

Your Baby and You: Nutrition for Two



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Table of Contents

Prenatal Vitamins	2
Weight Gain	3
My Pyramid	6
Avoidances	
Caffeine	6
Low Calorie Sweeteners	8
Alcohol	9
Pica	9
Food Safety	
Listeriosis	9
High Mercury Fish	10
Nutrients of Importance	11
Vegetarian Diet	14
Common Complaints	15
Exercise	16
Lactation	17
Recipe Ideas	21
References & Acknowledgments	30

Prenatal Vitamins

Why should I take prenatal vitamins?

Even if you are very healthy and eat a variety of foods from all of the food groups, you will still benefit from taking a prenatal vitamin supplement. Because the amounts of vitamins and minerals in foods can vary, it is a good idea to take a supplement to make sure that you are getting everything you need. It is especially important to take the supplement if you already have deficiencies of certain vitamins or minerals, are having twins, or follow a specialized diet such as vegan or vegetarian.

Which vitamins and minerals are included in my prenatal vitamins?

The composition of prenatal vitamins varies among brands. Therefore, it is important to look for one that contains the following:

- ☐ 4,000 to 5,000 IU (international units or IUs) of vitamin A
- ☐ 800 to 1,000 mcg (1 mg) of folic acid
- ☐ 400 IU of vitamin D
- ☐ 200 to 300 mg of calcium
- ☐ 70 mg of vitamin C
- ☐ 1.5 mg of thiamin
- ☐ 1.6 mg of riboflavin
- ☐ 2.6 mg of pyridoxine
- ☐ 17 mg of niacinamide
- ☐ 2.2 mcg of vitamin B-12
- ☐ 10 mg of vitamin E
- ☐ 15 mg of zinc
- ☐ 30 mg of iron

(www.webmd.com)

<u>Vitamin Component</u>	<u>Benefit to Mother</u>	<u>Benefit to Baby</u>
Vitamin A	Helps with postpartum tissue repair, as well as maintaining normal vision and helping fight off infections	Important for lung, urinary tract, and heart development. *Do not take >10,000 IU per day or medications Accutane or Retin-A which can cause birth defects.
Folic Acid	Your body needs this nutrient for the production, repair, and functioning of DNA; deficiency can cause anemia and increase risk of some types of cancer.	Necessary for organ and tissue growth and prevention of neural tube defects, especially during the first few weeks of pregnancy.
Vitamin D	Important for the body to properly use calcium and phosphorus in building bones; deficiency increases risk of osteoporosis (brittle bones) later in life	Important for bone formation. *Avoid supplementation beyond recommended amount as high doses can be toxic

<u>Vitamin Component</u>	<u>Benefit to Mother</u>	<u>Benefit to Baby</u>
Calcium	Decreased risk of high blood pressure in pregnancy, decreased risk of osteoporosis (brittle bones) later in life	Important for bone and tooth formation.
Zinc	Possibly associated with decreased risk of bleeding during delivery, infections, and prolonged labor	May be important for growth and prevention of malformations.
Iron	Increased blood supply; associated with a decrease in postpartum depression. 18% of women develop anemia in pregnancy and it is easily prevented with a prenatal vitamin and mineral supplement	Higher risk of having a low-birth-weight infant, lower scores on intelligence, language, motor, and attention tests in infancy and even at the age of 5 years

Weight Gain

Weight gain is a necessary and important part of pregnancy. The healthiest babies are those that weigh between 7 pounds 11 ounces and 9 pounds 14 ounces at birth. Too little weight gain means your baby may be born smaller than is healthy and is at greater risk of health complications. On the other hand, avoiding excess weight gain is important in preventing high blood pressure, gestational diabetes, and Cesarean delivery. Excess weight gained during pregnancy also tends to remain following delivery, so prevention now can help you more easily get back to your prepregnancy weight. Gaining the right amount of weight – not too much and not too little -- is important to be sure your baby is born at the healthiest possible weight. The weight that you gain helps to support the baby in the following ways:

<u>Component</u>	<u>10 Weeks</u>	<u>20 Weeks</u>	<u>30 Weeks</u>	<u>40 Weeks</u>
Fetus	.01	.66	3.3	7.81
Placenta	.04	.37	.95	1.47
Uterus	.31	.70	1.32	2.46
Amniotic Fluid	.07	.77	1.65	1.97
Breasts	.10	.40	.79	.99
Blood Supply	.22	1.32	2.86	2.96
Other Fluid	0	.58	1.77	7.04
<u>Maternal Fat Stores</u>	<u>.69</u>	<u>4.70</u>	<u>8.01</u>	<u>7.70</u>
Total Weight Gain	1.44	9.50	20.65	32.40

Approximate Weight Gain in Pounds
(adapted from Nutrition Through the Life Cycle)

The actual weight gained depends on the individual person, but 32.40 pounds overall is about average. A scale known as Body Mass Index (BMI) is used to determine how much weight a woman actually needs to gain to have the healthiest possible baby. The chart below will help you determine your own BMI. Find your height and your pre-pregnancy weight on the chart.

Body Mass Index (BMI) Table

Height Weight (in pounds)

BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
4'10" (58")	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167
4'11" (59")	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173
5' (60")	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179
5'1" (61")	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185
5'2" (62")	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191
5'3" (63")	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197
5'4" (64")	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204
5'5" (65")	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210
5'6" (66")	118	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216
5'7" (67")	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223
5'8" (68")	125	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230
5'9" (69")	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236
5'10" (70")	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243
5'11" (71")	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250
6' (72")	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258
6'1" (73")	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265
6'2" (74")	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272
6'3" (75")	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279

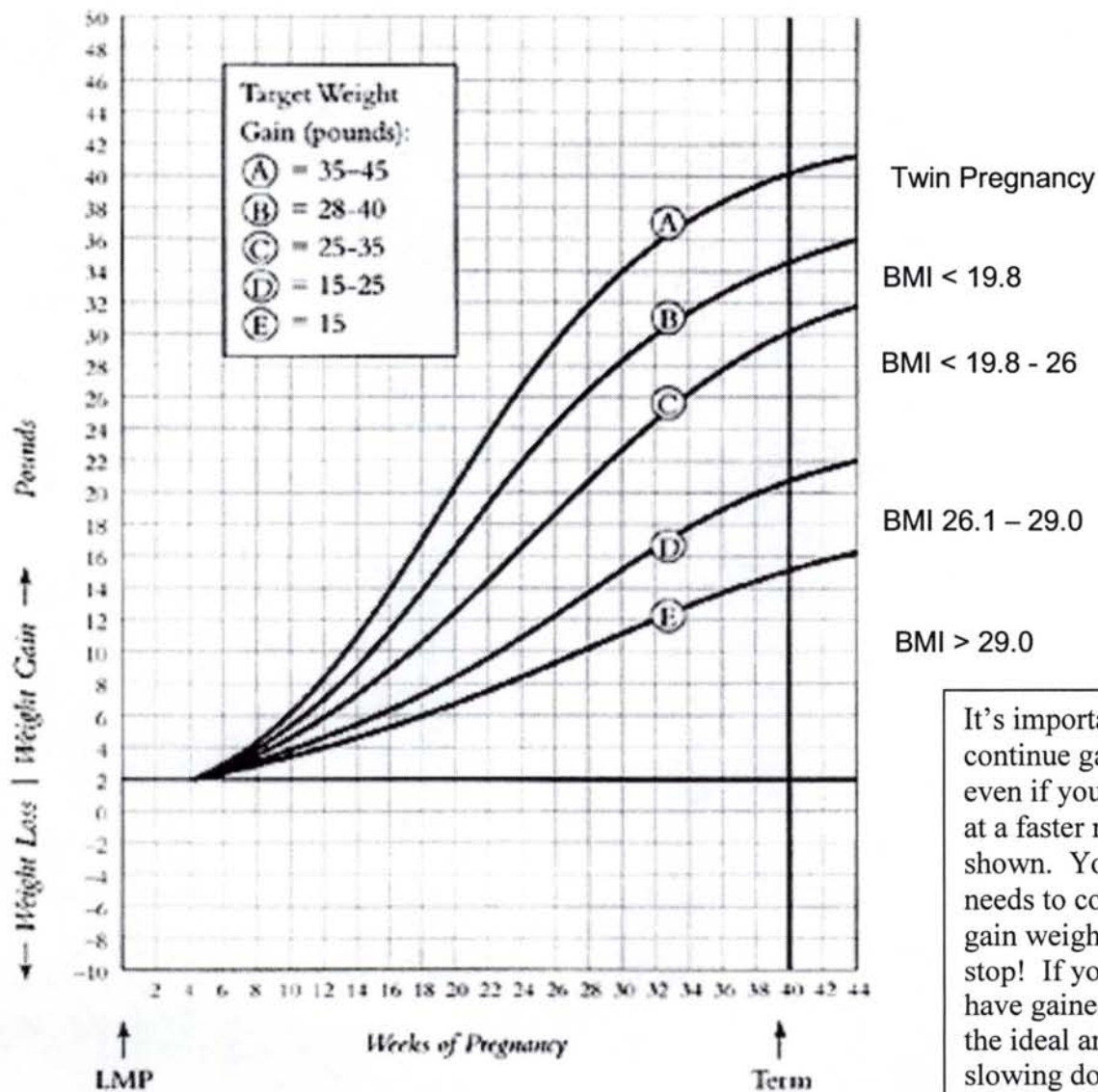
Source: Evidence Report of Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults, 1998. NIH/National Heart, Lung, and Blood Institute (NHLBI)

