



PATIENT & CAREGIVER EDUCATION

Eat Your Way to Better Health

This information describes how you can make healthy food and exercise choices.

The foods you eat and the lifestyle choices you make play a major role in your health. Healthy choices can:

- Lower your risk for developing chronic diseases, such as high blood pressure, diabetes, heart disease, and some cancers.
- Control symptoms of medical conditions, such as high blood pressure, high blood sugar, and high cholesterol.

In this resource, we outline 6 steps to improving your overall health, including how to manage your weight, control your food portions, understand food labels, increase your physical activity, and make healthy food choices. We also answer some frequently asked questions about living a healthy lifestyle. At the end of this resource, there are 3 sample menus that include healthy meals for you to try.

For more information about making food choices during treatment, ask your nurse for the resource *Eating Well During Your Cancer Treatment* (www.mskcc.org/pe/eating_cancer_treatment).

Step 1: Achieve and Maintain a Healthy Weight

Your diet and exercise can make you gain or lose weight. If you take in more calories than your body needs, you're likely to gain weight. If you take in fewer calories than your body needs, you're like to lose weight.

If you're overweight, you need to eat fewer calories than your body needs, increase your physical activity, or both to get to a healthy weight. There are

many health benefits to maintaining a healthy weight, including lowering your risk for many chronic diseases. Obesity can increase your risk for:

- Colon, breast, prostate, and esophagus cancers
- Heart disease
- Diabetes
- High blood pressure
- Sleep apnea
- Other chronic diseases, such as asthma, arthritis, and gallbladder disease

If you’re underweight, talk with your healthcare provider about ways to gain weight safely.

Find out your body mass index (BMI)

BMI is a measurement of the amount of fat in your body based on your height and weight. It can help you learn if your weight is healthy or not. A healthy BMI for an adult is between 18.5 and 24.9.

| BMI | Weight category |
|---------------|-----------------|
| 18.4 or lower | Underweight |
| 18.5 to 24.9 | Normal |
| 25 to 29.9 | Overweight |
| 30 or higher | Obese |

You can calculate your BMI using the tool on this website: www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm. You can also find your BMI on the BMI table below. To use the table:

1. Find your height in the left-hand column.
2. Once you find your height, look across that same row to find your weight.
3. Once you find your weight, look at the corresponding BMI at the top of the column. This is your BMI.

| BMI Table | | | | | | | | | | | | | | |
|--------------------------|----------------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-------|-----|-----|
| BMI | Normal | | | | | | Overweight | | | | | Obese | | |
| | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 35 | 40 |
| Height (feet and inches) | Body Weight (pounds) | | | | | | | | | | | | | |
| 4' 10" | 91 | 96 | 100 | 105 | 110 | 115 | 119 | 124 | 129 | 134 | 138 | 143 | 167 | 191 |
| 4' 11" | 94 | 99 | 104 | 109 | 114 | 119 | 124 | 128 | 133 | 138 | 143 | 148 | 173 | 198 |
| 5' 0" | 97 | 102 | 107 | 112 | 118 | 123 | 128 | 133 | 138 | 143 | 148 | 152 | 179 | 204 |
| 5' 1" | 100 | 106 | 111 | 116 | 122 | 127 | 132 | 137 | 143 | 148 | 153 | 158 | 185 | 211 |
| 5' 2" | 104 | 109 | 115 | 120 | 126 | 131 | 136 | 142 | 147 | 153 | 158 | 164 | 191 | 218 |
| 5' 3" | 107 | 112 | 118 | 124 | 130 | 135 | 141 | 146 | 152 | 158 | 163 | 169 | 197 | 225 |
| 5' 4" | 110 | 116 | 122 | 128 | 134 | 140 | 145 | 151 | 157 | 163 | 169 | 175 | 204 | 232 |
| 5' 5" | 114 | 120 | 126 | 132 | 138 | 144 | 150 | 156 | 162 | 168 | 174 | 180 | 210 | 240 |
| 5' 6" | 118 | 124 | 130 | 136 | 142 | 148 | 155 | 161 | 167 | 173 | 179 | 186 | 216 | 247 |
| 5' 7" | 121 | 127 | 134 | 140 | 146 | 153 | 159 | 166 | 172 | 178 | 185 | 191 | 223 | 255 |
| 5' 8" | 125 | 131 | 138 | 144 | 151 | 158 | 164 | 171 | 177 | 184 | 190 | 197 | 230 | 262 |
| 5' 9" | 128 | 135 | 142 | 149 | 155 | 162 | 169 | 176 | 182 | 189 | 196 | 203 | 236 | 270 |
| 5' 10" | 132 | 139 | 146 | 153 | 160 | 167 | 174 | 181 | 188 | 195 | 202 | 209 | 243 | 278 |
| 5' 11" | 136 | 143 | 150 | 157 | 165 | 172 | 179 | 186 | 193 | 200 | 208 | 215 | 250 | 286 |
| 6' 0" | 140 | 147 | 154 | 162 | 169 | 177 | 184 | 191 | 199 | 206 | 213 | 221 | 258 | 294 |
| 6' 1" | 144 | 151 | 159 | 166 | 174 | 182 | 189 | 197 | 204 | 212 | 219 | 227 | 265 | 302 |
| 6' 2" | 148 | 155 | 163 | 171 | 179 | 186 | 194 | 202 | 210 | 218 | 225 | 233 | 272 | 311 |
| 6' 3" | 152 | 160 | 168 | 176 | 184 | 192 | 200 | 208 | 216 | 224 | 232 | 240 | 279 | 319 |
| 6' 4" | 156 | 164 | 172 | 180 | 189 | 197 | 205 | 213 | 221 | 230 | 238 | 246 | 287 | 328 |

For example, if you're 5 feet, 5 inches tall and you weigh 168 pounds, then your BMI is 28. This means you're considered overweight. Your goal should be to achieve a BMI that puts you in the normal range.

