

UMHS Healthy Eating Tip of the Month—April 2016**Prenatal Nutrition-Preparing Your Baby for Lifelong Health**

-Learn about the essential vitamins and minerals, food safety, fish safety and proper nutrients for twins (or more) during pregnancy-

Unborn babies need a variety of vitamins and minerals to properly develop and prepare for life outside of the womb. A pregnant woman must ensure that she provides the fetus with adequate nutrition. Folic Acid, Iron, Vitamin D, Calcium, and Vitamin C are some of the most important for the growth of a healthy baby.

**What is Folic Acid?**

-Folic Acid (Folate) is a B Vitamin that assists with neurological development. For proper spinal cord and brain formation in the baby, a pregnant woman needs extra folic acid. Inadequate Folic Acid before and during pregnancy can cause birth defects. Numerous research studies have shown that appropriate Folic Acid supplementation reduces Spina Bifida and other neurological defects.

Vitamins and Minerals for Baby's Bones: Calcium and Vitamin D

-Vitamin D is actually created in the body when sunlight hits the skin, although small amounts are found in food. Vitamin D primarily works together with Calcium to build strong bones and prevent softened or brittle bones. Calcium is a mineral that promotes strong bones. Most of the Calcium in the human body is stored in the bones and regulates breaking down and building of bone tissue.

What is Iron?

-Iron is a mineral that the body needs to make hemoglobin, a substance in your blood that carries oxygen around the body. Iron is also important for growth and development, especially of body tissues and hormones. Too little Iron in the body causes a disorder called anemia where the body cannot receive enough oxygen and is associated with low birth weight infants.

What is Vitamin C?

-Vitamin C acts as an antioxidant in the body protecting it from free radicals which generally have a negative impact on the body. Vitamin C helps with wound healing and boosting the immune system to fight off disease. In addition, Vitamin C increases the absorption of iron from plant-based food sources such as peas, beans, spinach, etc.

Sources of Vitamin C

- ◆ Citrus fruits-oranges, grapefruit, lemons, limes, etc. and juice from these fruits
- ◆ Kiwifruit
- ◆ Red and Green bell pepper
- ◆ Broccoli
- ◆ Strawberries
- ◆ Cantaloupe
- ◆ Baked potatoes
- ◆ Tomatoes
- ◆ Foods fortified with Vitamin C

*The Vitamin C content of food may be reduced by prolonged storage and by cooking. Steaming or microwaving may lessen cooking losses.



Sources of Calcium

- ◆ Milk
- ◆ Yogurt
- ◆ Cheese
- ◆ Kale
- ◆ Broccoli
- ◆ Chinese cabbage
- ◆ Fish with edible soft bones-canned salmon and sardines, etc.
- ◆ Foods fortified with Calcium
- ◆ Some grain products (breads, pasta, and fortified cereals) will supply a small portion of your daily Calcium needs.



Sources of Folic Acid

- ◆ Asparagus
- ◆ Brussels sprouts
- ◆ Dark green leafy vegetables-spinach, mustard greens, etc.
- ◆ Oranges and orange juice
- ◆ Nuts-peanuts
- ◆ Beans and peas-kidney and black-eyed peas
- ◆ Grains-whole grains, fortified cold cereals, enriched flour products, enriched pasta, and enriched rice
- ◆ Foods fortified with Folic Acid
- ◆ Beef liver
- ◆ Most fruits and vegetables have some Folic Acid content

Sources of Iron

- ◆ Meat
- ◆ Seafood
- ◆ Poultry
- ◆ Iron-fortified breakfast cereals and breads
- ◆ White beans, kidney beans, peas, and lentils
- ◆ Spinach
- ◆ Nuts
- ◆ Raisins

*Your body absorbs Iron from plant sources better when eaten with meat, poultry, seafood, and foods that contain Vitamin C.

Sources of Vitamin D

- ◆ Fatty fish-salmon, tuna, mackerel
- ◆ Beef liver
- ◆ Cheese
- ◆ Egg yolks
- ◆ Mushrooms
- ◆ Milk fortified with Vitamin D -400 IU per quart
- ◆ Fortified breakfast cereals
- ◆ Some orange juices, yogurt, margarine, and soy beverages are fortified with Vitamin D.

How to Handle Non-Food Cravings

-Do you crave nonfood items during your pregnancy like crayons, paper, chalk, paint, soap, etc? Cravings like these are called Pica. When you experience Pica you may be lacking Iron and Calcium in your diet.

-Always tell your doctor or Registered Dietitian Nutritionist if you experience Pica-type symptoms.

-Foods high in Iron: meats, fortified cereals and breads, dried fruit, dried beans and peas, leafy greens vegetables.

-Choose foods that contain 20% or more of the Daily Value for Iron. You may find this percentage by reading the Nutrition Facts label on the packaging of foods.

-Vitamin C helps the body absorb more Iron so eat a fruit or vegetable high in Vitamin C (tomato, tomato sauce, tomato juice, oranges or orange juice, lemon or lemon juice, etc.) with Iron –rich foods.