Based on your BMI, you can determine approximately how much weight you should gain during your pregnancy.

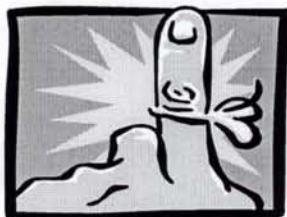
Prepregnancy BMI	Recommended Weight Gain
Less than 19.8	28-40 lb
19.8-26.0	25-35 lb
26.1-29.0	15-25 lb
Greater than 29.0	15 lb
Twin Pregnancy	35-45 lb

(Source: Nutrition Through the Life Cycle)

The chart below gives you an idea of approximately the rate you should be gaining weight. You can plot your rate of weight gain on the chart. The number of weeks is on the bottom axis and the number of pounds gained is on the left axis. The labels on the right give an estimate of about where you should fall based on your BMI.



It's important to continue gaining weight, even if you are gaining at a faster rate than shown. Your baby still needs to continue to gain weight, so don't stop! If you see that you have gained more than the ideal amount, try slowing down your weight gain rather than stopping all together.



When losing weight following delivery, it is best not to lose more than one pound a week. If more than one is lost, there is a risk of decreased milk production.

My Pyramid



During pregnancy, only 300 additional calories are needed as compared to before pregnancy.

During lactation, it is important to take in enough calories in order to sustain milk production. In the first six months of breastfeeding, when the baby is smaller and feeding often, approximately 330 extra calories are needed per day. In the second six months, the baby is larger and eating more at once but not as often. Therefore, you will only need about 400 extra calories per day.

<u>Food Group</u>	<u>Amount Needed</u>	<u>Sample Foods</u>
Grains	7 ounces per day	Brown rice, oatmeal, whole wheat pita, whole wheat breads, whole wheat cereal, whole wheat cereal flakes
Vegetables	3.5 cups per day	Spinach, broccoli, carrots, sweet potatoes, squash, green or red peppers, eggplant, cauliflower, zucchini
Fruits	2 cups per day	Pineapple, banana, grapes, berries, apples, oranges, mangoes, raisins, pears
Milk	3 cups per day	Skim milk, fat-free or low-fat yogurt, hard cheese made with part-skim milk
Meat & Beans	5 ounces per day	Salmon steak, filet, or loaf, lean steaks and roasts, Chicken without skin, lean turkey, black beans, black eyed peas, kidney beans, hummus (chickpeas) on pita

From: mypyramid.gov

Visit mypyramid.gov for more information and tips on how to include some of these ideas into your daily meal plans.

Avoidances

Caffeine:

Pre-pregnancy:

Although caffeine consumption has not been proven to have any adverse effects on birth outcome, an association between caffeine consumption and conception has been observed. Women who consume high levels (more than 150 mg per day) of caffeine may be at increased risk for delayed conception.

Pregnancy:

No studies have proven an association between miscarriage or preterm delivery and typical caffeine consumption. Excessive amounts of caffeine may increase the chances of having a low birthweight baby.

Lactation:

Caffeine can be transferred to the nursing child through breast milk. High caffeine intakes can cause sleeplessness and irritability in your baby.

Recommendations:

Keep daily caffeine intake at a level below 300mg. Check packages for caffeine content in order to keep track of intake.

Approximate Caffeine Content of Common Foods and Beverages

Item	Typical (mg)	Range (mg)
Coffee (8 fl. Oz.)		
Brewed, drip	85	65-120
Instant	75	60-85
Decaf	3	2-4
Espresso (1 fl. Oz or 2 tablespoons)	40	30-50
Tea (8 fl. Oz)		
Brewed	40	20-90
Instant	28	24-31
Iced	25	9-50
Soft drinks (12 fl. Oz or 1 can)	40	0-80
Cocoa (8 fl. Oz)	6	3-32
Chocolate milk (8 fl. Oz)	5	2-7
Milk chocolate (1 oz)	6	1-15
Dark chocolate	20	5-35
Baker's chocolate	26	26
Chocolate syrup (1 fl oz)	4	4

Levels of Caffeine in Specific Soft Drinks:

Brand of soft drink (12 ounces)	Caffeine (milligrams)
7-Up	0
A&W Creme Soda	29
Barq's Root Beer	22
Cherry Coca-Cola, Diet Cherry Coca-Cola	34
Coca-Cola Classic	34
Code Red Mountain Dew	55

Brand of soft drink	Caffeine
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(12 ounces)	(milligrams)
Diet Barq's Root Beer	0
Diet Coke	45
Dr Pepper	41
Diet Pepsi-Cola	36
Diet Wild Cherry Pepsi	36
Fanta	0
Mello Yello, Diet Mello Yello	51
Mountain Dew, Diet Mountain Dew	55
Pepsi-Cola	37
Sprite, Diet Sprite	0
Sunkist Orange Soda, Diet Sunkist Orange Soda	41
Tab	47
Wild Cherry Pepsi	38

(Sources: American Beverage Association, 2005; The Coca-Cola Co., 2005; Dr Pepper/Seven Up Inc., 2005 via www.mayoclinic.com)

Keep in mind: Energy drinks such as Red Bull have 80 or more milligrams of caffeine per serving size. In an 12 ounce bottle of Red Bull, there are actually 155.5mg of caffeine. The brand Full Throttle has 100mg in a 12 ounce bottle.

Low Calorie Sweeteners:

Sweeteners approved for consumption in the United States:

<u>Sweetener Name</u>	<u>Trade Name</u>	<u>Comments</u>
Aspartame	NutraSweet®	Approved for any women except those with PKU
Saccharin	Sweet 'N Low®	Use in moderation during pregnancy
Acesulfame K	Sunette®, Sweet 'n Safe®	No reproductive risk; approved for all
Sucralose	Splenda®	No reproductive risk; approved for all
Neotame		No reproductive risk; approved for all

Alcohol:

Alcohol consumed by the mother is easily transferred to the baby. The baby is unable to break down alcohol in the same way that the mother's body does. This causes the alcohol to remain in the baby's system for a longer period of time. Additionally, because the baby is so small in comparison to an adult, the same amount of alcohol has a greater effect on the baby as compared to the mother. "Heavy drinking during pregnancy increases the risk of miscarriage, stillbirth, and infant death within the first month after delivery. Approximately 40% of the fetuses born to women who drink heavily early in pregnancy will develop fetal alcohol syndrome (FAS)."

