

Nutrition during Pregnancy



- The food you eat will give your growing baby important nourishment.
- What you eat is much more important than the amount of food you eat.
- You need 300 calories more per day than before you got pregnant.
- For good nutrition, you need carbohydrates, proteins, vitamins, and minerals.
- Each of these nutrients has a very special function.

CARBOHYDRATES

- Sugars and starches give your body energy.
- You can find these in fruits, vegetables, and grains.

PROTEIN

- Protein is needed for tissue growth and repair.
- You can find these in meats, eggs, milk products, grains, and vegetables.

VITAMINS AND MINERALS

- Vitamins and minerals are needed for your body to function well and your baby's body to form properly.
- Your doctor may tell you to take a vitamin supplement to help you get enough vitamins and minerals.


FOLIC ACID

- Folic acid is needed so your baby can form new blood cells.
- It is also important so the baby's nerve cells can form during the beginning of your pregnancy.
- It helps reduce the risk of spinal closure birth defects such as spina bifida.
- You should take 400 micrograms of folic acid every day. Your doctor may order a daily multivitamin supplement because it is hard to get enough folic acid through the foods that you eat.

FOLIC ACID IS FOUND IN:
Green leafy vegetables (spinach, greens, romaine lettuce, broccoli, and asparagus)
Whole-grain breads and cereals
Fruit (strawberries and oranges)
Dried beans and peas (lima beans, black-eyed peas, chickpeas, and pinto beans)
Liver

CALCIUM

- Calcium is needed so your baby's heart, muscles, bones, and teeth will form and grow.
- If you do not get enough calcium during pregnancy, your baby will take it from what you already have stored in your body.
- You must try to keep the calcium you have stored in your body.
- Milk and milk products are the best sources of calcium.
- Your doctor may order a calcium supplement if you do not like milk or you cannot eat milk products.

	FOODS HIGH IN CALCIUM ARE:	
	Milk, ice cream, yogurt, cheese	Beans
	Calcium-fortified apple or orange juice	Dried prunes and apricots
	Tuna, sardines	Nuts and seeds
	Broccoli	

IRON


- Iron is needed for your baby's red blood cells to form.
- It also helps normal growth and provides iron stores for your baby to use after birth.
- Your doctor may tell you to take a prenatal vitamin with iron so you can get enough during pregnancy.
- Iron is absorbed better from iron-rich foods.

FOODS THAT HAVE IRON ARE:
Lean red meat
Spinach
Whole-grain breads and cereals

SOME FOODS THAT ARE HIGH IN IRON ARE:	
Bread (white or whole wheat)	Watermelon or strawberries
Muffins (bran or English)	Raisins, dates, prunes, figs, or apricots
Wheat germ	Fish
Organ meats (heart, kidney, liver)	Prune, tomato, or apple juice
Lean red meat	Dark leafy greens (spinach, collards, or kale)
Poultry	Pizza (cheese or pepperoni)
Tofu	Beef or bean burrito
Seeds (sunflower, pumpkin)	Beef taco


VITAMIN C

- Vitamin C helps you fight infection.
- Vitamin C helps keep bones and muscles healthy.
- Vitamin C helps you and your baby absorb iron.

	VITAMIN C IS FOUND IN:
	Citrus fruits (oranges, tangerines, grapefruit), tomatoes
	Broccoli, Brussels sprouts, green peppers, white potatoes

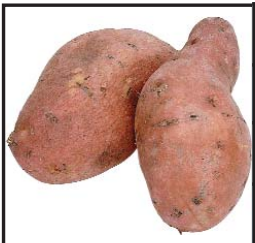
VITAMIN D

- Vitamin D helps your body absorb phosphorous and calcium.
- Your baby needs vitamin D to develop healthy bones and teeth.
- Vitamin D is found in vitamin D-enriched milk and milk products.

	VITAMIN D IS FOUND IN:
	Vitamin D-enriched milk and milk products
	Mushrooms
	Eggs

VITAMIN A

- Vitamin A is needed to keep your skin healthy.
- Vitamin A helps your thyroid work correctly. The thyroid controls your metabolism.

	VITAMIN A IS FOUND IN:
	Carrots
	Sweet potatoes
	Dark leafy greens

ADDITIONAL VITAMINS

- Additional vitamins may be needed while you are pregnant.
- The best way to get the vitamins and minerals you need is by eating healthy foods.
- Your doctor may order a prenatal vitamin because your nutrition needs increase during pregnancy.
- The prenatal vitamins do not replace good food choices. They will add nutrition to your daily diet and help you meet your increased needs.
- Always check with your doctor before you take vitamins or minerals on your own.
- Too much of some things may be harmful to you or your baby.