-Foods high in Calcium: milk, yogurt, cheese, dried milk powder, cottage cheese, ice cream, etc.

-More than 500 milligrams of Calcium in one meal/snack will not be absorbed by the body.

-Choose foods that contain 20% or more of the Daily Value for Calcium by reading the Nutrition Facts label.



Nutrient Needs During Pregnancy Per Day

Folic acid	600 micrograms
Iron	27 milligrams
Calcium	1000 milligrams
Vitamin D	600 IU
DHA (Omega-3 Fatty Acids)	200 milligrams
Dairy	3 cups
Fruits	2 cups or more
Grains	5-7 ounces
Protein Foods	5-6 ounces
Vegetable	3 cups or more

Prenatal vitamins contain many of the recommended amounts of nutrients for pregnancy, however food is the best source of nutrients. Prenatal vitamins are prescribed by your doctor.

Having Twins? Or Triplets?

-More babies means mom-to-be will need more energy and nutrients for your babies to develop properly. It is recommended that you eat 500-600 extra calories/day with twins. If you are pregnant with more than twins, you may need even more extra calories each day.

-Extra calories should come from lean meats, low-fat dairy products, fruits, vegetable, and whole grain breads/cereals.

-If you feel full more quickly after eating as the babies grow, try eating smaller more frequent meals and snacks.

-It is recommended that you drink approximately 96 fluid ounces of water (12 cups) per day or other caffeine-free beverages.

-Pregnancy with multiple babies increases your risk of nutritional deficiencies of: Iron, Calcium Vitamin D, Folic Acid, Magnesium, Zinc, Omega-3 Fatty Acids/DHA.

Food Safety During Pregnancy

-Pregnant women are at more risk for contracting a food-borne illness than most adults. Food-borne illnesses not only make you uncomfortable but can jeopardize the health of your unborn baby. Some food-borne illnesses may not make you feel sick but can still cause harm to the baby. Below is a list of foods that you should avoid while pregnant.

Do **NOT** eat:

- ◆ Rare, raw or undercooked meats & poultry
- ◆ Hot dogs, pates, luncheon meats, bologna or other delicatesen meats **UNLESS** reheated to 165°F or steaming hot
- ◆ Raw fish (including sushi & sashimi)
- ◆ Undercooked & raw shellfish
- ◆ Fish with high mercury levels (especially swordfish, tilefish, king mackerel & shark) and limit white/albacore tuna.
- ◆ Smoked seafood, unless cooked
- ◆ Unpasteurized dairy products (i.e. raw milk, etc.)
- ◆ Soft cheeses made from unpasteurized milk (feta, brie, camembert, blue-veined varieties, queso fresco, queso blanco, pan-ela, etc.)
- ◆ Raw or undercooked eggs
- ◆ Food containing raw or undercooked eggs
- ◆ Raw sprouts
- ◆ Store made deli salads (ham salad, chicken salad, seafood salad, etc.)
- ◆ Unpasteurized fruit & vegetable juices
- ◆ Refrigerated pates or meat spreads

*General tips:

- Reheat ready-to-eat foods before consuming
- Eat packaged items by the “use-by” date



Herbal Supplements & Pregnancy

-Herbal or botanical supplements/food additives are not recommended during pregnancy. This is because there is no regulation of these supplements by the Food & Drug Administration (FDA-a government agency that ensures the safety of food and food products in the U.S.).

-In addition to lack of regulation, there are many risks associated with herbal supplements/food additives including: miscarriage, premature birth, uterine contractions, or injury to the fetus.

-Some herbs that are commonly used to season foods, such as ginger, peppermint, garlic, turmeric, chamomile, cinnamon, do not have negative effects on a pregnancy or fetus used in typical amounts for cooking. These herbs are **NOT** considered safe used in larger quantities than everyday seasoning of foods.

-You should **always check with your doctor** before taking any herbal supplements/food additives while pregnant to ensure your and your baby's safety.

Safe Fish Consumption

-Eating fish during pregnancy is important since fish provide large amounts of protein and Omega-3 Fatty Acids, and are low in saturated fat. It is important to eat safe fish since certain kinds of fish are more likely to contain mercury and other chemicals that can harm the mother and the developing baby's brain, spinal cord, and nerves.

-Eat 8-12 ounces of a variety of fish a week (2-3 servings/week).

-Choose fish lower in mercury such as salmon, shrimp, pollock, tuna (light canned), tilapia, catfish, and cod.

-**Avoid** 4 types of fish: tilefish from the Gulf of Mexico, shark, swordfish, and king mackerel since these fish are highest in mercury. Limit white/albacore tuna to 6 ounces/week.

-If you fish in or eat fish caught from local streams, rivers, and lakes you should look for fish advisories for the areas you are fishing from or eating fish from. Check this website for more information on safe fish: www.michigan.gov/eatsafefish.

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