Babies born with fetal alcohol syndrome are smaller than normal and have mental retardation and facial malformations. Babies with fetal alcohol syndrome develop into children with poor coordination, a short attention span, and behavioral problems. They also experience growth retardation and remain small for their age. Fetuses that are exposed to alcohol during pregnancy but do not develop obvious fetal alcohol syndrome may also have more subtle birth defects and learning impairment.

Pica:

This condition affects over half of pregnant women in some parts of the southern United States. This phenomenon involves eating non-food substances such as ice. Consuming ice is not uncommon after finishing a beverage which was served on ice. However, pica involves eating large amounts of ice, beyond just half a glass or so. This can present severe nutrition problems if not recognized. Eating non-food substances can cause problems in absorbing the proper nutrients during pregnancy. This can also cause problems if non-food substances are eaten in place of healthy foods. Your health as well as your baby's health could be hurt by this. If this type of behavior or craving is encountered, you should seek advice from your doctor or midwife.

Food Safety

Listeriosis:

Listeriosis is a foodborne illness caused by the bacteria *listeria monocytogenes*. This can be very harmful in pregnant women and their unborn children. The mother may experience only mild or flu-like symptoms treatable with antibiotics. However, risks to the fetus are more dangerous. Risks include miscarriage, fetal death, premature delivery, and severe illness or death in the newborn due to infection. Pregnant women are 20 times more likely to get listeriosis than are non-pregnant women, so they must be especially careful. The United States Department of Agriculture recommends that pregnant women avoid the following foods which may cause listeriosis.

<u>Food</u>	<u>Conditions in Which the Food May Be Eaten</u>
Hot dogs, luncheon meats, deli meats	Reheated until steaming hot
Soft cheeses: feta, Brie, Camembert, blue-veined cheeses, Mexican-style cheeses such as "queso blanco fresco"	Avoid completely
Refrigerated pâté or meat spreads	Avoid completely; may be consumed if canned
Refrigerated smoked seafood: salmon, trout, whitefish, cod, tuna, mackerel (labeled as "nova-style," "lox," "kippered," "smoked," or "jerky")	Only if it is an ingredient in a cooked dish; canned fish may be safely eaten
Raw (unpasteurized) milk or foods that contain unpasteurized milk	Avoid completely

(adapted from "Listeriosis and Pregnancy: What is your risk?" published by the USDA)

High Mercury Fish:

High levels of mercury consumed during pregnancy can be harmful to the baby. Mercury can cause brain defects in the newborn. Therefore, it is important to avoid foods which contain high levels of mercury. The most commonly consumed mercury-containing foods are listed in the table below. It is safe to consume fish that contain about 0.10 ppm of mercury in small amounts. Fish containing more than 0.50 ppm of mercury should be avoided during pregnancy as well as lactation. Children should also not consume these fish.

Top 10 Fish and Shellfish consumed in the United States	Mean mercury level in parts per million (ppm)	Other common seafood	Mean mercury level in parts per million (ppm)
Canned tuna (light)	0.12	Lobster	0.31
Shrimp	ND*	Grouper	0.55
Pollock	0.06	Halibut	0.26
Salmon (fresh, frozen)	0.01	Oysters	ND*
Cod	0.11	Mahi mahi	0.19
Catfish	0.05	Herring	0.04
Clams	ND*	Fish with about 0.5 ppm Hg	Mean mercury level in parts per million (ppm)
Flounder or sole	0.05	Fresh or frozen tuna	0.38
Crabs	0.06	Red snapper	0.60
Scallops	0.05	Orange roughy	0.54

Fish with the highest levels of mercury (about 1 ppm Hg):

Shark	0.99
Swordfish	0.97
Tilefish (golden bass or golden snapper)	1.45
King mackerel	0.73

(Source: www.americanheart.org)

*Mercury levels below detectable level.

Advice from the FDA

Women who are pregnant, planning to become pregnant or nursing — and young children — should not eat these fish. Everyone else can eat up to 7 ounces of high-mercury fish per week.

Nutrients of Importance & Good Sources

Protein Sources:	Serving	Amount in Serving
Milk or yogurt	1 cup	8 g
Meat	1 oz.	7 g
Egg	1	7 g
Cheese	1 oz.	7 g
Dried beans	½ cup cooked	7 g
Bread	1 slice	3 g
Pasta	1/2 cup	3 g
Rice	1/3 cup	3 g
Fortified cereal	1 oz.	3 g

Daily Goal: 71 g*

Omega-3 Fat Sources	Serving	Amount in Serving
Olive oil		0.1 g/T
Walnuts, English		0.7 g/T
Soybean oil		0.9 g/T
Canola oil		1.3 g/T

Walnut oil		1.4 g/T
Flaxseeds		2.2 g/T
Flaxseed (linseed) oil		8.5 g/T
Canned tuna**	3 oz.	0.26-0.73g (check label for exact amt)
Shrimp**	3 oz	0.27 g
Salmon (fresh, frozen)**	3 oz	0.68-1.83g
Catfish**	3 oz	0.15-0.20g

-Adapted from USDA Nutrient Data Laboratory.

Daily Goal: 1.4 g/day*

**Mercury consumption should be limited during pregnancy. Consult page 10 for mercury levels and recommendations.

Calcium Sources	Serving	Amount in Serving
Cow's milk	1 cup	288 mg
Yogurt	1 cup	275-415 mg
Cheddar cheese	1 oz.	204 mg
Ice cream	1 cup	180 mg
Calcium-set tofu	½ cup	120-430 mg
Fortified soy milk	1 cup	200-400 mg
Soybeans, cooked	½ cup	88 mg
Black beans, cooked	½ cup	46 mg
Sesame tahini	2 T	128 mg
Almonds	¼ cup	88 mg
Broccoli	½ cup	36 mg
Bok choy	½ cup	36 mg
Spinach	½ cup	122 mg

Daily Goal: 1000mg*

Iron Sources	Serving	Amount in Serving
Lentils	½ cup	3.3 mg
Kidney beans	½ cup	2.6 mg
Chickpeas	½ cup	2.4 mg
Black beans	½ cup	1.7 mg
Sesame tahini	2 tbsp	2.7 mg
Sunflower seeds	¼ cup	2.3 mg
Cashews	¼ cup	2.1 mg
Fortified cereals	1 oz.	2.1-18 (check label for exact amt)
Cream of wheat, cooked	½ cup	5.1 mg
Instant oatmeal, cooked	½ cup	4.2 mg
Beef liver	3 oz	7.5 mg
Beef, lean ground	3 oz	3.9 mg
Chicken, breast, no bone	3 oz	0.9 mg
Pork, loin chop	3 oz	3.5 mg
Tuna, canned, water	3.5 oz	1.0 mg
Salmon, pink, canned	3 oz	0.7 mg

Raisins	¼ cup	1.0 mg
Bread, whole grain	2 slices	1.7 mg

Daily Goal: 27 mg*

Vitamin D Sources	Serving	Amount in Serving
Fortified cow's milk	1 cup	2.5 mcg
Fortified soy milk	1 cup	1-3 mcg
Fortified breakfast cereals	1 oz	0.5-1.0 mcg (check label for exact amt)
Egg yolk	1 large egg	0.6 mcg

*Direct sun exposure of approximately 15 minutes a day can also supply enough vitamin D to meet the 5 mcg requirements. Sunblock will block the sunlight from activating the vitamin D; therefore, it is important to consume enough vitamin D from food sources if sun exposure is limited.