If your BMI is above 25, look for the weights that correlate with a healthy BMI for your height. That should be your target weight.

Caloric needs

Your caloric need is the number of calories your body needs. It depends on:

- Your age
- Your muscle mass (how much muscle you have)
- The amount and type of exercise you do
- Your overall health

An adult female generally needs 1,600 to 2,200 calories per day. An adult male generally needs 2,200 to 2,800 calories per day. In general, if you're older or less active, you need fewer calories. If you have a lot of muscle or are very active, you need more calories.

If you want to lose weight, try to eat fewer calories and be more active.

Step 2: Control Your Food Portions

Eating too many calories from any foods can result in weight gain. To avoid weight gain, it's important to control your food portions (serving sizes).

The following tables list the amount of food that's equal to 1 serving size.

Bread, cereal, rice, and pasta

| Food | Amount of 1 Serving Size |
|---------------|---|
| Bread | 1 slice |
| Cereal (hot) | ½ cup |
| Cereal (cold) | 1 ounce (½ cup to 1 cup, depending on the cereal) |
| Pasta | ½ cup |
| Rice | ½ cup |

Vegetables

| Food | Amount of 1 Serving Size |
|-----------------------------------|--------------------------|
| Cooked or raw, chopped vegetables | ½ cup |
| Vegetable juice | ¼ cup |
| Raw, leafy vegetables | 1 cup |

Fruits

| Food | Amount of 1 Serving Size |
|--|--------------------------|
| Chopped, cooked, or unsweetened canned fruit | ½ cup |
| Dried fruit | ¼ cup |
| Fruit juice | ¾ cup |
| Whole fruit, medium, fresh | 1 piece of fruit |

Milk, yogurt, and cheese

| Food | Amount of 1 Serving Size |
|--|--------------------------|
| Milk or yogurt | 1 cup |
| Natural cheeses (Mozzarella, Swiss, Muenster, Cheddar, Provolone, and Gouda) | 1 ½ ounces |
| Processed or packaged cheeses (American and most cheese spreads) | 2 ounces |

Lean meat, poultry, fish, beans, eggs, and nuts

| Food | Amount of 1 Serving Size |
|-------------------------------|--------------------------|
| Cooked beans | ½ cup |
| Cooked meat, poultry, or fish | 3 ounces |
| Eggs | 1 |
| Nuts | ⅓ cup |
| Peanut butter | 2 tablespoons |

You can also use the following examples of everyday items to help determine your portion sizes.

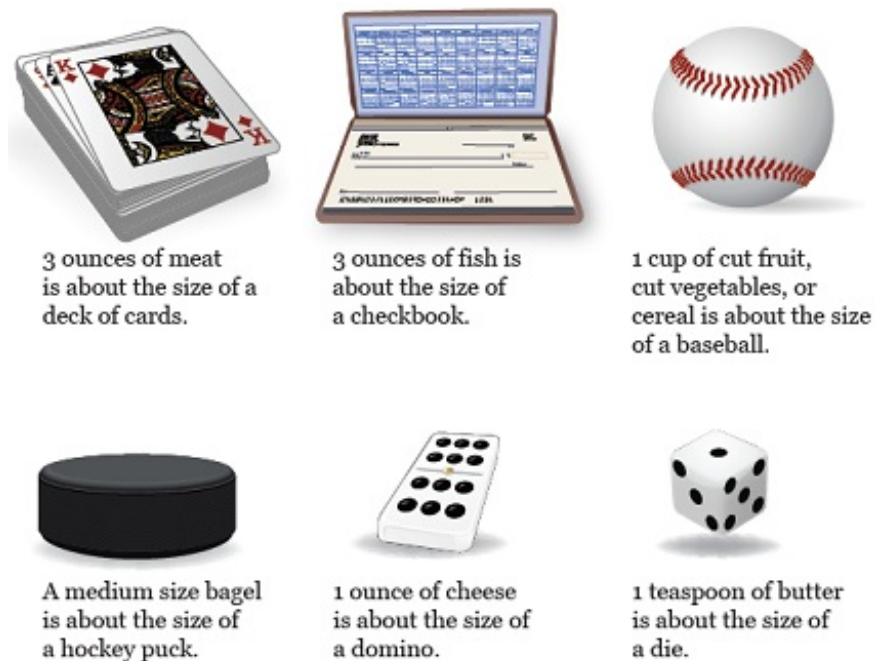


Figure 1. Example portion sizes

Step 3: Make Healthy Food Choices

Fats, oils, and cholesterol

“Good” cholesterol” versus “bad” cholesterol

Cholesterol is a fat-like substance. It's found only in foods that come from an animal source, such as meat, eggs, and dairy. Cholesterol travels in your blood in packages called lipoproteins. There are 2 types of lipoproteins: “good” and “bad.”

- Low-density lipoprotein (LDL) is “bad” cholesterol. It can clog your arteries (blood vessels) and cause heart disease.
- High-density lipoprotein (HDL) is “good” cholesterol. It takes cholesterol out of your body.

Fats and oils

All types of fats have the same number of calories, but some fats are healthier than others. Cut back on the total amount of fat in your diet.

