

**HEALTHY EATING TIP OF THE MONTH—OCTOBER 2019**

# **Nutrition During Pregnancy**



# NUTRITION TIPS FOR PREGNANT MOMS

## Making Healthy Food Choices

Find your own style of healthy eating that includes a variety of foods from all food groups; fruits, vegetables, grains, dairy, and proteins.

Fill half your plate with fruits and vegetables, include a variety of colors in both groups.

Make at least half your grains whole grains; brown rice, oatmeal, whole grain breads/pastas.

Have a variety of protein foods throughout the week; seafood, poultry, eggs, low-fat dairy products. Include plant based proteins; beans, peas, nuts, seeds, and soy products.

### Daily Food Checklist

Food Group	1st Trimester	2nd & 3rd Trimesters
Fruits	2 cups	2 cups
Vegetables	2 1/2 cups	3 cups
Grains	6 ounces	8 ounces
Protein Foods	5 1/2 ounces	6 1/2 ounces
Dairy	3 cups	3 cups

Get a Daily Food Checklist for moms designed just for you.  
Go to [ChooseMyPlate.gov/Checklist](http://ChooseMyPlate.gov/Checklist)

### Seafood

The Omega-3 fats in seafood have many health benefits for you and your baby.

- Eat 8 - 12oz per week of a variety of seafood.
- Choose seafood that is higher in omega-3 fats and lower in mercury (salmon, sardines, trout, \*tuna)
- • \*Limit intake of albacore tuna to 6oz per week.
- Avoid: tilefish, shark, swordfish, and king mackerel, as they are highest in mercury.

### Physical Activity

Make physical activity a part of your daily routine! Aim for at least 2 1/2 hours per week of moderate intensity physical activity such as:

- Swimming, walking, gardening, dancing.
- Do the activity for at least 10 minutes at a time and spread them throughout the week.

\*Avoid activities with a high risk of falling or injury; talk with your doctor about what types of physical activity are safe for you.

### Remember:

- \* Visit your doctor regularly
- \* Pregnant women need to avoid alcohol and smoking. Ask your doctor about caffeine, dietary supplements, and drug use.
- \* In addition to a balanced diet, take a prenatal vitamin and mineral supplement containing folic acid.
- \* Feed your baby only human milk (breastmilk) for the first 6 months.

# MICRONUTRIENT NEEDS DURING PREGNANCY

## What are micronutrients?

A large group of nutrients including vitamins and minerals that are essential for nearly all physiological functions. They are referred to as micronutrients because they are required in much smaller amounts than the macronutrients (proteins, carbohydrates, and fats). While the amounts may be small, they play very large roles in human health and the development of your growing baby.

## WHY TAKE A PRENATAL VITAMIN?

As you need increased amounts of certain vitamins and minerals during pregnancy, it can be challenging to ensure you are getting them all through your diet. Prenatal vitamins can act as a nutritional safety net, in combination with a balanced diet, to ensure that you are meeting your increased needs and the needs of your growing baby.

## Tips for taking Prenatal Vitamins:

- Start taking a prenatal vitamin as soon as you find out you are pregnant.
- Talk with your doctor about any other vitamin or mineral supplements you are taking to make sure they are safe for you and your baby.
- Take only the recommended dosage of your prenatal vitamin. Certain micronutrients can be harmful to your baby if taken in large amounts.
- Your doctor may be able to write a prescription for prenatal vitamins, which could reduce your out of pocket cost.
- If you experience side effects from your prenatal vitamin, talk with your doctor about switching to a different dose or brand which may help alleviate some of the side effects.

## Why are micronutrients Important During pregnancy?

During pregnancy you have to meet the needs of your developing baby in addition to your own. This is true for both macro- and micronutrients but it can be hard to know how much you need and how to make sure you are getting the right amounts of the various micronutrients during pregnancy.