Daily Goal: 5 mcg*

Vitamin B₁₂ Sources	Serving	Amount in Serving
Fortified breakfast cereals	1 oz	0.6-6.0 mcg (check label for exact amt)
Fortified soy milk	1 cup	0.8-3.2 mcg (check label for exact amt)
Nutritional yeast	1 tbsp	1.5 mcg
Fortified veggie soy meats	3 oz	1.5-3.6 mcg
Cow's milk	1 cup	0.8-1.0 mcg
Egg	1 large	0.5 mcg
Beef liver	3.5 oz	112 mcg
Tuna, canned, water	3.5 oz	1.8 mcg
Low fat yogurt	1 cup	1.4 mcg
Chicken, white meat	3.5 oz	0.36 mcg
Cheddar cheese	1 oz	0.24 mcg

Daily Goal: 2.6 mcg*

Folic Acid/Folate Sources	Serving	Amount in Serving
Orange	1	40 mcg
Orange juice	6 oz	82 mcg
Pineapple juice	6 oz	44 mcg
Papaya juice	6 oz	40 mcg
Dried beans	½ cup	50 mcg
Fortified breakfast cereals	1 cup (1 oz)	400 mcg (varies, check label for exact amt)
Breakfast cereals	1 cup (1 oz)	100 mcg
Bread, roll	1 slice (1 oz)	40 mcg
Pasta	½ cup	30 mcg
Rice	½ cup	30 mcg
Chicken liver	3.5 oz	770 mcg
Beef liver	3.5 oz	217 mcg

Spinach, cooked	½ cup	131 mcg
Brussel sprouts	½ cup	47 mcg
Broccoli, cooked	½ cup	39 mcg

Daily Goal: 600 mcg*

Fiber Sources	Serving	Amount in Serving
Whole wheat spaghetti	1 cup	6.3 g
Whole wheat bread	1 slice	1.9 g
Brown rice, cooked	1 cup	3.5 g
Apple with skin	1 medium	3.3 g
Green beans, cooked	1 cup	4.0 g
Broccoli, boiled	1 cup	5.1 g
Kidney beans, boiled	1 cup	13.1 g
Split peas, cooked	1 cup	16.3 g
Oatmeal, cooked	1 cup	4.0 g

Daily Goal: 25 g*

*Daily Goals are based on the Dietary Reference Intakes for pregnant women ages 19-30.

Vegetarian Diets:

Vegetarian diets during pregnancy are not a problem as long you make sure to eat foods which will provide adequate nutrients. It is especially important to get a variety of foods so that you will not become nutrient deficient, especially when your baby is depending on what you eat. Following is a food guide adapted for the vegetarian diet. Amounts of vitamins and minerals remain the same for regular and vegetarian diets.

Food Group	Serving Size	Servings Per Day
Grains:		6-11
Whole grain bread	1 slice	
Cooked grains (rice, etc)	½ cup	
Fortified cold cereals	1 oz (1 cup)	
Fortified cooked cereals	½ cup	
Corn	½ cup	
Pasta	½ cup	
Tortillas	1 small	
Crackers	4 small	
Food Group	Serving Size	Servings Per Day
Legumes, Nuts, Seeds, Dairy:		5-7
Dried beans, cooked	½ cup	
Peas	½ cup	

Soy products	½ cup or 2-3 oz	
Soynuts	¼ cup	
Nut and seed butter	2 tbsp	
Eggs	1	
Cow's milk	1 cup	
Cheese	1 oz	
Yogurt	½ cup	
Fortified soymilk	1 cup	
Vegetables:		4
Cooked vegetables	½ cup	
Raw vegetables	1 cup	
Vegetable juice	½ cup	
Fruits:		2
Medium-sized fruit	1	
Cut-up raw or cooked fruit	½ cup	
100% fruit juice	½ cup	
Dried fruit	¼ cup	
Fats, Oils, and Sweets:		2+ (depending on calories)
Mayonnaise, oil, margarine	1 tbsp	
Honey, syrup, jams, jellies, sugar	1 tbsp	

Common Complaints

Nausea and Vomiting:

Problem:

Nausea and vomiting is commonly known as "morning sickness," but it can occur any time of the day. It usually begins around the fourth week after conception and ends suddenly around the tenth week after conception. The symptoms may occur together or separately. At this time, the cause of nausea and vomiting is unknown, but it may be a result of changes in hormones during pregnancy.

Treatment:

Dietary management is the safest method of treating nausea and vomiting during pregnancy. General recommendations for women experiencing nausea and vomiting are to continue to gain weight, do not consume liquids and solids at the same time, avoid odors and foods that trigger nausea and/or vomiting, and select foods that are well tolerated. Bland foods such as crackers and toast are often well-tolerated. A piece of fruit or cereal with milk are also good choices. Foods with strong odors such as coffee and some meats should be avoided if these cause nausea. Water intake is important to maintain hydration in the case of vomiting.

Heartburn:

Heartburn is a common problem in pregnancy. Simple ways to reduce the likelihood of heartburn are eating small, frequent meals, not going to bed on a full stomach, and avoiding foods that seem to aggravate heartburn such as foods with a lot of fat. Peppermints and spearmints can also cause heartburn. If heartburn still persists, try to elevate the upper part of the body with pillows during sleep, and avoid bending your head below the waist. Heartburn medication is not recommended, but antacid tablets can be safely consumed. Check with your doctor or midwife for safe medications to use during pregnancy.

Constipation:

Constipation and hemorrhoids can also be common during pregnancy. The best method of treatment for constipation is to consume an adequate amount of dietary fiber per day. This amount should be somewhere around 30 grams per day. This is a very large amount of fiber and should be added into the diet gradually. For sources of fiber, see page 14 of this booklet. Drinking at least eight glasses of water a day and light physical activity (see page 16) will also aide in alleviating constipation. Avoid using laxatives, and seek approval from your doctor or midwife for any fiber supplements.

Exercise



Exercise is an important part of a healthy lifestyle at any time in life. Simple exercises can also be done during pregnancy to help you maintain a healthy weight and bone mass. Additionally, women who are in good shape physically have a shorter and easier labor and recover more quickly from childbirth. You should consult your doctor or midwife before beginning any exercise program. Women who did not exercise before they became pregnant should not attempt to start a heavy physical exercise schedule. Walking for 30 minutes 3-5 times per week is a good way to include physical activity during pregnancy. Women who exercised before they became pregnant should maintain some type of physical activity but should avoid overheating. Safe activities include walking, gentle cycling, swimming, light jogging, and dancing. Weights should not be used during pregnancy.

Lactation

Benefits to Mom

- Helps uterus to contract to pre-pregnancy size
- Ovulation and menstruation are suppressed
- Aids in return to pre-pregnancy weight
- Possible reduced risk of breast and ovarian cancers
- Maternal-infant bonding

Benefits to Infant

- Reduced risk of gastrointestinal infections with diarrhea, middle- and inner-ear infections, and upper respiratory infections (colds)
- Possible reduced risk of Sudden Infant Death Syndrome
- Possible reduced risk of obesity
- Possible reduced risk of various autoimmune diseases such as diabetes and Crohn's disease
- Some studies show a higher IQ

Recommendations from the American Academy of Pediatrics:

Breastfeeding should begin within one hour of birth and should continue at first signs of hunger through six months of age. No other foods should be given during the first six months. Breastfeeding newborns should be assessed for weight and health by 2-4 days of age. Continuation of breastfeeding is recommended through at least 12 months in combination with appropriate foods. It can continue as long as mutually desired after 12 months.