Saturated fats

Eating foods with too much saturated fat can raise your total cholesterol and LDL levels. Limiting the amount of saturated fat you eat can keep your heart healthy and make it easier to maintain your weight.

Saturated fats are found in:

- Beef, pork, veal and chicken skin
- Whole milk and milk products such as cheese and ice cream
- Butter
- Lard, bacon fat
- Coconut, palm, and palm kernel oils
- Baked goods such as cookies, pastries and croissant

Eating unsaturated fats (monounsaturated and polyunsaturated fats) instead of saturated fats may lower your risk of heart disease.

Monounsaturated fats

Choose mostly monounsaturated fats. These fats can lower your total cholesterol and LDL levels. They don't affect your HDL level.

Monounsaturated fats come from plant-based sources. They're mostly found in:

- Olives
- Olive oil
- Canola oil
- Peanuts, peanut oil
- Almonds, hazelnuts, pecans
- Avocados

Polyunsaturated fats

Polyunsaturated fats can lower your total cholesterol and don't raise LDL levels.

Polyunsaturated fats also come from plant-based sources. They're found in:

- Corn oil
- Safflower oil
- Sunflower oil
- Soybean oil
- Cottonseed oil

Trans fats

Trans fats (also called partially hydrogenated fats or oils) are made when hydrogen is added to oil. They're artificially made, which means they're man-made and usually don't happen naturally.

Trans fats can raise your total cholesterol and LDL levels and lower your HDL level. There is no safe level of trans fats to eat. Try to avoid them completely.

Trans fats are found in:

- Many fried, prepackaged, baked, and processed foods
- Margarine, butter-like products, and shortening
- Powdered and liquid coffee creamers

Choose foods that say “zero (0) trans fat” on the label. Try not to eat processed foods that have partially hydrogenated oils, such as some crackers, cookies, peanut butter, and breaded frozen foods. Look at the ingredient list of a food to see if it has partially hydrogenated oils.

Omega-3 fatty acids

Omega-3 fatty acids are needed for good health, especially for heart health. They’re found mainly in oily fish. Try to eat at least 2 (4-ounce) servings of omega-3 rich fish per week. Fish that have omega-3 fatty acids include:

- Salmon
- Tuna
- Mackerel

Foods that have smaller amounts of omega-3 fatty acids include:

- Leafy green vegetables
- Walnuts
- Soybeans
- Flax seeds, chia seeds

Omega-6 fatty acids

Omega-6 fatty acids are also necessary for good health, since your body can’t make them. But, your body needs only small amounts. Omega-6 fatty acids are found in:

- Vegetable oils
- Margarine
- Baked goods

- Processed foods

How much fat should I eat?

20% to 35% of the calories in your diet can come from fats. Most of your fat intake should come from monounsaturated and polyunsaturated fats. 10% or less of the total calories in your diet can come from saturated fat.

There are 9 calories in each gram of fat. To find how many grams of fat you can eat each day:

- For total fat, multiply your daily caloric need by 20% and 35%
- For saturated fat, multiple your daily caloric need by 10%

Then, divide those numbers by 9 to get the number of fat grams you can eat each day. You can also use the table below.

| Daily Caloric Need | Daily Total Fat | Daily Saturated Fat |
|--------------------|-----------------|---------------------|
| 1,600 calories | 35 to 62 grams | 17 grams or less |
| 1,800 calories | 40 to 70 grams | 20 grams or less |
| 2,000 calories | 44 to 77 grams | 22 grams or less |
| 2,200 calories | 48 to 85 grams | 24 grams or less |
| 2,800 calories | 62 to 108 grams | 31 grams or less |

Tips for trimming fat from your diet

- Limit spreads that are high in fat. These include:
 - Butter
 - Margarine
 - Cream cheese
 - Mayonnaise
 - Salad dressings
- Choose lean cuts of meat, such as skinless chicken or turkey and fish.
- Eat no more than 18 ounces of red meat per week.

- Remove the fat and skin from your meat before cooking it.
- Bake, broil, grill, steam, or poach your foods.
- Pan fry your foods with nonstick cooking spray instead of deep frying your foods.
- Add more flavor to your foods with herbs and spices instead of butter or oil.
- Use fruit or fruit juices in your marinades. Try kiwi, papaya, lemon, or lime juice.
- Use vegetable stock or low-sodium tomato juice instead of butter or oil to cook your vegetables, meats, and seafood.
- Refrigerate your soups and skim off the fat layer that forms on top.
- Make scrambled eggs or omelets by using 1 yolk with 2 egg whites. Or, use an egg substitute product.
- Choose canned tuna or sardines that are packed in water, not oil. Otherwise, drain oil-packed canned tuna or sardines to decrease the fat.
- Cook with canola or olive oil. These oils have the least amount of saturated fat.

Fruits and vegetables

Eating many different kinds of fruits and vegetables can help protect you against chronic diseases. Fruits and vegetables are:

- Rich in vitamins, minerals, antioxidants, and phytochemicals (good substances that are found only in plant foods).
- Rich in fiber.
- Low in calories, fat, and cholesterol.

Eat at least 2 ½ cups of vegetables and 2 cups of fruit per day. Include fruits and vegetables in most of your meals and snacks. Choose whole or cut-up fruits and vegetables, not juices. Juices contain little or no fiber. Fiber is important for healthy bowel function.

The Dietary Guidelines for Americans recommend eating more fruits and vegetables as part of a healthy eating plan. This includes eating different types of fruits and vegetables. You can do this by choosing different colors of fruits and vegetables, such as dark green, red, and orange. Legumes (such as beans, lentils) also contain many essential vitamins and nutrients and should be included in your diet.

