Move over, fat! Carbohydrates have recently made a splash in the nutrition world, creating a tangle of controversy. But have they gotten a bad rap?

Carbohydrates naturally make up a large part of your diet and also are a main component in many processed foods. Carbohydrates, fats and protein are the three main macronutrients we need in larger quantities that provide us with energy. Eating them in the right proportion helps to stay balanced and keep your body moving well!

As researchers have started to look closer at carbohydrates and health, it’s emerged that the quality of the carbohydrates is just as important as the quantity. You learned in the first and second series about food processing or refinement. As a food goes through processing, the nutrient quality typically goes down. This is especially the case for grains. A large five-year study among nearly 500,000 men and women suggested that eating whole grains offers modest protection against colorectal cancer.

Focusing on quality and increasing whole grains often leads to a reduction of refined grains in your diet. Let’s take a closer look at how to make those changes in your diet.


Can you incorporate carbohydrates into a healthy diet? Get the answer on page 3!
The Difference Between Refined and Whole Grains

It’s important to understand that not all grains are created equal. One of the best ways to start making healthier choices is first understanding the differences.

All grains start out whole, as a seed, with 3 parts: endosperm, germ, and bran. During the refining process, the germ and bran are taken out leaving the endosperm. Unfortunately, this is the part that is highest in calories and contains the least amount of vitamins and minerals. And worst of all, most of the natural fiber is taken out.

Fiber has become a “nutrient of public health concern” according to the Dietary Guidelines for Americans. It is recommended for all Americans to eat 25-30 grams of fiber per day. Most people only eat about 15 grams per day, half of the recommended amount! But why the hype? Let’s learn why.

- Fiber is good for the gut. A higher fiber diet helps prevent constipation. Yes, please!
- Whole grains, with the natural fiber, help to keep you fuller longer. This can help with overeating and weight management.
- Fiber has also shown to lower blood cholesterol levels.

Many of the processed foods found in the supermarket are made with refined grains, so it makes it even more important to be a detective in deciphering labels while shopping. Always look for the magic word, “whole.”

Anatomy of Whole Grain

CHECK THE NUTRITION FACTS LABEL to see how many servings are in your favorite snacks.

Let’s Talk Portion Size

Another key part of processed, refined grains is the serving size. Research has shown that over the last 40 years, Americans are eating about 250 more calories per day. Increased portion sizes have played a large role in this and the extra calories may also have a harmful effect on your waistline. Are you trying to make healthful choices, but struggle with portion control?

Here are some easy ways to keep portion sizes under control.

1. Repackage supersize bags into smaller portioned bags. Supersize bags can be more economical, but you may have a tendency to overeat from the large bag size.
2. Use a smaller plate. Your plate may look full, but bonus, you’ll be eating less.
3. Also, eat from a plate. Not a package.
4. Slow down and skip second helpings. Give yourself time to digest and serve yourself more food only if you are still hungry.
5. Learn to read the serving size on the food label. You may be surprised at the recommended serving size. Do they really think ¾ cup is enough cereal?

Sources:
https://www.choosemyplate.gov/eathealthy/grains
https://www.healthyeating.org/Healthy-Eating/Healthy-Living/Weight-Management/Article-Viewer/article/348/correct-portion-sizes-how-to-keep-portion-distortion-in-check
https://www.bettycrocker.com/how-to/tipslibrary/ingredients/whole-grain-story
https://www.health.harvard.edu/newsletter_article/Obesity_in_America_Large_portions_large_proportions
https://www.silversneakers.com/blog/qa-how-many-carbs-eat-per-day/

Fresh Conversations is developed by: Iowa Dept. of Public Health idph.iowa.gov/inn
Iowa Dept. on Aging iowaaging.gov
**Half of All the Grains You Eat Should be Whole Grains**

Most Americans consume enough grains, but few are whole grains. At least half of all the grains you eat should be whole grains. Color is not always an indication of a whole grain. For example, bread can be brown because of molasses or other added ingredients.

Also, don’t be fooled by fancy names on food packages. Read the ingredient list to see if a whole-grain ingredient is listed first. Foods labeled with words “multi-grain,” “stone-ground” “100% wheat,” “cracked wheat,” “seven-grain,” or “bran” are usually not whole-grain products.