Dietary Considerations

Don't worry! Your diet does not have to be perfect in order to have a healthy baby! Simply continue to eat a well-balanced diet and your baby will receive the optimal breast milk it needs.

Additional Calories:

You will need to consume 300 –500 additional calories (compared to before you were pregnant) in order to produce the milk your baby will need. You can get these extra calories just by adding a healthy snack a couple of times each day.

Breastfeeding — Commonly Asked Questions

How do I take care of my breasts during breastfeeding?

By the third or fourth day of breastfeeding, your milk will change from colostrum to what looks more like skim milk. Your breasts will also go from feeling soft to firm. If your nipples leak, use a nursing pad or clean folded handkerchief squares inside your bra to catch the leaking milk. Be sure to change these often. Do not use plastic-lined pads because they will prevent air from circulating around your nipples and result in soreness.

How often should I nurse?

Breastfed babies tend to feed more often than formula-fed babies, usually eight to 12 times a day. The main reason for this is that their stomachs empty much more quickly because human milk is so easy to digest. The more often you nurse, the more milk you will be able to produce. Initially, your newborn will probably nurse every couple of hours, regardless of whether it's day or night. By the end of the first month, your baby may start sleeping longer at night. Let your baby feed on demand — that is, whenever he is hungry. Watch for different signals from your baby, rather than the clock to decide when to nurse. When your baby is hungry, he may do any of the following:

- Nuzzle against your breast
- Show the rooting reflex
- Make sucking motions or put hand to mouth
- Cry (this is a late sign of hunger)

It is best not to wait until your baby is overly hungry before you breastfeed. Some newborns can be sleepy and hard to wake. Do not let your baby sleep through feedings until your milk supply has been developed, usually about two to three weeks. If your baby is not demanding to be fed, wake her if three to four hours have passed since the last feeding. If this persists, call your pediatrician.

As your baby gets older, he will begin taking more milk during each feeding, but will need to eat less frequently. As mentioned before, you should increase the number of calories you consume during the second six months in order to support the increase in calories your baby needs.

How long does breastfeeding take?

While some infants nurse for only 10 minutes on one breast, it is quite common for others to stay on one side for much longer. Some feedings may be longer than others depending on your baby's schedule and the time of day. Since the composition of your milk changes during the course of each feeding, be sure that your baby nurses long enough to get the hind milk that is high in fat and important for your infant to receive in order to get meet his energy requirements.

Some babies may be nursing even though they appear to be sleeping. If your baby has fallen asleep at your breast, or if you need to stop a feeding before your baby is finished, gently break the suction with your finger. Do this by slipping a finger into your baby's mouth while he or she is still latched-on. Never pull the baby off the breast without releasing the suction.

When you breastfeed, alternate between which breast you offer first. (You may want to keep a safety pin or short ribbon on your bra strap to help you remember on which breast your baby last nursed.)

You will soon get to know your baby's feeding patterns. Each baby has a particular style of eating, some slower, some faster. Learning your own baby's eating patterns makes it easier to determine when she is hungry, when she has had enough, how often

Remember, your baby's feedings control how much milk your breasts produce. It is important to let your baby nurse on both sides so that each breast gets stimulation over the course of a day.

she needs to eat, and how much time she needs for feedings.

For some mothers and babies, breastfeeding goes smoothly from the start. For others, it takes a little time and several attempts to get the process going effectively. Like anything new, breastfeeding takes some practice. This is perfectly normal. If you need help, ask your child's pediatrician, a lactation consultant or a breastfeeding support group. Remember, the most important keys to successful breastfeeding are proper positioning and correct latch-on.

Until you and your baby develop a feeding routine, stay positive and try not to get discouraged. Remember, your milk gives your baby more than just food. It also provides important antibodies to fight off infection and has medical and psychological benefits for both of you.

How can you make sure your baby is getting enough milk?

Keeping up with your baby's diapering habits is one of the best ways to tell if he is being well fed. One is by the number of wet diapers he has in a day. Make sure he has at least six wet diapers per day with pale yellow urine, beginning around the third or fourth day of life.

Your infant should also have several small bowel movements daily (there may be one after every feeding in the first few weeks). During the first week of life, your infant should have at least two stools per day. From about 1 to 4 weeks old these should increase to at least five per day. As your baby gets older, bowel movements may occur less often, and may even skip a number of days.

Your baby should be steadily gaining weight after the first week of life. During the first week, some infants lose several ounces of weight, but they should be back up to their birth weight by the end of the second week. Your pediatrician's office will weigh your baby at each visit. Keep in mind that your baby may breastfeed more often during growth spurts.

Signs that baby is getting enough milk:

- At least six wet diapers per day and two to five loose yellow stools per day, depending on baby's age. (Your baby's stools should be loose and have a yellowish color to them. Be sure your child's stools are not white or clay-colored.)
- Steady weight gain, after the first week of age.
- Pale yellow urine, not deep yellow or orange.
- Sleeping well, yet baby looks alert and healthy when awake.

Should you give your baby water to drink?

Most breastfeeding babies do not need any water, vitamins or iron in addition to breast milk for at least the first 6 months. Human milk provides all the fluids and nutrients a baby needs to be healthy.

If your baby cannot or will not nurse, or if you are having problems with breastfeeding, it is important that you call your pediatrician as soon as possible. Refusal to breastfeed may be a sign of illness that needs prompt attention.

Should you consume alcohol while you are breastfeeding?

It is best to avoid all alcohol during breastfeeding. If you must consume alcohol, do so immediately after breastfeeding rather than right before. This will give your body longer to remove the alcohol from your body. Limit consumption as much as possible, because the more you drink, the longer it will stay in your body.

Why is breastfeeding my baby making me uncomfortable?

Another frequent concern for mothers is engorgement. Engorgement is uncomfortable for the mother and can make nursing more difficult for a baby. Feeding on demand not only ensures that your baby's hunger is satisfied, but it also helps prevent engorgement. Engorgement occurs when your breasts become too full with milk. A little engorgement is normal, but excessive engorgement can be uncomfortable or painful. If your breasts do become engorged, try the following:

- Express some milk before you breastfeed, either manually or with a breast pump.
- Soak a cloth in warm water and put it on your breasts. Or take a warm shower before feeding your baby. For severe engorgement, warmth may not help. In this case, you may want to use cold compresses as you express milk. Ice packs used between feedings can relieve your discomfort and reduce swelling.
- Feed your baby in more than one position. Try sitting up, then lying down.
- Gently massage your breasts from under the arm and down toward the nipple. This will help reduce soreness and ease milk flow.
- Do not take any medications without approval from your doctor. Acetaminophen (e.g., Tylenol) may relieve pain and is safe to take occasionally during breastfeeding.

It is important to keep breastfeeding. Engorgement is a temporary condition and will be most quickly relieved by effective milk removal. Once the engorgement passes, your breasts will become soft again. This is normal and is exactly what should happen.

Recipe Ideas

Chicken Piccata

¼ cup all-purpose flour
 ½ teaspoon salt
 ½ teaspoon pepper
 4 boneless skinless chicken breast halves (4 oz. each)
 ¼ cup butter, cubed
 ¼ cup chicken broth
 1 tablespoon lemon juice

Servings: 4

Directions:

In a large resealable plastic bag, combine the flour, salt, and pepper. Flatten chicken to ½ inch thickness; place in bag, one piece at a time, and shake to coat.
 In a large skillet over medium heat, brown chicken in butter. Stir in broth. Bring to a boil. Reduce heat; simmer uncovered, for 12-15 minutes or until juices run clear. Drizzle with lemon juice.