# MICRONUTRIENT NEEDS DURING PREGNANCY

## MICRONUTRIENTS OF SIGNIFICANT IMPORTANCE DURING PREGNANCY

Nutrient	Functions	Recommended Total Intake	Dietary Sources
Vitamin A	Involved in fetal growth, tissue and bone formation and repair, and immune function. Vitamin A toxicity can lead to liver dysfunction and birth defects.	770 ( $\mu\text{g}/\text{day}$ ) *Avoid supplements with high vitamin A content	<ul style="list-style-type: none"> <li>Eggs, dairy, liver, fish liver oil</li> <li>Kale, sweet potato, carrots</li> </ul>
Vitamin D	Involved in immune function, brain health and important for the absorption of calcium.	15 ( $\mu\text{g}/\text{day}$ )	<ul style="list-style-type: none"> <li>Milk, yogurt, fortified cereals</li> <li>oily fish, mushrooms</li> </ul> <p>*The number one source is exposure to sunlight</p>
Folate or Folic Acid	Adequate intake of folate before/during pregnancy is key to reducing the risk of birth defects of the brain and spinal cord.	600 ( $\mu\text{g}/\text{day}$ )	<ul style="list-style-type: none"> <li>Dark green leafy vegetables</li> <li>Citrus</li> <li>Enriched grain products</li> </ul>
Vitamin C	Component of connective tissue, key antioxidant, important for enhancing the absorption of iron.	85 (mg/day)	<ul style="list-style-type: none"> <li>Many fruits and vegetables</li> <li>Citrus, guava, tomatoes, broccoli</li> </ul>
Calcium	Essential for bone health and development, important for muscle and nerve function as well as enzyme and hormone activity.	1000 (mg/day)	<ul style="list-style-type: none"> <li>Dairy products (milk, yogurt etc.)</li> <li>Dark green leafy vegetables, beans, peas, nuts, seeds</li> </ul>
Iron	Carries oxygen throughout the body, important for brain development, metabolism and immune function.	27 (mg/day)	<ul style="list-style-type: none"> <li>Red meat, fish, poultry</li> <li>Green leafy vegetables, beans, nuts, eggs, dried fruit</li> </ul>
Selenium	Involved in cardiovascular and immune function, reduces harmful effects of heavy metals and is a key antioxidant during pregnancy.	55 ( $\mu\text{g}/\text{day}$ )	<ul style="list-style-type: none"> <li>Red meat, fish, poultry</li> <li>Dairy products, eggs, oatmeal, brown rice, nuts, seeds</li> </ul>
Zinc	Important for enzyme activity, cell division, gene expression, wound healing, vision, neurological, and immune function.	11 (mg/day)	<ul style="list-style-type: none"> <li>Red meat, fish, poultry</li> <li>Milk, nuts</li> </ul>

\*While all micronutrients are important for the health of you and your baby, this table focuses on the micronutrients with increased recommended intake during pregnancy and those of particular importance for fetal development.

\*The “Recommended Total Intake” values above indicate the total daily intake from dietary sources and supplements.

\*The recommended intake values included above are general guidelines for uncomplicated pregnancies. Talk with your doctor or a Registered Dietitian Nutritionist to determine what micronutrient levels are best for you.

# FOOD SAFETY DURING PREGNANCY

## Why is Food Safety Important During pregnancy?

During pregnancy your body goes through immune system changes. This puts you and your baby at an increased risk of foodborne illness such as Listeria and Toxoplasma gondii, which can lead to birth defects and pregnancy complications. Many foodborne illnesses can infect and harm your baby even if you do not feel sick. For these reasons it is important to pay extra attention to food safety practices while you are pregnant and breastfeeding.



