancy is high and it can take up to 2 years to replace depleted iron stores through diet alone (assuming an excellent diet) if you do not take care to obtain enough iron and other nutrients.

BASIC DAILY ANEMIA REGIME:

- * 1 Cup of active-culture yogurt, acidophilus milk or equivalent capsules
- * A generous handful of alfalfa sprouts daily
- * 2 egg yolks or whole eggs per day
- * A generous serving (4 oz plus) of meat in this order of preference: liver, venison, oysters, clams, shrimp, pork, lean beef.
- * A "B 50" tablet morning and night (containing 50 mg. or major B vitamins
- * Cook as much as possible in cast iron pans-especially acidic foods like tomatoes
- * 15 minutes of brisk walking or other pulse raising exercise
- * **Do not** take supplements containing iron with calcium containing supplements or high calcium foods (like milk). This decreases iron absorption. **Do** take iron supplements with foods high in vitamin C (fruits, veggies) as these increase absorption.
- * Incorporate nutritional yeast in your diet, working your intake up to two tablespoons per day. This is an excellent source of B-vitamins and iron. It can be hidden in sauces, sprinkled on popcorn, and used in a number of other ways. Shop for a mild tasting nutritional yeast at a natural foods store and use it in small amounts throughout the day.
- * Include foods such as green leafy raw or steamed, especially mustard, lamb's quarters, beet greens, spinach, romaine lettuce, black olives, black strap molasses, nutritional yeast, raisins, apricots, prunes, red, lima and pinto bean almonds, sesame and sunflower seeds.

SOURCES OF IRON

FOOD	SERVING	MG. OF IRON
Beef Liver	3 oz.	7.5-12
Sunflower seed	1/2 cup	5.1
Dried Apricots	1/2 cup	3.6
Black Strap Molasses	1 Tbsp	3.2
Almonds	1/2 cup	2.7
Cashews	1/2 cup	2.6
Soybeans	1/2 cup	2.5
Raisins	1/2 cup	2.5
Lentils	1/2 cup	2.1

Turkey, dark meat	3 oz.	2.0
Lima beans	1/2 cup	2.0
Haddock or Cod fish	6 oz.	1.0
Spinach	1 cup	1.7
Brussel sprouts	1 cup	1.6
Peanuts	1/2 cup	1.6
Peas	1/2 cup	1.4
Brewer's Yeast	1 tbsp	1.4
Beet greens	1/2 cup	1.4
Turkey, light meat	3 oz.	1.0
Endive, escarole	1 cup	1.0
Whole grain bread	1 slice	0.5
Wheat germ	1 tbsp	0.5
Duck	3 oz.	2.0
Prune juice	1 cup	10.5

SOURCES OF FOLACIN IN FOOD

<u>RICH SOURCES</u>	<u>GREATER THAN 75 MCG. PER SERVING</u>
Asparagus	6 stalks or 1/2 cup cooked
Beans: garbanzo, kidney, navy, pinto	1/2 cup cooked
Lentils	1 cup cooked
Lettuce: romaine	1 cup raw
Orange juice	6 oz.
Spinach	1 cup raw, 2/3 cup cooked
Nutritional Yeast	2 tbsp

<u>GOOD SOURCES</u>	<u>35 to 75 MCG. PER SERVING</u>
Avocado	1/2 medium
Beans: baked, pork & beans	1/2 cup
Beets, fresh	1 cup raw
Broccoli	1/2 cup cooked
Brussel sprouts	1/2 cup cooked
Cabbage	1 cup raw
Corn	1/2 cup cooked
Collards	1/2 cup cooked
Falafel (garbanzo croquettes)	3 patties
Humus (garbanzo-sesame dip)	1/2 cup
Lettuce: bibb, Boston, endive	1 cup raw
Liver	1 oz. cooked
Mustard greens	1/2 cup cooked
Orange	1 medium
Peanuts	1/4 cup
Peas: green or split	1 cup cooked
Pineapple juice	6 oz.
Sesame butter (tahini)	3 tbsp
Soybean kernels (roasted)	2 1/2 tbsp
Sunflower seeds	1 oz or 1/4 cup
Tomato juice, vegetable cocktail	6 oz.

SOURCES OF CALCIUM

<u>FOOD</u>	<u>AMOUNT OF SERVING</u>	<u>MG. CALCIUM</u>
Milk, whole	1 cup	288
Milk, low fat (2 %)	1 cup	297
Milk, skim	1 cup	298
Butter milk	1 cup	296
Yogurt, low fat	1 cup	270
Nonfat milk powder	1/4 cup	367
<u>FISH</u>		
Fish canned with bones	3 oz.	345
Oysters	1 cup	226
Shrimp	1 cup	147

VEGETABLE SOURCES (Many contain high amounts of Calcium which is bound-the following sources contain calcium which is not bound and thus, usable by the body)

Tofu	1/4 cup	150
Fortified Soy Milk	1 cup	288
Collard greens	1 cup	360
Dandelion greens	1 cup	150
Okra	1 cup	150
Kale	1 cup	200
Bok Choy	1 cup	250
Mustard greens	1 cup	180
Broccoli	1 stalk	267
Turnip greens	1 cup	267