Recipe from: www.quickcooking.com

Approximate Cost: (based on Kroger Plus membership food prices)

<u>Ingredient:</u>	<u>Total Cost:</u>	<u>Recipe Cost:</u>
¼ cup all-purpose flour	\$.95/2lb bag	\$.04
½ teaspoon salt	--	--
½ teaspoon pepper	--	--
4 chicken breast halves (4 oz. each)	\$1.99/lb	\$1.99
¼ cup butter, cubed	\$2.69/2 c.	\$.34
¼ cup chicken broth	\$.50/can; 1 c./can	\$.13
1 tablespoon lemon juice	\$2.99/63 tbsp	\$.05
Total Cost		\$2.55
Cost Per Serving		\$.63

Menu Analysis (Per Serving):

Calories:	263.20 g	Vitamin A:	114.13 RE
Protein:	28.50 g	Vitamin C:	2.36 mg
Carbohydrate:	6.28 g	Vitamin D:	0.00 mcg
Dietary Fiber:	.23 g	Vitamin E:	.42 mg
Fat:	13.15 g	Vitamin K:	0.00 mcg
Calcium:	37.21 mg	Thiamin:	.15 mg
Iron:	1.28 mg	Riboflavin:	.16 mg
Magnesium:	35.51 mg	Niacin:	55.57 mg

Phosphorus:	24.87 mg	Vitamin B ₆ :	2.62 mg
Potassium:	330.00 mg	Folate:	17.84 mcg
Sodium:	418.40 mg	Vitamin B ₁₂ :	.48 mcg
Zinc:	1.03 mg		

Tasty Onion Chicken:

½ cup butter, melted
 1 tablespoon Worcestershire sauce
 1 teaspoon ground mustard
 1 can (2.8 oz) french-fried onions, crushed
 4 boneless skinless chicken breast halves

Servings: 4

Directions:

In a shallow bowl, combine the butter, Worcestershire sauce and mustard. Place the onions in another shallow bowl. Dip the chicken in butter mixture, then coat with onions. Place in a greased 11 x 7 x 2 in. baking dish; drizzle with remaining butter mixture. Bake, uncovered at 400° for 20-25 minutes or until chicken juices run clear.

Recipe from: www.quickcooking.com

Approximate Cost: (based on Kroger Plus membership food prices)

<u>Ingredient:</u>	<u>Total Cost:</u>	<u>Recipe Cost:</u>
½ cup butter, melted	\$2.69/2 c.	\$.67
1 tablespoon Worcestershire sauce	\$1.19/29 tbsp	\$.04
1 teaspoon ground mustard	\$1.79/pckg	\$.20
1 can (2.8 oz) french-fried onions, crushed	\$1.29/can	\$1.29
4 boneless skinless chicken breast halves	\$1.99/lb	\$1.99
Total Cost:		\$4.19
Cost Per Serving:		\$1.05

Menu Analysis (Per Serving):

Calories:	285.43 g	Vitamin A:	95.36 RE
Protein:	29.32 g	Vitamin C:	23.05 mg
Carbohydrate:	17.28 g	Vitamin D:	0.00 mcg
Dietary Fiber:	1.83 g	Vitamin E:	.61 mg
Fat:	10.91 g	Vitamin K:	0.00 mcg
Calcium:	71.65 mg	Thiamin:	.19 mg
Iron:	1.43 mg	Riboflavin:	.14 mg
Magnesium:	51.53 mg	Niacin:	13.44 mg
Phosphorus:	296.99 mg	Vitamin B ₆ :	.97 mg
Potassium:	658.49 mg	Folate:	37.98 mcg
Sodium:	140.62 mg	Vitamin B ₁₂ :	.46 mcg

Zinc: 1.38 mg

Baked Parmesan Chicken:

4 boneless, skinless chicken breast halves (4 oz. each)
½ cup Italian flavored bread crumbs
2 tablespoons grated Parmesan cheese
3 tablespoons butter, melted

Servings: 4

Directions:

1. Preheat oven to 375° F.
2. IN a bowl, combine bread crumbs and Parmesan cheese. Dip chicken pieces in melted margarine or butter, then roll in bread crumb mixture. Place on a baking rack in a shallow baking pan. Bake in the 375° F oven for about 30 minutes or until no pink remains.

Recipe from: www.quickcooking.com

Approximate Cost: (based on Kroger Plus membership food prices)

<u>Ingredient:</u>	<u>Total Cost:</u>	<u>Recipe Cost:</u>
4 chicken breast halves (4 oz. each)	\$1.99/lb	\$1.99
½ cup Italian flavored bread crumbs	\$1.89/7 ½ servings	\$.25
2 tablespoons grated Parmesan cheese	\$2.00/30 tbsp	\$.14
3 tablespoons margarine or butter, melted	\$2.69/32 tbsp	\$.25
Total Cost:		\$2.63
Cost Per Serving:		\$.66

Menu Analysis (Per Serving):

Calories:	272.60 g	Vitamin A:	92.16 RE
Protein:	30.51 g	Vitamin C:	1.48 mg
Carbohydrate:	11.66 g	Vitamin D:	0.00 mcg
Dietary Fiber:	.63 g	Vitamin E:	.35 mg
Fat:	11.24 g	Vitamin K:	0.00 mcg
Calcium:	64.73 mg	Thiamin:	.11 mg
Iron:	1.37 mg	Riboflavin:	.15 mg
Magnesium:	40.22 mg	Niacin:	6.13 mg
Phosphorus:	273.84 mg	Vitamin B ₆ :	.68 mg
Potassium:	346.85 mg	Folate:	21.57 mcg
Sodium:	521.91 mg	Vitamin B ₁₂ :	.50 mcg
Zinc:	1.17 mg		

Beef 'n' Rice Enchiladas:

1 package (6.8 oz) Spanish rice
1 lb ground beef
2 cans (10 oz. each) enchilada sauce, divided
10 wheat flour tortillas (8 inches, warmed)
2 cups (8 ounces) shredded cheddar cheese, divided
Servings: 10 enchiladas

Directions:

1. Prepare rice mix according to package directions. Meanwhile, in a large skillet, cook beef over medium heat until no longer pink; drain. Stir in Spanish rice and 1 ¼ cups enchilada sauce. Spoon about 2/3 cup of beef mixture down the center of each tortilla. Top each with cheese; roll up.
2. Place in an ungreased 13 x 9 x 2 inch baking dish. Top with the remaining enchilada sauce and cheese. Bake, uncovered, at 350 °F for 8-10 minutes or until the cheese is melted.

Recipe from: www.epicurious.com

Approximate Cost: (based on Kroger Plus membership food prices)

<u>Ingredient:</u>	<u>Total Cost:</u>	<u>Recipe Cost:</u>
1 package (6.8 oz) Spanish rice	\$1.79/pckg	\$ 1.79
1 lb ground beef	\$2.99/lb	\$ 2.99
2 cans (10 oz. each) enchilada sauce	\$1.49/can	\$ 2.98
10 whole wheat flour tortillas	\$2.19/package	\$ 2.19
2 cups (8 ounces) shredded cheddar cheese	\$5/4bags; 2c./bag	\$ 1.25
Total Cost:		\$11.20
Cost Per Enchilada:		\$ 1.12

Menu Analysis (Per Enchilada):

Calories:	394.81 g	Vitamin A:	188.85 RE
Protein:	18.21 g	Vitamin C:	10.30 mg
Carbohydrate:	34.24 g	Vitamin D:	.07 mcg
Dietary Fiber:	1.78 g	Vitamin E:	.61 mg
Fat:	19.13 g	Vitamin K:	.68 mcg
Calcium:	197.93 mg	Thiamin:	.33 mg
Iron:	3.22mg	Riboflavin:	.37 mg
Magnesium:	26.73 mg	Niacin:	4.24 mg
Phosphorus:	241.43 mg	Vitamin B ₆ :	.15 mg
Potassium:	263.84 mg	Folate:	67.56 mcg
Sodium:	675.50 mg	Vitamin B ₁₂ :	1.05 mcg
Zinc:	2.68 mg		

Garlic Chicken 'N' Pasta:

1 package (8 ounces) whole wheat penne pasta
4 boneless skinless chicken breast halves (4 oz. each)
1 teaspoon olive
1 jar (16 oz) roasted garlic parmesan sauce
2 small tomatoes, seeded and chopped, divided

Servings: 4

Directions:

Cook pasta according to package directions. Meanwhile, in a large skillet, brown chicken in oil. Add Parmesan sauce; cover and simmer for 8-10 minutes or until chicken juices run clear. Add half of the tomatoes. Drain pasta; top with chicken and sauce. Sprinkle with remaining tomatoes.