Foods to Avoid	May Contain	Foods to Eat Instead
Raw seafood	Parasites or bacteria	Seafood cooked to 145 °F
Unpasteurized juice, cider, and milk	E. coli or Listeria	Pasteurized versions of juice, cider, and milk are safer options.
Soft/unpasteurized cheeses	E. coli or Listeria	Hard/pasteurized cheeses
Premade deli salads	Listeria	Make these dishes at home
Raw sprouts	E. coli or salmonella	Thoroughly cooked sprouts
Cold lunch meats/hot dogs	Listeria	Reheat all deli meats to steaming hot (165 °F)
Undercooked meat and poultry	E. coli, Salmonella, Campylobacter, Toxoplasma gondii	Meat and poultry should all be at or above the USDA recommended internal temperature

### Safe Internal Cooking Temperatures

- Beef, pork, veal, lamb, (roasts and chops) and fish
- Egg dishes, ground beef, pork, veal and lamb.
- Whole, ground, or pieces of chicken, turkey and duck

145 °F

160 °F

165 °F

### Remember

- Wash hands and surfaces often
- Keep raw meat and poultry separate from ready-to-eat foods.
- Cook foods to the proper internal temperature
- Get leftovers in the fridge within 2 hours of being cooked.

# WEIGHT GAIN DURING PREGNANCY

## Why is appropriate weight gain during pregnancy important?

The amount of weight you gain during your pregnancy is a predictor for fetal growth and development and maternal health. Gaining the right amount of weight during pregnancy is essential to ensure the health of both mother and baby. Gaining too little or too much can put you and your baby at a risk for complications.

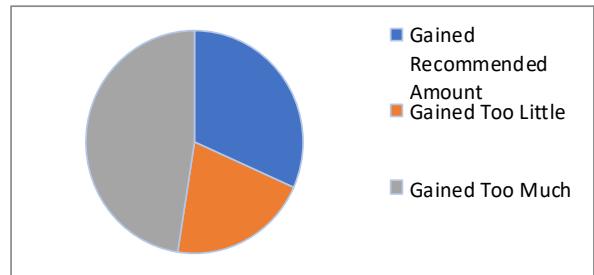
### Risks associated with gaining too much:

- ◊ Delivery complications
- ◊ Caesarean delivery (C-section)
- ◊ High birth weight
- ◊ Gestational diabetes
- ◊ Maternal hypertension
- ◊ Obesity during childhood
- ◊ Difficulty losing extra weight after delivery

### Risks associated with not gaining enough:

- ◊ Low birth weight
- ◊ Preterm delivery
- ◊ Difficulty breastfeeding
- ◊ Increased risk of illness
- ◊ Developmental delays

Studies have found that only about 1 out of every 3 women have pregnancy weight gain within the recommendations.



## How much weight should I gain?

The amount of weight you should gain is based on many factors, including your pre-pregnancy body mass index (BMI), your age, and whether or not you are carrying multiples. These tables provide general guidelines for pregnancy weight gain recommendations for adult women pregnant with one baby. Teenagers and women pregnant with twins or more, talk with your doctor about your weight gain goals.

### Recommended Weight Gain for Women Pregnant with One Baby

Pre-pregnancy BMI	Total Weight Gain in Pounds	Weight Gain in the 2nd & 3rd Trimesters in Pounds per Week
<b>Underweight BMI less than 18.5</b>	28 - 40	1 - 1.3
<b>Normal Weight BMI 18.5 - 24.9</b>	25 - 35	1
<b>Overweight BMI 25.0—29.9</b>	15 - 25	0.6
<b>Obese BMI of 30 or higher</b>	11 - 20	0.5



# WEIGHT GAIN DURING PREGNANCY



## Are You Experiencing Weight Loss Due to “Morning Sickness”?

“Morning sickness” can occur at any time of day or night and varies from mild to severe nausea and vomiting during pregnancy. If you are struggling to meet the weight gain recommendations because of morning sickness, it may help to eat smaller, more frequent meals throughout the day to avoid getting too hungry or too full. It is important to stay hydrated by drinking plenty of water or unsweetened, un-caffeinated beverages. Contact your doctor if you experience extreme morning sickness or significant weight loss.