Look for foods that name one of the following whole grains first on the label’s ingredient list:

- brown or wild rice
- buckwheat
- bulgur
- millet
- oatmeal
- popcorn
- corn
- whole-grain sorghum
- whole rye
- quinoa
- whole or rolled oats
- whole-grain barley

**How Can I Incorporate Carbohydrates Into a Healthy Diet?**

According to USDA Choose My Plate, it is recommended for adults 51+ to eat 5-6 servings of grains per day. That translates to anywhere from 45 to 65 percent of your total daily calories. It is also recommended for at least half of the grains you eat to be whole grain. Choose carbohydrates that give you a lot of nutrients without extra calories.

- Fruits and vegetables (choose different types with bright colors)
- Whole grains, like oatmeal, whole-wheat bread, and brown rice
- Beans, nuts, seeds

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<thead>
<tr>
<th>Instead of...</th>
<th>Try...</th>
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<tbody>
<tr>
<td>White Rice</td>
<td>Brown or Wild Rice, Riced Cauliflower</td>
</tr>
<tr>
<td>Regular Pasta</td>
<td>Whole Wheat Pasta, Spaghetti Squash</td>
</tr>
<tr>
<td>White Bread</td>
<td>Whole Wheat or Whole Grain Bread</td>
</tr>
<tr>
<td>Instant Oatmeal</td>
<td>Steel Cut or Rolled Oats</td>
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</tbody>
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**Stay Active!**

Being physically active is one of the most important actions that people of all ages can take to improve their health. But how much and what kind of physical activity should you be getting? The Physical Activity Guidelines for Americans states:

- Adults should move more and sit less throughout the day.
- Adults should do at least 150 minutes (2 hours and 30 minutes) of aerobic activity a week.
- Adults should also do muscle-strengthening activities that involve all major muscle groups on 2 or more days a week.

Did you know that a sedentary lifestyle is a key contributor to constipation? Exercise gets your blood pumping everywhere in your body, including your gastrointestinal tract, leading to good muscle tone and more digestive enzymes being released.

Need help finding a food pantry, free hot meals or community garden?

Call 2-1-1 for resources available in your area.
Preheat oven to 375 F. Lightly coat a 13'x9'x2' baking dish with cooking spray and set aside.

Drain spinach by placing in a colander set over the sink or in a bowl. Press with a spoon to remove as much liquid as possible. Place spinach in a medium bowl.

Add the cottage cheese and 1 cup of the mozzarella cheese to the spinach. Stir to combine.

Pour half of the spaghetti sauce into prepared baking dish. Add water and stir to mix.

Spoon 1-2 tablespoons cheese mixture into each uncooked pasta shell. Arrange shells in a single layer over sauce. Pour remaining sauce over top.

Sprinkle the remaining ½ cup mozzarella cheese evenly over sauce.

Cover tightly with foil. Bake for 1 hour or until shells are tender. Let stand 10 minutes before serving.

Ingredients
- 1 package (10 oz) frozen, chopped spinach, thawed
- 1 carton (12 oz) cottage cheese
- 1 ½ cup shredded mozzarella cheese, divided
- 1 jar (24 oz) spaghetti or pasta sauce
- 1 cup water
- 24 large pasta shells, uncooked (try to find whole grain!)

Instructions
1. Preheat oven to 375 F. Lightly coat a 13'x9'x2' baking dish with cooking spray and set aside.
2. Drain spinach by placing in a colander set over the sink or in a bowl. Press with a spoon to remove as much liquid as possible. Place spinach in a medium bowl.
3. Add the cottage cheese and 1 cup of the mozzarella cheese to the spinach. Stir to combine.
4. Pour half of the spaghetti sauce into prepared baking dish. Add water and stir to mix.
5. Spoon 1-2 tablespoons cheese mixture into each uncooked pasta shell. Arrange shells in a single layer over sauce. Pour remaining sauce over top.
6. Sprinkle the remaining ½ cup mozzarella cheese evenly over sauce.
7. Cover tightly with foil. Bake for 1 hour or until shells are tender. Let stand 10 minutes before serving.

Tips
- Can’t find large whole grain shells? Use smaller whole grain shells to make a casserole!
- If cooking for a smaller household, the remainder of the recipe can be frozen for 2-3 months. It would be recommended to fully cook and store in individual sized freezer safe containers.

Nutrition Facts per Serving: 270 calories, 33 g carbohydrates, 16 g protein, 4 g Fiber, 7 g Total Fat.

This recipe is provided by Iowa State University Extension and Outreach. For more resources like this, visit the Spend Smart. Eat Smart. website at http://spendsmart.extension.iastate.edu. Spend Smart. Eat Smart. is a registered trademark of Iowa State University.