Recipe from: www.quickcooking.com

Approximate Cost: (based on Kroger Plus membership food prices)

<u>Ingredient:</u>	<u>Total Cost:</u>	<u>Recipe Cost:</u>
1 package whole wheat penne pasta	\$1.99/lb	\$1.00
4 chicken breast halves (4 oz. each)	\$1.99/lb	\$1.99
1 teaspoon olive or vegetable oil	\$4.49/34 tbsp	\$.05
1 jar (16 oz) roasted garlic parmesan sauce	\$2/jar	\$2.00
2 small tomatoes	\$1.79/lb	\$.90
Total Cost:		\$5.94
Cost Per Serving:		\$1.49

Menu Analysis (Per Serving):

Calories:	285.43 g	Vitamin A:	95.36 RE
Protein:	29.32 g	Vitamin C:	23.05 mg
Carbohydrate:	17.28 g	Vitamin D:	0.00 mcg
Dietary Fiber:	1.83 g	Vitamin E:	.61 mg
Fat:	10.91 g	Vitamin K:	0.00 mcg
Calcium:	71.65 mg	Thiamin:	.19 mg
Iron:	1.43 mg	Riboflavin:	.14 mg
Magnesium:	51.53 mg	Niacin:	13.44 mg
Phosphorus:	296.99 mg	Vitamin B ₆ :	.97 mg
Potassium:	658.49 mg	Folate:	37.98 mcg
Sodium:	140.62 mg	Vitamin B ₁₂ :	.46 mcg
Zinc:	1.38 mg		

Chicken and Wild Rice Soup:

2/3 c. wild rice
5 1/4 cups chicken broth
Dash of pepper
1 1/2 cups sliced fresh mushrooms
2 tbsp. butter
6 oz. chopped cooked chicken
1/2 cup snipped fresh parsley
1/2 chopped onion

Servings: 8 side dish; 4 main course

Directions:

1. Run cold water over wild rice in a strainer for about 1 minute, lifting the rice to rinse it thoroughly.
2. In a large saucepan, mix wild rice, broth, and pepper. Bring to boiling; reduce heat. Simmer, covered for 40 to 45 minutes or until the wild rice is tender.
3. Meanwhile, in a skillet, cook mushrooms and onion in butter until tender, but not brown.
4. Add mushroom mixture, chicken, and the parsley to the soup. Heat through.

Recipe from: www.quickcooking.com

Approximate Cost: (based on Kroger Plus membership food prices)

<u>Ingredient:</u>	<u>Total Cost:</u>	<u>Recipe Cost:</u>
2/3 c. wild rice	\$1.39/2/3 c. box	\$1.39
5 1/4 cups chicken broth	\$.50/can; 1c./can	\$2.63
Dash of pepper	--	--
1 1/2 cups sliced fresh mushrooms	\$1.00/carton	\$1.00
2 tbsp. butter	\$2.69/32 tbsp.	\$.17
6 oz. chopped cooked chicken	\$1.99/lb	\$.75
1/2 cup snipped fresh parsley	\$1.00/bunch	\$.50
1/2 chopped onion	\$1.99/lb	\$.60
Total Cost:		\$7.04
Cost Per Side Dish Serving:		\$.88
Cost Per Serving:		\$1.76

Menu Analysis (Per Side Dish Serving):

Calories:	260.04 g	Vitamin A:	95.61 RE
Protein:	21.45 g	Vitamin C:	12.37 mg
Carbohydrate:	24.27 g	Vitamin D:	.50 mcg
Dietary Fiber:	2.56 g	Vitamin E:	.60 mg
Fat:	8.58 g	Vitamin K:	40.91 mcg
Calcium:	40.36 mg	Thiamin:	.11 mg
Iron:	2.29 mg	Riboflavin:	.33 mg

Magnesium:	70.36 mg	Niacin:	12.12 mg
Phosphorus:	333.61 mg	Vitamin B ₆ :	.43 mg
Potassium:	668.50 mg	Folate:	51.74 mcg
Sodium:	1054.52 mg	Vitamin B ₁₂ :	.50 mcg
Zinc:	2.55 mg		

Sugar Snap Peas and Pasta:

½ lb. sugar snap peas, trimmed and strings discarded
 1 lb whole wheat penne pasta
 1 medium garlic clove, minced and mashed to a paste with ½ tsp. salt
 2 tbsp. extra-virgin olive oil
 ½ cup finely grated Parmesan cheese

Servings: 4

Directions:

Cook sugar snaps in a pot of boiling salted water for 2 minutes, then transfer 1 cup of the sugar snaps to a colander and rinse under cold water to stop cooking. Transfer cooled sugar snaps to a cutting board. Cook sugar snaps remaining in pot until tender, about 2 ½ minutes more, then transfer with a slotted spoon to a bowl. Keep the cooking water in the pot to cook pasta.

Return cooking water in pot to a boil and cook pasta until al dente (firm to the bite), then drain in colander. While pasta is cooking, cut 1 cup sugar snaps (on cutting board) crosswise into ½ inch pieces. Mix sugar snaps from bowl, garlic paste, 2 tablespoons oil, and ½ cup cheese together. Add cut sugar snaps.

Toss hot pasta with sugar snap mixture, then season pasta with salt and pepper.

Recipe from: www.epicurious.com

Approximate Cost: (based on Kroger Plus membership food prices)

<u>Ingredient:</u>	<u>Total Cost:</u>	<u>Recipe Cost:</u>
½ lb. sugar snap peas	\$4.00/lb	\$2.00
1 lb whole wheat penne pasta	3bx/\$5; 1lb/bx	\$1.67
1 medium garlic clove	\$2.07/lb	\$.13
Salt	--	--
¼ cup extra-virgin olive oil	\$4.49/17oz.	\$.26
½ cup finely grated Parmesan cheese	\$2.00/8oz	\$.50
Total Cost:		\$4.56
Cost Per Serving:		\$1.14

Menu Analysis (Per Serving)

Calories:	508.07 g	Vitamin A:	18.75 RE
Protein:	20.84 g	Vitamin C:	34.26 mg

Carbohydrate:	89.93 g	Vitamin D:	0.00 mcg
Dietary Fiber:	1.49 g	Vitamin E:	1.11 mg
Fat:	10.33 g	Vitamin K:	17.48 mcg
Calcium:	157.13 mg	Thiamin:	.64 mg
Iron:	5.40 mg	Riboflavin:	.23 mg
Magnesium:	179.28 mg	Niacin:	6.19 mg
Phosphorus:	374.56 mg	Vitamin B ₆ :	.36 mg
Potassium:	367.13 mg	Folate:	88.86 mcg
Sodium:	127.82 mg	Vitamin B ₁₂ :	.09 mcg
Zinc:	3.06 mg		

Southwestern Salmon w/Grilled Pineapples

Number of portions: 6 Portion size: 4 oz salmon, 1 1/2 oz mixed greens,
1/2 oz
dressing

Six 4 oz Salmon filet, boneless, skinless
6 slices Pineapple, sliced 3/8 " thick
1 cup salad mix or lettuce of choice
3 Plum tomatoes, sliced
1 Cucumber, sliced thin
1 1/2 tsp McCormick southwest seasoning
Cracked black pepper, to taste

Dressing:
2 1/2 Tbsp Balsamic vinegar
1 oz 1/4 tsp Olive oil
1 1/4 Tbsp Lemon juice

1. Season salmon with southwestern seasoning.
2. Sprinkle pineapple slices with cracked pepper.
3. Grill salmon approximately 4 mins per side until done.
4. Grill pineapple until caramelized and warmed thoroughly.
5. Toss mesculin greens, tomatoes and cucumber with dressing.
6. Top salad with salmon and pineapple.