The list below shows the best fruit and vegetable sources for vitamin A (carotenoids), vitamin C, folate, and potassium. These are important nutrients to have in your diet.

| Nutrient | Food Sources |
|-----------|--|
| Vitamin A | <ul style="list-style-type: none"> • Dark green, leafy vegetables (such as spinach, collard greens, turnip greens, kale, mustard greens, romaine, and green leaf lettuce) • Orange fruits (such as mangoes, cantaloupes, apricots, and red or pink grapefruits) • Orange vegetables (such as carrots, sweet potatoes, and pumpkin) • Red vegetables (such as tomatoes, tomato products, and sweet red peppers) |
| Vitamin C | <ul style="list-style-type: none"> • Broccoli, peppers, tomatoes, cabbage, Brussels sprouts, potatoes • Citrus fruits, kiwi fruit, strawberries, cantaloupe, guava • Leafy greens, such as romaine lettuce, turnip greens, spinach |
| Folate | <ul style="list-style-type: none"> • Cooked beans and peas, peanuts • Dark green, leafy vegetables such as spinach, mustard greens, romaine lettuce • Green peas • Oranges and orange juice |
| Potassium | <ul style="list-style-type: none"> • Baked sweet potato, white potato, cooked greens, winter (orange) squashes • Bananas, plantains, dried fruits such as apricots and prunes, oranges and orange juice, cantaloupe, and honeydew melon • Cooked beans (such as baked beans), soybeans, and lentils • Tomatoes and tomato products |

Source: *Dietary Guidelines for Americans*. United States Department of Agriculture, 2015.

Fiber and whole grains

Fiber is an important part of your diet because it:

- Helps regulate your bowel movements (pooping).
- Helps prevent constipation (having fewer bowel movements than usual).
- Helps you feel full.
- Helps with weight loss.
- Can help lower cholesterol.
- Can lower the risk for diabetes, heart disease, and obesity.

Plant foods are the best sources of fiber. Along with fruits and vegetables, eating a variety of whole grains, cereals, legumes, nuts, and seeds can provide the fiber you need.

Your fiber needs are based on your daily caloric need. Women usually need about 25 grams of fiber per day and men need about 35 grams of fiber per day.

To make sure you're getting enough fiber, eat whole grains. They contain more vitamins, minerals, and fiber than refined or processed grains. Read ingredient labels carefully to find out if the foods you choose have whole grains. Food labels must have the word "whole" right before the name of the grain. For example, when choosing a wheat bread or pasta, the label must read "whole wheat," not "enriched wheat flour."

To get more fiber and whole grains in your diet:

- Eat foods such as whole-wheat bread, brown rice, barley, whole oats, oatmeal, bran cereals, and popcorn.
- Try pancakes, muffins, or bread mixes made with whole-wheat or buckwheat flour.
- Choose a whole grain like barley and add a small amount of dried fruit or toasted nuts.
- Add beans to rice, pasta, salad, and soups.

- Choose fresh fruits and vegetables instead of juices.

Increase your fiber intake gradually and drink at least 8 (8-ounce glasses) of liquids each day.

Use this table to choose foods that are good sources of fiber.

| Amount of Fiber | Food | Serving Size |
|-----------------|--|--------------|
| 3 to 4 grams | Broccoli or cauliflower | ½ cup |
| | Couscous, macaroni, or spaghetti (white) | 1 cup cooked |
| | Dried figs | ¼ cup |
| | Fresh pineapple | 1 cup |
| | Green beans | ½ cup |
| | Nectarine or peach | 1 medium |
| | Orange | 1 medium |
| | Pearled barley, cooked | ½ cup |
| | Potato baked, with skin | 1 medium |
| | Raw carrots | 1 medium |
| | Spinach or cabbage | ½ cup |
| | Stewed prunes | ½ cup |
| | Whole-grain bread | 1 slice |
| | Whole-wheat spaghetti | ½ cup |
| 4 to 5 grams | Apples | 1 medium |
| | Avocado | ½ cup |
| | Blueberries | 1 cup |
| | Brown rice | 1 cup |
| | Bran flakes, wheat | ½ cup |
| | Bulgur | ½ cup |
| | Cooked beets | 1 cup |
| | Fresh cranberries | 1 cup |

| | | |
|--------------|---|-----------------|
| | Green peas | ½ cup |
| | Mangoes | 1 medium |
| | Mixed vegetables, cooked from frozen | ½ cup |
| | Oatmeal | 1 cup cooked |
| 6 to 9 grams | Acorn squash, cooked | 1 cup |
| | All Bran® cereal | ¾ cup |
| | Brussels sprouts, cooked | 1 cup |
| | Cooked beans: kidney, lima, black, northern, pinto, white, navy | ½ cup |
| | Edamame (soybeans), frozen and cooked | 1 cup |
| | Flax seed | 1 ounce |
| | Fresh raspberries or blackberries | 1 cup |
| | Lentils, split peas | ½ cup cooked |
| | Shredded wheat cereal | 1 cup |
| | Whole-wheat pita bread | 8-inch diameter |

Sodium (salt) and potassium

Our bodies need some sodium, but too much sodium can increase your risk for:

- High blood pressure
- Congestive heart failure
- Stroke
- Kidney disease

The Dietary Guidelines for Americans recommend eating no more than 2,300 milligrams (mg) of sodium per day. If you're in a high-risk group, such as if you're over 40 years old, are African American, or have high blood pressure (also called hypertension) or diabetes, you should have no more than 1,500 mg.