FLUIDS

- Fluids are needed to help your body stay warm or cool.
- Fluids help you have normal bowel movements.

- Fluids also help you avoid urinary tract infections.
- Fluids can also reduce uterine contractions in your uterus.
- Fluids help keep your lips and skin soft.
- You should drink 6 to 8 (8-ounce) glasses of fluid.
- Water is your best choice. You can add lemon or lime juice for flavor.
- Low-fat milk, fruit or vegetable juice, and soup are also good fluids.

FIBER

- Fiber is needed in your diet to help you have normal bowel movements.
- You will find fiber in whole-grain breads and cereals, fruits and vegetables, popcorn, and bran.
- Leave the skins and peels of fruits and vegetables on.

TRY THESE HEALTHY SNACK IDEAS:
Bran muffin with low-fat milk
Sandwich with low-fat meat/cheese
Low-fat yogurt with fruit
Frozen low-fat yogurt or ice milk
Peanut butter and banana slices on toast
Peanut butter and jelly sandwich
Rice pudding made with low-fat milk
Cheese sandwich and tomato juice

HEALTHY SNACKS

- Healthy snacks help you get the nutrition you need when you are pregnant.
- You may not be able to get all the calories and vitamins you need in just 3 meals a day.
- Include some healthy snacks in your diet.



Food Safety

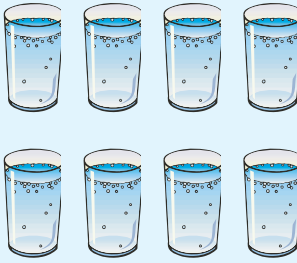
- Be sure to wash your hands, the food, and all silverware before fixing your food.
- Cook all foods well and keep them at the correct temperature before and after cooking.
- Listeria is a type of bacteria that can be found in food. It is rare, but it can cause problems in pregnant women.
- To reduce your risk of having a problem with listeria, the United States Department of Agriculture has the following recommendations:
 - Reheat all ready-to-eat foods such as hot dogs, luncheon meats, cold cuts, fermented and dry sausage, and other deli-style meat and poultry products until they are steaming hot. If you cannot reheat these foods, do not eat them.

- Do not drink raw, unpasteurized milk or eat foods made from it.
- Do not eat soft cheeses such as feta, brie, camembert, or white- or blue-veined varieties.

Your Daily Food Guide - American Dietetic Association

NOTE: If you or anyone in your family has a history of being allergic to peanuts, you should not eat foods containing peanuts while you are pregnant.

Food Group	Amounts of Food That Make Up 1 Serving	Number of Servings Daily
		Single Pregnancy
MILK & MILK PRODUCTS	1 cup of whole, low-fat, or skim milk 1 ounce of cheese 1 1/3 cups of cottage cheese 1 1/2 cups of ice cream/ice milk or 1 cup low-fat frozen yogurt	3-4
MEAT & PROTEIN	1/2 cup of cooked dried beans (lentils, chickpeas, kidney beans, etc.) 1 egg 1/4 cup of tuna 1 ounce of beef, fish, chicken, or liver 1/2 cup of cottage cheese 1/2 cup of tofu	6
BREADS & CEREALS	1 slice of whole-grain bread 1/2 cup of cooked cereal 3/4 cup of cold cereal 1 corn tortilla 1/3 cup of cooked rice, noodles, or pasta 6 saltine crackers 1 muffin, biscuit, or roll 1 small bagel	9
VEGETABLES	1/2 cup of raw or cooked: broccoli, spinach, asparagus, cabbage, romaine lettuce, collards, kale, Brussels sprouts, carrots, or squash	3-5

Food Group	Amounts of Food That Make Up 1 Serving	Number of Servings Daily
		Single Pregnancy
FRUIT	1/2 cup of orange or grapefruit juice 3/4 cup of tomato juice 1 medium fruit	2-4
FATS, OIL, & SWEETS	USE ONLY IN MODERATION	USE ONLY IN MODERATION
WATER & OTHER FLUIDS	At least 6 to 8 (8-ounce) glasses daily. Drink more during warm weather and exercise. Avoid beverages with caffeine. Do not drink any alcoholic beverages (including beer and wine).	