## Are You Experiencing Rapid Weight Gain?

If you begin to rapidly gain weight (2 pounds or more within 1 week) you should contact your doctor because a sudden increase in weekly weight gain above the recommended amount can be a sign of preeclampsia which is a very serious health condition that can cause pregnancy complications.

## Tips to Help You Meet the Recommendations for Weight Gain During Pregnancy

**Eat a balanced diet:** Include all food groups and choose vegetables, fruits, whole grains, low fat dairy, lean protein, and water over processed foods and sugar sweetened beverages.

**Remember:** Making healthy food choices will help you and your baby get the nutrients needed to support the growth and changes that occur during pregnancy and fetal development.

**Know your calorie needs:** “Eating for two” does not mean you should double your calorie intake.

- First trimester - extra calories are generally not needed during the first 3 months of pregnancy.
- Second trimester - About 340 additional calories per day are needed during the second 3 months of pregnancy.
- Third Trimester - About 450 additional calories per day are needed during the last 3 months of pregnancy.

**Track your weight gain:** Document your weight at the beginning of your pregnancy and track how much you gain throughout your pregnancy to compare to the recommendations.

**Include physical activity:** The goal is to maintain at least 150 minutes (2.5 hours) per week of moderate intensity aerobic activity. Talk with your doctor about what types of physical activity are safe during your pregnancy.

# HEALTHY EATING TIP OF THE MONTH—OCTOBER 2019

## NUTRITION DURING PREGNANCY

### REFERENCES:

Kominiarek MA, Rajan P. Nutrition Recommendations in Pregnancy and Lactation. *Medical Clinics of North America*. 2016;100(6):1199-1215. doi:10.1016/j.mcna.2016.06.004.

Mousa A, Naqash A, Lim S. Macronutrient and Micronutrient Intake during Pregnancy: An Overview of Recent Evidence. *Nutrients*. 2019;11(2):443. doi:10.3390/nu11020443.

Black RE, Dewey KG. Benefits of supplementation with multiple micronutrients in pregnancy. *Annals of the New York Academy of Sciences*. 2019. doi:10.1111/nyas.14088.

Gabbe SG. *Obstetrics: Normal and Problem Pregnancies*. 7th ed. Philadelphia, PA: Elsevier.; 2017. <http://www.clinicalkey.com>. Accessed May 15, 2019.

Ng C, Badon S, Dhivyalosini M, et al. Associations of pre-pregnancy body mass index, middle-upper arm circumference, and gestational weight gain. *Sexual & Reproductive Healthcare*. 2019;20:60-65. doi:10.1016/j.srhc.2019.03.002.

Zhao R, Xu L, Wu M, Huang S, Cao X. Maternal pre-pregnancy body mass index, gestational weight gain influence birth weight. *Women and Birth*. 2018;31(1). doi:10.1016/j.wombi.2017.06.003.

WIC Works Resource System. Tips for Pregnant Moms | WIC Works Resource System. <https://wicworks.fns.usda.gov/resources/tips-pregnant-moms>. Accessed May 15, 2019.

Foodsafety.gov. Food Safety for Pregnant Women. FoodSafety.gov. <https://www.foodsafety.gov/risk/pregnant/index.html>. Published August 23, 2009. Accessed June 1, 2019.

MyPlate Plan. Choose MyPlate. <https://www.choosemyplate.gov/MyPlatePlan>. Published December 10, 2018. Accessed May 16, 2019.

For Women. EatRight. <https://www.eatright.org/for-women>. Accessed May 15, 2019.

During Pregnancy | CDC. Centers for Disease Control and Prevention. <https://www.cdc.gov/pregnancy/during.html>. Accessed May 15, 2019.



Created by:

Asha Shanti, Dietetic Intern  
Patient Food and Nutrition Services  
300 N. Ingalls Street  
NIB NI8E20  
Ann Arbor, MI 48109-5407  
(734) 936 - 5197