Salt that's found naturally in food makes up only about 10% of the salt we eat in a typical day. Adding table salt to your food adds another 5% to 10%. The

remaining 75% of salt in our diet comes from salt that's added when food is made. Fast foods and packaged and processed foods are especially high in sodium. A fast-food cheeseburger and medium serving of French fries has about 1,370 mg of sodium.

To lower the amount of salt in your diet:

- Don't add salt to your food at the table.
- Avoid preparing and cooking food with salt. Use fresh herbs and spices for flavoring.
- Read labels on all packaged foods to find the amount of sodium per serving. Buy foods that are labeled "low sodium," "very low sodium," "salt free," or "sodium free." Low-sodium foods have less than 140 mg of sodium (5% of the daily value) per serving.
- Limit ketchup, soy sauce, and salad dressing. These are usually high in sodium.
- Limit pickled and cured foods (such as sauerkraut, pickles, hot dogs, bacon, and processed lunch meats).
- When you're eating out, choose plain foods and avoid sauces and condiments. Ask the waiter to have no extra salt added to your food.

If your blood pressure is high, choose foods that are naturally low in sodium and rich in potassium. Potassium is a mineral found in many fruits and vegetables. It helps keep blood pressure within a normal range. The National Academy of Sciences, Engineering, and Medicine recommends that adult males should have at least 3,400 mg of potassium each day. Adult females should have at least 2,900 mg of potassium each day. Even if your blood pressure is normal, foods that are rich in potassium should still be part of your diet.

If you're concerned about your blood pressure, talk with your healthcare provider.

Foods rich in potassium

| Food | Serving Size | Amount of Potassium (mg) |
|----------------------------------|--------------|--------------------------|
| Baked potato with flesh and skin | 1 medium | 941 mg |
| Prune juice, canned | 1 cup | 707 mg |
| Tomato paste, canned | ½ cup | 669 mg |
| Beet greens, fresh, cooked | ½ cup | 654 mg |
| White beans, canned | ½ cup | 595 mg |
| Yogurt, plain, nonfat | 1 cup | 579 mg |
| Sweet potato | 1 medium | 542 mg |
| Salmon, Atlantic, wild, cooked | 3 ounces | 534 mg |
| Orange juice | 1 cup | 496 mg |
| Swiss chard, cooked | ½ cup | 481 mg |
| Lima beans, cooked | 1 cup | 478 mg |
| Tuna, yellowfin, cooked | 3 ounces | 448 mg |
| Acorn squash, cooked | ½ cup | 448 mg |
| Banana | 1 medium | 420 mg |
| Spinach, cooked | ½ cup | 370 mg |
| Avocado | ½ cup | 364 mg |

Sugars

There are different kinds of sugars in food.

Natural sugars

Natural sugars are sugars found in whole, unprocessed foods, such as milk, fruit, vegetables, grains, and legumes. You should get most of your sugar from sources of natural sugars. You will get a variety of health benefits with much fewer calories to help you achieve and maintain a healthy weight.

Added sugars

Added sugars are sugars added to processed foods and drinks. Added sugars add calories to foods but don't provide any nutrients. Manufacturers use added sugars to:

- Give baked goods color and texture
- Help preserve food
- Use as a bulking agent (add volume to foods)

The Dietary Guidelines recommends that most Americans limit added sugars to less than 10% of total calories per day. A 2,000 calorie diet would be 200 calories (50 grams) of added sugar per day.

Added sugars are usually found in foods that have little nutritional value, such as cakes, cookies, regular soda, ice cream, sports drinks, and juices. They may also be found in pasta sauce, flavored yogurts and cereals, and condiments, such as ketchup.

The new food labels on packaged foods now include the amount of added sugars. You can also check the ingredients list for added sugars. The following ingredients are examples of added sugars:

- Agave
- Brown sugar
- Corn syrup
- Dextrose
- Evaporated cane juice
- Fruit juice concentrate
- High fructose corn syrup
- Honey
- Maple syrup
- Molasses

- Sucrose
- White sugar

Choosing foods and drinks with too much added sugars often results in having fewer healthier foods and drinks. This can lead to health issues, such as:

- Weight gain, which can contribute to increased risk of type 2 diabetes
- Hypertension (high blood pressure),
- Heart disease and other cardiovascular diseases
- Some cancers

Calcium and vitamin D

You need calcium in your diet every day to keep your bones and teeth strong and your muscles and nerves healthy. When you're not getting enough calcium from your diet, your body takes calcium from your bones. This can make your bones weak and brittle and cause a disease called osteoporosis. Osteoporosis puts you at greater risk for bone fractures.

Here are tips for getting more calcium in your diet:

- Have at least 2 to 3 servings of skim or low-fat dairy every day. Include milk, yogurt, or cheese. If you have trouble tolerating lactose (a sugar found in milk products), try lactose-free products, such as Lactaid® milk or soy products.
- Almonds, leafy greens, soybeans, canned sardines, and salmon are also good sources of calcium.
- Foods such as cereals and orange juice usually have added calcium.
- Many people, including women during menopause, need calcium supplements. Speak with your healthcare provider or a dietitian to find out more about your calcium needs.

Your body needs vitamin D so it can absorb the calcium in your diet. Vitamin D is found in fortified dairy products and some fatty fishes. Your body can also make vitamin D from sunlight. Most people get all the vitamin D they need from

sunlight. But, if you don’t spend much time outside or if you usually keep your skin covered (such as for religious reasons), you may need to take a vitamin D supplement.

