Nutrition and physical activity are important parts of everyday life. The food you eat affects how well you pay attention in class and how long you can run during soccer practice. People who are physically active have healthier bones and muscles and also feel better about themselves.

Just like a race car driver selects the right fuel for his car, we need to choose the right fuel for our bodies. Our bodies get energy from three sources — carbohydrates, proteins, and fats. All these nutrients play an important role in our bodies.

Carbohydrates are used as energy by our muscles and brain.

Proteins are important in immunity because they help fight infection. Proteins also help build and repair tissues in our body.

Fat is important because it protects our organs, such as our heart, lungs, and liver.

Fuel is not all our body needs. Just like the race car needs motor oil to keep it running smoothly, our bodies need water. Water is necessary for life and has many important functions. Water regulates body temperature, prevents muscle cramps, and helps with strength and concentration. If you want your body to perform like a well-oiled sports car, consider drinking 8 to 9 cups of water each day.

Race car drivers need to drive every day to keep their skills and car in peak performance. In the same way, we need to be physically active each day to keep our bodies running and feeling well. Keep your body well-tuned by getting 60 minutes or more of physical activity each day. Physical activity is more than aerobic activities such as running. It also involves activities to make your muscles and bones stronger.

**Aerobic activities**

Examples: Moderate activities are walking, shooting baskets, washing the car, and vigorous activities are running, skiing, swimming laps, and singles tennis.

How often: Aerobic activities should take up the majority of your 60 minutes or more of physical activity each day, with at least 3 days per week of vigorous activities.

**Muscle strength**

Examples: gymnastics and push-ups.

How often: 3 days per week as part of your 60 minutes or more of daily physical activity.

**Bone strength**

Examples: jumping rope or running. How often: 3 days per week as part of your 60 minutes or more of daily physical activity.

Just like you want to keep your car running well for a long time, you want to do the same for your body. Choosing the right fuels for your body and being physically active is easy and fun! Try a new healthy recipe with your friends and go on a walk or bike ride with your family. Making just one or two small changes to your lifestyle can lead to big changes in how you feel!

**The Mystery Club**

preparing for Race Day

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Choose MyPlate

MyPlate is a great tool to help guide your food choices. MyPlate provides you with a visual image of what foods to put on your plate and in what proportion. The icon conveys that half of your plate should consist of fruits and vegetables, with vegetables comprising slightly more than the fruits. The other half of the plate consists of grains and proteins, with grains comprising slightly more than the protein. Dairy is depicted as a circle (e.g., glass of milk) off to the side of the plate.

When Choosing Your Plate, keep these seven tips in mind:

1. Enjoy your food, but eat less.
   Even “treats” can fit, just in small portions.

2. Avoid oversized portions.
   Restaurant and snack foods tend to be too large; cut these portions in half, share them with a friend or save for another meal.

3. Make half your plate fruits and vegetables.
   Focus on fruit, not juice. Make sure your fruits and vegetables provide a rainbow of color.

4. Switch to fat-free or low-fat (1%) milk.
   Low- and fat-free milk provide the same nutrition as whole milk without the fat and calories.

5. Make at least half your grains whole grains.
   Look for “whole wheat” and “whole grain” as the first ingredient on labels.

6. Compare sodium in foods, particularly your snack foods.
   Choose snack foods with lower sodium numbers.

7. Drink water instead of sugary drinks.
   Fruit drinks, beverages, and punches as well as soft and sport drinks have a lot of sugar, so try to drink more water.

MyPlate helps you visualize the proportion foods should have, but does not show the actual portion size. Two of the key messages of MyPlate encourage us to decrease our portions. Often times we just assume the amount of food we are given is an appropriate amount, but this may not always be true. Many restaurants allow you to increase the size of your meal for a small price. But are you really getting a good deal? Sure, you may be getting more food, but do you need all the extra food? Probably not.

Consuming portions that are too large means additional calories, fat, and sodium, which will likely lead to an unhealthy body weight and future health problems. Many times food is presented to us as one serving even though it often is enough food for two or three people!

Can you guess how long you would have to exercise to burn off the extra calories by choosing the larger portion of popcorn over the smaller portion?

Answer

There is a 360 calorie difference and that would take 1 hour and 15 minutes of walking if you were a 150-pound person.