Menu Analysis (Per Serving):

Calories:	386.81 g	Vitamin A:	98.26 RE
Protein:	35.27 g	Vitamin C:	28.64 mg
Carbohydrate:	10.90 g	Vitamin D:	0.00 mcg
Dietary Fiber:	1.97 g	Vitamin E:	.79 mg
Fat:	22.20 g	Vitamin K:	48.14 mcg

Calcium:	54.01 mg
Iron:	1.52 mg
Magnesium:	75.68 mg
Phosphorus:	429.38 mg
Potassium:	965.76 mg
Sodium:	109.03 mg
Zinc:	1.00 mg

Thiamin:	.70 mg
Riboflavin:	.27 mg
Niacin:	13.50 mg
Vitamin B ₆ :	1.21 mg
Folate:	71.82 mcg
Vitamin B ₁₂ :	4.76 mcg

Four Bean Salad

1 (14.5 ounce) can black beans
 1 (14.5 ounce) can dark red kidney beans
 1 (15 ounce) can garbanzo beans
 1 (14.5 ounce) can pinto beans
 1 (10 ounce) package frozen corn kernels, thawed
 1 tablespoon vegetable oil
 1 teaspoon cumin
 2 teaspoons chili powder
 1 teaspoon lime juice
 1 (8 ounce) jar chunky salsa
 1 pinch dried parsley

Directions:

1. Pour beans into a colander, and rinse under running water.
2. In a large mixing bowl, toss beans and corn together with oil, cumin, chili powder, lime juice, and salsa. Sprinkle with parsley, cover, and chill.

Source of: protein, calcium, iron, and fiber

Yogurt with Fruit

Large container of vanilla yogurt
 Package of mixed frozen fruit (thawed)
 Granola, optional

Source of: protein, calcium

Ants on a Log

Celery sticks
 Peanut butter
 Raisins

Source of: fiber, iron, protein,

Cheese & Crackers

Source of: fiber, calcium, protein, vitamin B₁₂

Hummus & Pita Wedges

Source of: protein, fiber, iron

References

Brown, Judith E. *Nutrition Through the Life Cycle*. 2e. 2004.

American Academy of Pediatrics: <http://www.aap.org/>

La Leche League: <http://www.lalecheleague.org/>

<http://mypyramid.gov>

http://www.mckinley.uiuc.edu/handouts/dietary_sources_iron.html

<http://www.feinberg.northwestern.edu/nutrition/factsheets/vitamin-b12.html>

<http://www.quickcooking.com>

<http://www.epicurious.com>

USDA Nutrient Data Laboratory:

http://www.ars.usda.gov/main/site_main.htm?modecode=12354500

<http://www.americanheart.org/presenter.jhtml?identifier=3013797>

<http://www.ific.org/publications/brochures/listeriosisbroch.cfm>

Hansen-Petrik, Melissa. *Lifespan Nutrition Class Notes*: 2005.

University of Tennessee Medical Center: *Lactation Consultants*.

<http://www.webmd.com>

Evidence Report of Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults, 1998. NIH/National Heart, Lung, and Blood Institute (NHLBI)

<http://www.mayoclinic.com> : American Beverage Association, 2005; The Coca-Cola Co., 2005; Dr Pepper/Seven Up Inc., 2005

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Donation of Fruits



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Community Nutrition Class of 2006 for Preparation of Snacks



Lisa Ross Birth & Women's Center

Your Baby and You, Nutrition for Two Staff Evaluation Form

Was information included in the presentation more detailed than what is normally covered with clients?

Yes

☒ No

Will you incorporate information from this presentation in your own counseling sessions?

☒ Yes

No

Were you confident in the accuracy of information presented?

☒ Yes

No

Were materials easy to understand?

☒ Yes

No

Was the method of presentation effective?

☒ Yes

No

Was information presented relevant and useful?

☒ Yes

No

Was the presentation of adequate length?

☒ Yes

No

If no, should it be shorter or longer?

Shorter

Longer

Was the presentation helpful overall?

☒ Yes

No

What was most helpful about this presentation?

Population of patients targeted could be varied given the materials.

Level of detail was perfect to maintain interest.

Very accurate info. Great that you covered breast feeding.

What suggestions do you have for improving the presentation?

More time to sign up patients. This was not your fault. More cooperation on our end in advance possibly would have netted more of an audience.

Your Baby and You, Nutrition for Two
Client Evaluation Form

Was the presentation helpful in your understanding of nutrition needs and requirements throughout pregnancy and lactation?

Yes

No

Will the information presented help you to plan healthful meals for yourself throughout pregnancy and lactation?

Yes

No

Were you confident in the accuracy of information presented?

Yes

No

Were materials easy to understand?

Yes

No

Was the method of presentation effective?

Yes

No

Was information presented relevant and useful?

Yes

No

Was the activity helpful in reinforcing the topics covered?

Yes

No

Was the presentation of adequate length?

Yes

No

If no, should it be shorter or longer?

Shorter

Longer

Was the presentation helpful overall?

Yes

No

What was most helpful about this presentation?

The diversity of food resources described, and the accommodations described for vegetarians.

What suggestions do you have for improving the presentation?

- Use the appetizers as an ice-breaker... or an attention-getter → "What foods provide for pregnant moms nutrients?"
→ This could tie together the beginning of the presentation better.

Your Baby and You, Nutrition for Two
Client Evaluation Form

Was the presentation helpful in your understanding of nutrition needs and requirements throughout pregnancy and lactation?

Yes

No

Will the information presented help you to plan healthful meals for yourself throughout pregnancy and lactation?

Yes

No

Were you confident in the accuracy of information presented?

Yes

No

Were materials easy to understand?

Yes

No

Was the method of presentation effective?

Yes

No

Was information presented relevant and useful?

Yes

No

Was the activity helpful in reinforcing the topics covered?

Yes

No

Was the presentation of adequate length?

Yes

No

If no, should it be shorter or longer?

Shorter

Longer

Was the presentation helpful overall?

Yes

No

What was most helpful about this presentation?

*Enjoyed the detail put into the booklets.
It will be a helpful resource for the months to come.*

What suggestions do you have for improving the presentation?

Allow time between sections for questions & comments

Your Baby and You, Nutrition for Two
Client Evaluation Form

Was the presentation helpful in your understanding of nutrition needs and requirements throughout pregnancy and lactation?

Yes

No

Will the information presented help you to plan healthful meals for yourself throughout pregnancy and lactation?

Yes

No

Were you confident in the accuracy of information presented?

Yes

No

Were materials easy to understand?

Yes

No

Was the method of presentation effective?

Yes

No

Was information presented relevant and useful?

Yes

No

Was the activity helpful in reinforcing the topics covered?

Yes

No

Was the presentation of adequate length?

Yes

No

If no, should it be shorter or longer?

Shorter

Longer

Was the presentation helpful overall?

Yes

No

What was most helpful about this presentation?

*thorough - covered all the bases
The booklet is a great resource*

What suggestions do you have for improving the presentation?

*only practice so that the presentation
can be given without referring
to the booklet too much.*

Nicely done!