Daily recommended intake

The table below lists the daily amount of calcium and vitamin D you need per day based on your age.

| Age | Calcium (mg) | Vitamin D (IU) |
|--------------------|--------------------------------------|----------------|
| 0 to 6 months | 200 mg | 400 IU |
| 7 to 12 months | 260 mg | 400 IU |
| 1 to 3 years | 700 mg | 600 IU |
| 4 to 8 years | 1,000 mg | 600 IU |
| 9 to 18 years | 1,300 mg | 600 IU |
| 19 to 50 years | 1,000 mg | 600 IU |
| 51 to 70 years | 1,200 mg for women and 1,000 for men | 600 IU |
| 70 years and older | 1,200 mg | 800 IU |

IU=International Units

Most of your bone mass is made during childhood and early adulthood. But, you’re never too old to improve your bone health. To do this, eat foods that are rich in calcium and vitamin D and take part in daily weight-bearing activities, such as walking, jogging, lifting weights, or jumping rope. All of these things can help make your bones stronger.

Alcohol

Alcoholic drinks provide calories but contain few nutrients. If you drink alcohol, do so in moderation. This means having no more than 1 drink a day if you’re female and no more than 2 drinks a day if you’re male. One drink equals:

- 12 ounces of beer
- 5 ounces of wine
- 1.5 ounces of 80-proof liquor

Drinking too much alcohol can lead to:

- Cirrhosis (liver scarring)
- Mouth cancer
- Head and neck cancer
- Esophageal cancer
- Breast cancer (evidence not as strong)
- Colon cancer (evidence not as strong)

Some studies have shown that moderate drinking can decrease the risk for heart disease by increasing HDL levels (good cholesterol). However, it's still not a good idea to start drinking alcohol if you don't already.

Step 4: Understand Food Labels

Reading and understanding food labels can help you make smart food choices.

Food labels have been updated to give more information and are easier to read. Food labels now include:

- Added sugars in a serving.
- The amount of vitamin D and potassium in a serving.
- Larger, bolder, calories and serving size so they're easier to read.
- Serving size to reflect amounts that people actually eat.
- The percentage of daily value for nutrients such as sodium, fiber and vitamin D based on newer scientific evidence.

Here is an example of the new food label.

| Nutrition Facts | |
|---|----------------------|
| 8 servings per container | |
| Serving size | 2/3 cup (55g) |
| Amount per serving | |
| Calories | 230 |
| % Daily Value* | |
| Total Fat 8g | 10% |
| Saturated Fat 1g | 5% |
| Trans Fat 0g | |
| Cholesterol 0mg | 0% |
| Sodium 160mg | 7% |
| Total Carbohydrate 37g | 13% |
| Dietary Fiber 4g | 14% |
| Total Sugars 12g | |
| Includes 10g Added Sugars | 20% |
| Protein 3g | |
| Vitamin D 2mcg | 10% |
| Calcium 260mg | 20% |
| Iron 8mg | 45% |
| Potassium 235mg | 6% |
| * The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice. | |

Figure 2. New food label

How to read food labels

This section explains how find certain information on a food label. The numbers next to the headings will help you find the matching information on the food label at the end of this section (see Figure 3).

Serving size (1)

Servings per container can sometimes be deceiving. Packages that look like a single serving can often be 2 or 3.

% Daily Value (2)

The % daily value is a guide to the amount of nutrients in 1 serving of food. For example, the labels above list 20% for calcium. This means 1 serving provides 20% of the calcium you need each day. The % Daily Values are based on a diet of 2,000 calories per day for healthy adults.

Fat (3)

The type of fat in your food is important. Choose products with 3 grams of fat or less per serving and choose products with the least amount of saturated or trans fats.

Fiber, vitamins, and minerals (4)

More fiber, vitamins, and minerals are better (up to 100% of the Daily Value). Select foods that contain at least 25% of 1 or more of these categories.

Sugar (5)

Less sugar is better. Save foods or beverages with more than 15 grams of sugar per serving for special occasions. Choose foods with less added sugar.

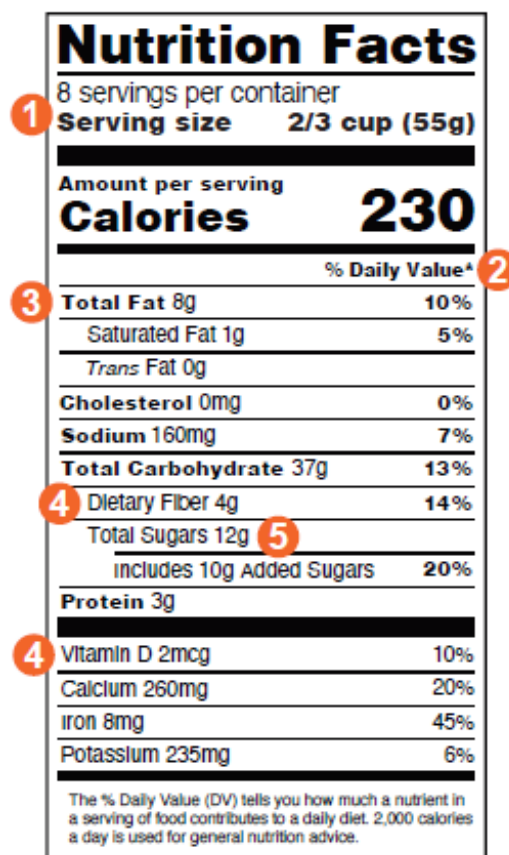


Figure 3. How to read a food label

This food label shows that the food is high in added sugars. Due to the high sugar content, this food would not be considered a healthy choice.