TOP 10 Healthy Habits

1. Be physically active for at least 60 minutes each day.
2. Use a water bottle to help drink your 8 to 9 cups of water.
3. Skip the soda.
4. Consume only 100% fruit juice.
5. Eat plenty of orange and dark green veggies.
6. Seek out whole grain foods.
7. Choose to have a fruit or vegetable as a snack.
8. Choose low-fat or fat-free dairy products when possible.
9. Select low-fat or lean meats and poultry.
10. Share large portions with friends.
Wacky Science

Dissecting the Nutrition Facts Panel

The Nutrition Facts Panel provides the science behind your food. It helps you understand the nutrient content of your food, compare food products, and make healthy choices. Follow the steps 1, 2, 3, and 4 below for the scientific method of making food choices. Before you get started, you should know that 5 percent Daily Value (DV) or less is considered low and 20 percent DV or more is considered high.

1. Examine the serving size and how many servings are in the package. Is this for one person or is it meant to be shared?

2. Look for foods high in fiber, Vitamin A, Vitamin C, Calcium, and Iron. These should have greater than 20% DV.

3. Look at the calories. Products with more than 400 calories per serving are considered high.

4. When comparing foods, look for those with the lower amounts of total, saturated, and trans fat as well as sodium. These should have less than 5 percent DV.

Because the label shows two servings, it is a good idea to share with a friend. The calories are low but the total saturated fat and trans fat are high. Also, the fiber is zero and the vitamins and minerals are low with the exception of calcium, which has 20% DV.

Q: Why did the younger brother stare at the can of frozen orange juice?
A: Because it said concentrate.

Written by Rachel Wall, nutrition consultant; Ruth Litchfield, ISU associate professor and state nutrition extension specialist; and Charles V. Schwab, ISU professor and extension safety specialist. This publication is funded by MetLife Foundation and Iowa State University Extension. For more information about the Progressive Agriculture Safety Day® program, go to www.progressiveag.org.

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Chloë, Liam, and Wyatt talked with their friends about what they learned during the school assembly presentation from the nutrition expert at their school. It was on how to make smart choices about food. When they shared with everyone what they learned from the presentation, each gave different examples of what they should do and should not do while making food decisions. Using the chart below, can you figure out what each person shared about 1) things to avoid and 2) things to do?

<table>
<thead>
<tr>
<th>Chloë</th>
<th>Liam</th>
<th>Wyatt</th>
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</thead>
<tbody>
<tr>
<td>Food high in total fats (&gt;20% DV)</td>
<td>Supersizing your order</td>
<td>Food high in sugar (&gt;20% DV)</td>
</tr>
<tr>
<td>*</td>
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</tr>
</tbody>
</table>

HINT: When you put an * in a box, put a “0” in the other boxes in that column and row.

Who is more active and should have more calories in his/her day?

Which snack in the refrigerator should Becky eat and why?

Which snack in the refrigerator should Matt eat and why?

Chloë knew to avoid food high in total fats and to always read the nutrition facts panel before making decisions. Liam knows to avoid supersizing your order because often the extra calories are not needed. Wyatt knows to avoid choosing food high in fiber.

The Mystery of “The Snacks in the Fridge”

Matt and his twin sister, Becky, are hungry for a bedtime snack. Matt had an active day; he played basketball for 30 minutes in PE and played soccer after school for an hour. Becky doesn’t participate in PE and when she gets home from school, she spends most of her free time reading or texting from the couch.

That morning they each had a breakfast sandwich with one egg, a slice of cheese, and one English muffin. Becky drank a cup of skim milk while Matt had a cup of orange juice. For lunch Matt had a sandwich on 2 slices of whole wheat bread with ham, lettuce, tomato, and green pepper. He also had a yogurt parfait with vanilla yogurt and 1 cup of strawberries. Becky had a peanut butter sandwich made with 2 tablespoons peanut butter and 1 slice of whole wheat bread. She also had a cup of baby carrots with ranch dressing and 1 cup of skim milk. For supper they each had stir-fry with brown rice (1 cup), cooked vegetables (1 cup of green peppers, peas, carrots, and broccoli), and chicken.

In the refrigerator there are two snack items. One is a cup of veggies (celery and cauliflower) with some cheese cubes and the other is a bowl of fresh berries.

Who is more active and should have more calories in his/her day?

__________________________________

__________________________________

__________________________________

Which snack in the refrigerator should Becky eat and why?

__________________________________

__________________________________

__________________________________

Which snack in the refrigerator should Matt eat and why?

__________________________________

__________________________________

__________________________________

Answer: Chloë knew to avoid supersizing his order because often the extra calories are not needed. Liam didn’t talk about avoiding food high in sugars that are greater than 20% of Daily Value. Wyatt knows to avoid choosing food high in fiber.

**Word Code**

Each of the following words or phrases is important in making healthy food choices.

Write the letter of the alphabet that comes before each letter shown to decode the words or phrases.

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Can you help decode these key words?

USE YOUR NOGGIN

Know how to avoid supersizing your order and to select food that is high in fiber.