If You Are a Vegetarian

- If you are a vegetarian, you can get the nutrients you need for pregnancy and breastfeeding if you plan carefully.
- If you are a vegetarian who eats eggs and dairy products but does not eat meat, fish, or chicken, you may need to eat more grains, beans, nuts, fruits, and vegetables. This will help you get enough protein and give you enough energy.
- If you are a strict vegetarian who only eats plant foods, you will need to work harder to get protein, calcium, and other nutrients.
- Have an extra serving of protein each day, such as soy (tofu) products.
- Have more dark green leafy vegetables, whole sesame seeds, and almonds. These are rich in calcium.
- Your doctor may talk to you about taking supplements of vitamin B12, folic acid, and iron.

The following guidelines will help you meet your pregnancy needs while following your vegetarian diet.

Food Group	Amounts of Food That Make Up 1 Serving	Number of Servings Daily
MILK & MILK PRODUCTS	1 cup of whole, low-fat, skim, or soy milk 1 ounce of cheese 1 cup of yogurt 1 1/2 cups of ice cream/ice milk OR 1 cup of low-fat frozen yogurt	3 - 4
PROTEIN FOODS ANIMAL PROTEIN PLUS VEGETABLE PROTEIN	1/2 cup cooked dried beans (lentils, chickpeas, kidney beans, etc.) 1 egg 1/4 cup of nuts * 1/2 cup of cottage cheese 1/2 cup of tofu	6 - 8 ounces
BREADS & CEREALS	1 slice of whole-grain bread 1/2 cup of cooked cereal 3/4 cup of cold cereal 1 corn tortilla 1/2 cup cooked rice, noodles, or pasta 6 saltine crackers 1 muffin, biscuit, or roll 1 small bagel	9
VEGETABLES	1 cup of raw vegetables 1/2 cup of cooked vegetables (Broccoli, spinach, asparagus, cabbage, romaine lettuce, collards, kale, Brussels sprouts, or squash)	4 or more
FRUITS	1 medium fruit 1/2 cup of orange or grapefruit juice 3/4 cup of tomato juice	3

Reference: Food and Nutrition Board, Institute of Medicine. *Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids*. Washington, DC: National Academy Press, 2002.

* If you or anyone in your family has a history of being allergic to peanuts, you should not eat foods containing peanuts while you are pregnant.



Caffeine

- Caffeine is a stimulant. It makes your heart pump faster.
 - There is caffeine in coffee, tea, and chocolate.
 - Caffeine is also in some sodas and medications.
 - Large amounts of caffeine may stop nutrients from getting to your baby.
 - Caffeine has been associated with low birth weight in babies.
- Coffee drinking should be limited to 2 cups per day.
 - Only eat small amounts of other food with caffeine in them.

Artificial Sweeteners

- **DO NOT** use diet foods.
- Artificial sweeteners are generally safe to use during pregnancy.
- Limit the amount of foods you eat that are artificially sweetened.
- Have no more than 2 or 3 servings a day.

Herbal Teas

- Herbal teas should be avoided during pregnancy.
- The ingredients and safety of herbal teas is unknown.
- Some herbal teas including lobelia, sassafras, coltsfoot, comfrey, and pennyroyal have possible bad side effects.

Healthy Lifestyle Choices

- You must stay away from things that could hurt your baby, especially in the early weeks of pregnancy.
- This is when your baby's organs and tissues are starting to form.

ALCOHOL

- If you drink beer, wine, wine coolers, and hard liquors during pregnancy, it is passed to your baby.
- If you get drunk, so will your baby.
- Alcohol may cause birth defects that lead to brain damage and body deformities. Drinking alcohol puts your baby at risk for fetal alcohol syndrome.



- Fetal alcohol syndrome may cause your baby to have mental retardation, abnormal facial features, heart problems, learning disabilities, and slow growth and development.
- Alcohol use in pregnancy is the number 1 cause of birth defects and a major cause of mental retardation in the United States.
- There is no *safe* amount of alcohol intake during pregnancy.
- Do not drink any alcohol during your pregnancy.

SMOKING

- If you smoke, your baby can have problems before it is born.



- Your growing baby needs oxygen just like you do.
- Your breathing supplies your baby with the oxygen it needs to live and grow.
- If you smoke a cigarette, your baby is smoking the same cigarette.
- Your baby is getting the same chemicals, nicotine, and carbon monoxide.
- Nicotine is a drug that causes your heart to beat faster.
- Carbon monoxide is a poisonous gas that takes the place of oxygen in your blood. Both nicotine and carbon monoxide can harm your baby.
- Pregnant women who smoke are at greater risk to miscarry, have placental problems, vaginal bleeding, early labor, premature birth, and stillbirth.
- Babies born to women who smoke may be born with a low birth weight.
- The babies have a greater risk for breathing and heart problems, sudden infant death syndrome (SIDS), and death in the 1st year of life.