Step 5: Get Active

Physical activity and exercise are a necessary part of a healthy lifestyle. By doing at least 30 minutes of moderate exercise most days of the week, you can stay fit. You can burn about 150 calories a day (about 1,000 calories a week) by doing moderate exercise.

- To stay at your current weight, do at least 60 minutes of moderate to vigorous activity on most days of the week.
- If you need to lose weight, do at least 60 to 90 minutes of moderate to vigorous activity each day.

Moderate exercise is when your breathing gets faster but you aren't out of breath (for example, you can have a conversation but can't sing) and you develop a sweat after 10 minutes. Vigorous activity is when your breathing is fast, you can't say more than a few words without stopping for a break, and you develop a sweat in a few minutes.

A gym isn't the only place to exercise. Here are some activities that provide moderate to vigorous exercise:

- Take the stairs instead of the elevator.
- Get off the bus or subway 1 stop early and walk the rest of the way.
- Walk to work, class, or the store or walk your pets.
- Take a 2-mile brisk walk in 30 minutes.
- Increase your time spent on household tasks, such as vacuuming, mopping, dusting, and washing dishes (45 to 60 minutes).
- Take "activity breaks" at work.
- Swim laps for 20 minutes.
- Take a 4-mile bike ride in 15 minutes.
- Play volleyball for 45 minutes.
- Play basketball for 15 to 20 minutes.

- Dance for 30 minutes.
- Rake leaves or do other yard work for 30 minutes.

Step 6: Put Your Plan into Action

These are the basic guidelines for a healthier diet and lifestyle. It's best to make gradual changes, focusing on 1 change at a time. Set goals to achieve success. Once you have reached one goal, move on to the next.

If you would like information about nutrition, call 212-639-7312 to set up an appointment with a clinical dietitian nutritionist. They can help you plan a healthy diet and lifestyle.

Frequently Asked Questions

Should I take vitamin or mineral supplements?

A well-balanced diet with a variety of foods usually has the right amount of vitamins and minerals. However, people who have different nutritional needs or don't have a healthy diet may benefit from taking a vitamin or mineral supplement. Examples are:

- People who are elderly
- People whose immune systems don't work well
- Women who are pregnant or may become pregnant
- People on very low-calorie diets
- Premenopausal women
- Alcoholics
- Vegans

Ask your healthcare provider or clinical dietitian nutritionist if you need to take any vitamin or mineral supplements.

Should I buy only organic fruits and vegetables?

Organic foods are grown with little fertilizer and no pesticides. Some studies suggest organic foods may have higher amounts of phytochemicals (compounds found in plants that can promote health), but there isn't currently enough research to know for sure.

Whether or not you buy organic, it's best to wash all of your produce well to clean off any pesticides. There are certain fruits and vegetables that may have higher amounts of pesticides, including:

- Cherries
- Spinach
- Grapes
- Pears
- Strawberries
- Apples
- Nectarines
- Potatoes
- Celery
- Bell peppers
- Peaches
- Raspberries
- Kale

You may want to buy these products organic.

Should I buy hormone-free meat and dairy products?

Many people are concerned about hormones added to foods. The USDA doesn't allow hormones to be given to pigs, chickens, turkeys, or other fowl. However, hormones can be given to cattle and sheep.

The amount of hormones you get if you eat beef, mutton, or lamb is very small compared with what your body makes each day. If you're concerned, you can buy hormone-free meat and dairy products, or you can choose a mostly plant-based diet. This means eating mostly fruits, vegetables, whole grains, legumes, nuts, and seeds and reducing your meat intake.

Is a vegetarian diet healthier for me?

Not always. Many healthy diets include animal products.

However, a vegetarian diet can lower the risk of some diseases, such as heart disease, kidney stones, and gallstones. The benefits include a lower intake of saturated fat, cholesterol, and animal protein. Vegetarian diets also have more antioxidants, folate, magnesium, potassium, and fiber. Try a diet that's mostly made up of plants. Talk with a clinical dietitian nutritionist to make sure that your vegetarian or mostly plant-based diet has all the nutrients you need.

Should I juice my fruits and vegetables?

Even though the fruit and vegetable juice provides water, vitamins, and minerals, it's often missing the fiber that's only in whole fruit. Also, if you throw out the skin of fruits and vegetables, you won't be getting some vitamins, minerals, and needed fiber. We recommend that you eat whole fruits and vegetables instead, which will provide more fiber.

Should I be on a gluten-free diet?

Gluten is the name of the protein that's found in wheat, rye, and barley.

If you have celiac disease, yes, you need to be on a gluten-free diet. Celiac disease is an autoimmune disease that causes damage to your small intestine when you eat gluten. You may also need to avoid gluten if you have gluten sensitivity. People with gluten sensitivity have gastrointestinal (GI) symptoms such as vomiting or diarrhea or have an allergic response after eating gluten.

If you don't have celiac disease or discomfort after eating gluten, there's little evidence to support that a gluten-free diet is healthier for you or can lead to weight loss. In fact, by eating only gluten-free "processed foods," you may gain weight. This is because many of these products contain more fat and calories.

The best approach is to include foods that are naturally gluten-free, such as fruits, vegetables, legumes, lean protein, and lowfat, unflavored dairy.

