

Complex Carbohydrates for Energy and Fiber

April 2022

Deana Hildebrand, PhD, RD, LD Professor & Extension Specialist

Christine Walters, MS, RDN Dietetic Intern, Extension Program Assistant

Tori Compton

Dietetic Intern, Extension Program Assistant

Carbohydrates are an important nutrient. They give you energy to do daily tasks. There are two types of carbohydrates.

Simple carboyhydrates are the sugars added to foods and beverages to sweeten the flavor. Foods with added sugar often supply calories but few or no important nutrients and no fiber. Examples include sugar-sweetened beverages, cakes, cookies, pastries, and candy. Try to eat less of these foods. Complex carbohydrates are naturally found in foods such as whole-grains, fruits, vegetables and beans. These foods provide healthy calories and nutrients important for you and your baby's health. Choose more of these foods.

What is fiber? Many of the same foods that provide complex carbohydrates provide fiber. Fiber is the part of food that your body does not digest and is sometimes called roughage or bulk. It keeps food moving through the digestive system and can help prevent constipation. Fiber is important because it helps regulate blood sugars, lowers cholesterol, keeps you feeling full and satisfied, helps you maintain a healthy weight, and lowers your risk of heart disease.

Many people do not eat enough fiber-rich foods. Increase the amount you eat slowly. For example, add an extra vegetable or fruit each day until you reach the recommended goals. As you add more fiber to your diet, make sure that you are drinking at least 8 to 9 cups of fluid each day. To help you get enough complex carbohydrates and fiber, choose foods from the grain, fruit and vegetable food groups.

Breads and Cereals

When you buy breads and cereals, look for the words whole grain, whole wheat, whole oats, oatmeal, or brown rice on the ingredient label. Try to eat 6 ounces of breads, cereals, pasta or rice each day during the first trimester of pregnancy. During the second and third

Oklahoma Cooperative Extension Fact Sheets are also available on our website at: extension.okstate.edu

trimester, increase bread and cereal servings to eight or nine servings. This will provide the extra calories and fiber you need. At least 3 ounces need to be whole grain. One ounce is 1 slice of bread, ½ cup of cooked cereal, rice or pasta, and about ¾ cup of ready-to-eat cereal.

INGREDIENTS: Whole wheat flour, water, wheat bran, high fructose corn syrup, rolled wheat, wheat gluten, yeast...

Be aware: Products that say multi-grain, 100% wheat, and seven grain on the label may not be whole grain products.

Tips for eating more whole grains

- · Eat 100% whole wheat crackers
- Try whole wheat pasta
- Add brown rice to a bean dish
- · Choose oatmeal for breakfast
- Sprinkle chia seeds or flaxseeds on smoothies and oatmeal
- Eat popcorn for a snack
- Add black beans to a taco or salad

Fruits and Vegetables

Focus on eating 2 cups of fruit each day. A medium size piece of fresh fruit is about 1 cup. You can also choose canned and cooked fruits. When you buy canned fruit, look for fruit packed in fruit juice or water.

- Eat a variety of different vegetables to get 2½ cups of vegetables each day.
- Tips for eating more fruits and vegetables
- Eat fresh, canned, or dried fruits for dessert.
- Carry apples, oranges, bananas, mangoes, or raisins with you for a snack.

The Oklahoma Cooperative Extension Service WE ARE OKLAHOMA

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education

for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.

- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs.
 Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

References

Academy of Nutrition and Dietetics. The Best Foods to Eat During Pregnancy. October 2018. Available at https://www.eatright.org/health/pregnancy/what-to-eat-when-expecting/the-best-foods-to-eat-during-pregnancy. Accessed June 2021.

US Department of Agriculture. Nutritional Needs During Pregnancy. April 2018. Available at Pregnancy I MyPlate. Accessed June 2021.

United States Department of Agriculture. (2020, December). Dietary Guidelines for Americans 2020-2025. Dietary Guidelines for Americans. https://www.dietaryguidelines.gov/. Accessed June 2021.

Oklahoma State University, as an equal opportunity employer, complies with all applicable federal and state laws regarding non-discrimination and affirmative action. Oklahoma State University is committed to a policy of equal opportunity for all individuals and does not discriminate based on race, religion, age, sex, color, national origin, marital status, sexual orientation, gender identity/expression, disability, or veteran status with regard to employment, educational programs and activities, and/or admissions. For more information, visit https:///eeo.okstate.edu.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Vice President for Agricultural Programs and has been prepared and distributed at a cost of 40 cents per copy. 04/2022 KG.