Smoke from other people's cigarettes can also harm your baby. Keep your baby away from other people's smoke. Ask for non-smoking seating in restaurants. Ask others to smoke outside, away from your baby.

- If you smoke, ask your doctor for help in quitting.
- There are programs and support groups to help you stop smoking. Your local American Heart Association and American Lung Association are also good resources.

MEDICINES

- Some drugs are not safe to use while you are pregnant.
- They can hurt your baby.
- Your baby's major organs are forming in the early weeks of pregnancy.
- Take only those medicines (including over-the-counter) that your doctor says are okay.
- On your 1st office visit, give your doctor a list of all medicines that you take. Include all medicines, over-the-counter medications and vitamins.
- Ask your doctor what medicines you can take for things like a headache or heartburn in case you need them during your pregnancy.

Let your doctor know about any medicines that you take. This includes those you take for other medical problems, over-the-counter drugs, and vitamins.



STREET DRUG USE

- If you are dependent on drugs, so is your baby.
- Your baby will be born addicted and undergo withdrawal.
- Withdrawal for a newborn can be very dangerous.
- The baby can die or be born with low birth weight and fetal distress.
- Do not use other drugs like LSD, angel dust, or downers.
- Any illicit drug use in pregnancy is a danger to your baby.
- Even if you think you do not have a drug problem, occasional drug use causes repeated withdrawal.
- Withdrawal for a baby can mean your baby may die.
- If you use drugs, now is the time to get help and quit.
- Ask your doctor for help and drug treatment options.

Some drugs and their possible effects are shown below.

DRUG	POSSIBLE EFFECTS ON YOUR BABY
Marijuana (“pot”)	Fetal growth problems
Cocaine and crack	Fetal brain damage, learning problems, miscarriages, preterm deliveries, placental abruption, fetal death
Valium	Cleft lip and palate, breathing problems, poor muscle tone, and low body warmth
Heroin	Breathing problems and newborn death
Methamphetamines (“crank,” “crystal,” “ice,” “speed”)	Developmental and skeletal defects, premature delivery, stroke or brain hemorrhage before birth. Long-term effects include sleep disturbance and behavioral problems, sensitivity to touch and light.

WEIGHT GAIN

- The amount of weight you should gain during pregnancy depends on what your weight was before becoming pregnant.
- Ask your doctor how much weight you should gain.

BMI	Your Body Size	Total Weight Gain During Pregnancy
Less than 19.8	Underweight	28 - 40 pounds
19.8 - 26.0	Normal	25 - 35 pounds
26.1 - 29.0	Overweight	15 - 25 pounds
More than 29.1	Obese	15 pounds

Reference: Your Pregnancy and Birth, Am Col Obstet & Gynecol., 4th Ed., Washington D.C.

BMI = Body Mass Index [weight/(height²)]

GUIDELINES FOR WEIGHT MANAGEMENT DURING PREGNANCY

- It is important that you eat food that has the nutrients to make sure you have gradual weight gain throughout pregnancy.
- Eat the correct foods to support the baby's development.
- Eat the correct foods and amounts to support your body's nutritional needs.
- The following guidelines will help you meet the increased nutrients needed during pregnancy. They will also help you avoid excess weight gain.
 - Eat a variety of foods from all food groups.
 - Review the *Nutrition for Pregnancy* section to make sure you are eating the correct number of servings and portion size per serving from each food group.
 - Do **NOT** diet.
 - Prevent excessive weight gain by going easy on gravy. Trim fat off meat.
 - Have limited amounts of fried foods, sweets, potato chips, and beverages sweetened with sugar.
 - Do **NOT** skip meals.
 - Eat at regular meal times and add some healthy between-meal snacks each day. These may include:
 - Cheese and crackers with a cup of milk.
 - Fruit or tomato juice.
 - A bowl of dry cereal with milk, nuts, raisins, or yogurt.
 - Include complex carbohydrates such as whole-grain breads, cereals, starches, fresh fruits, and vegetables. These help fill you up while providing energy.
 - Limit excess fats. Use skim or 1% milk and other low-fat dairy products in place of whole milk and whole milk products.
 - Trim visible fat from meat.
 - Replace fried and processed meats with baked, broiled, or roasted lean meat, fish, or chicken.
 - Limit fried foods, excess butter, salad dressings, and gravies.
 - Avoid high-fat snacks such as chips and nuts.

- Avoid or limit concentrated sweets.
 - These include candy, cookies, pastries, desserts, and beverages sweetened with sugar such as colas/sodas, Kool-Aid®, or fruit drinks.
 - Sugar substitutes and food or beverages which contain sugar substitutes should be used in moderation.

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