Sample Menus

Use these sample menus to help you incorporate healthy foods into your diet and to inspire ideas for recipes of your own.

| Sample Menu #1 | |
|----------------|--|
| Breakfast | <ul style="list-style-type: none">• 1 cup of bran flakes with 2 tablespoons of raisins• ½ cup of skim milk• 1 sliced banana• Coffee or tea with skim milk |
| Lunch | <ul style="list-style-type: none">• Tuna salad (4 ounces of tuna packed in water and 1 tablespoon of low-fat mayonnaise)• 1 slice of multigrain bread• ½ cup of cold bean (canned, drained, and rinsed) and carrot salad• 1 cup of grapes• 16 ounces of sparkling water with a fresh lemon wedge |
| Snack | <ul style="list-style-type: none">• 15 almonds• 1 orange |
| Dinner | <ul style="list-style-type: none">• 4 ounces of whole-wheat pasta• ½ cup of tomato sauce with no added salt• 1 tablespoon of grated Parmesan cheese• 4 ounces of grilled chicken breast• 6 steamed asparagus spears• 1 cup of mixed greens with tomato, red onion, and 4 black olives• 2 tablespoons of low-fat dressing |
| Snack | <ul style="list-style-type: none">• 1 fresh pear topped with 1 crumbled graham cracker and 2 tablespoons of low-fat yogurt |

| | |
|----------------------------|---|
| Nutritional Content | <ul style="list-style-type: none"> • 1,780 calories • 58 g fat • 10 g polyunsaturated fat • 12 g saturated fat • 30 g monounsaturated fat • 211 mg cholesterol • 37 g fiber • 933 mg calcium • 1,800 mg sodium • 3,370 mg potassium |
|----------------------------|---|

| Sample Menu #2 | |
|-----------------------|--|
| Breakfast | <ul style="list-style-type: none"> • 8 ounces of low-fat vanilla or fruit yogurt • 1 cup of cooked whole oats with 2 teaspoons of mixed cinnamon and sugar • ½ cup of fresh or canned fruit (in its own juice) • Coffee or tea with skim milk |
| Lunch | <ul style="list-style-type: none"> • Turkey sandwich (3 ounces of roasted turkey breast on 2 slices of whole-grain bread, 1 tablespoon of low-fat mayonnaise or mustard, ¼ of a sliced avocado, lettuce, and tomato) • 1 medium apple • 8 ounces of chocolate skim milk |
| Snack | <ul style="list-style-type: none"> • 2 cups of air-popped popcorn (no added butter) |
| Dinner | <ul style="list-style-type: none"> • 2 cups of vegetarian chili • 2 slices of whole-wheat bread or 1 medium whole-wheat dinner roll • 1 cup of mixed-greens salad • Salad dressing: 1 tablespoon of olive oil and 1 tablespoon of balsamic vinegar • 2 slices of watermelon |
| Snack | <ul style="list-style-type: none"> • ½ cup of fruit sorbet topped with 1 cup of fresh or frozen strawberries or raspberries |

| | |
|----------------------------|---|
| Nutritional Content | <ul style="list-style-type: none"> • 1,800 calories • 28 g fat • 5 g polyunsaturated fat • 8 g saturated fat • 9 g monounsaturated fat • 81 mg cholesterol • 47 g fiber • 1,300 mg calcium • 1,600 mg sodium • 4,200 mg potassium |
|----------------------------|---|

| Sample Menu #3 | |
|-----------------------|--|
| Breakfast | <ul style="list-style-type: none"> • Vegetable frittata (1 egg, 2 egg whites, and 1 cup of julienned vegetables) • 1 cup of cantaloupe cubes • Coffee or tea with skim milk |
| Lunch | <ul style="list-style-type: none"> • 1 ½ cups of black bean and corn soup (see recipe below) • Whole-grain roll with 1 slice of low-sodium cheese • 1 cup of mixed-greens salad • Salad dressing: 1 tablespoon of olive oil and 1 tablespoon of balsamic vinegar |
| Snack | <ul style="list-style-type: none"> • ½ cup of 1% cottage cheese • ½ cup of fresh fruit |
| Dinner | <ul style="list-style-type: none"> • 6 ounces of broiled salmon • 1 cup of spinach and mushrooms sautéed in 2 tablespoons of oil and garlic • 1 sweet potato, sliced and roasted in the oven • 1 cup of cooked mushrooms • 1 cup of brown rice |
| Snack | <ul style="list-style-type: none"> • 1 cup of sugar-free cocoa made with skim milk • 1 baked apple topped with cinnamon |

| | |
|---------------------|--|
| Nutritional Content | <ul style="list-style-type: none"> • 1,700 calories • 47 g fat • 6 g polyunsaturated fat • 13 g saturated fat • 20 g monounsaturated fat • 320 mg cholesterol • 44 g fiber • 1,050 mg calcium • 2,300 mg sodium • 3,300 mg potassium |
|---------------------|--|

Recipe for Black Bean and Corn Soup

- 28-ounce can of low-sodium crushed tomato and basil
- 8 ounces of low-sodium tomato juice
- 16-ounce can of rinsed black beans
- 16-ounce can of rinsed white beans
- 16-ounce can of rinsed kidney beans
- 16-ounce can of sweet corn
- 1 teaspoon of dry oregano
- ½ teaspoon of rosemary
- ½ teaspoon cracked red pepper flakes (optional)

Mix ingredients in a large pot and bring to a boil. Turn down heat and let simmer for 10 minutes. Serves 4.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

Eat Your Way to Better Health - Last updated on July 15, 2021

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