Carbohydrates
Also called: Carbs

Carbohydrates are one of the main types of nutrients. They are the most important source of energy for your body. Your digestive system changes carbohydrates into glucose ([blood sugar](https://medlineplus.gov/bloodsugar.html)). Your body uses this sugar for energy for your cells, tissues and organs. It stores any extra sugar in your liver and muscles for when it is needed.

Carbohydrates are called simple or complex, depending on their chemical structure. Simple carbohydrates include sugars found naturally in foods such as fruits, vegetables, milk, and milk products. They also include sugars added during food processing and refining. Complex carbohydrates include whole grain breads and cereals, starchy vegetables and legumes. Many of the complex carbohydrates are good sources of [fiber](https://medlineplus.gov/dietaryfiber.html).

For a healthy diet, limit the amount of added sugar that you eat and choose whole grains over refined grains.

**Start Here**


**Latest News**

- More News on Carbohydrates [https://medlineplus.gov/alphanews_c.html#carbohydrates](https://medlineplus.gov/alphanews_c.html#carbohydrates)

**Related Issues**

- Choosing Whole-Grain Foods: 10 Tips for Purchasing and Storing Whole-Grain Foods [https://www.choosemyplate.gov/ten-tips-choosing-whole-grain-foods](https://www.choosemyplate.gov/ten-tips-choosing-whole-grain-foods) (Department of Agriculture)

**Specifics**

- Added Sugar: Don't Get Sabotaged by Sweeteners [https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating](https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating)
Added Sugars [American Heart Association]

Artificial Sweeteners and Other Sugar Substitutes [Mayo Foundation for Medical Education and Research]

Carbohydrates and Diabetes (For Parents) [Nemours Foundation]

Counting Carbs? Understanding Glycemic Index and Glycemic Load [National Institutes of Health]

Frequently Asked Questions about Sugar [American Heart Association]

Non-Nutritive Sweeteners (Artificial Sweeteners) [American Heart Association]

Sugar 101 [American Heart Association]

Sweet Stuff: How Sugars and Sweeteners Affect Your Health [National Institutes of Health]

Whole Grains: Hearty Options for a Healthy Diet [Mayo Foundation for Medical Education and Research]

Statistics and Research

Consumption of Added Sugar among U.S. Children and Adolescents, 2005–2008 [National Center for Health Statistics]

Consumption of Added Sugars among U.S. Adults, 2005–2010 [National Center for Health Statistics]

Consumption of Sugar Drinks in the United States, 2005–2008 [National Center for Health Statistics]

Clinical Trials

ClinicalTrials.gov: Dietary Carbohydrates [National Institutes of Health]

ClinicalTrials.gov: Sweetening Agents [National Institutes of Health]

Journal Articles

References and abstracts from MEDLINE/PubMed (National Library of Medicine)

Article: Does preoperative oral carbohydrate treatment reduce the postoperative surgical stress... [PubMed]

Article: An Integrated View of the Effects of Wine Polyphenols and... [PubMed]

Article: A nutritional perspective on UCP1-dependent thermogenesis. [PubMed]

Carbohydrates -- see more articles [PubMed]

Sugar substitutes -- see more articles [PubMed]
Reference Desk


Find an Expert

- Center for Nutrition Policy and Promotion [https://www.cnpp.usda.gov/]
- Food and Nutrition Information Center [https://www.nal.usda.gov/fnic]

Children

  Also in Spanish [https://www.healthychildren.org/Spanish/health-issues/conditions/adhd/Paginas/Allergies-and-Hyperactivity.aspx]
- Carbohydrates, Sugar, and Your Child [https://kidshealth.org/en/parents/sugar.html] (Nemours Foundation)
  Also in Spanish [https://kidshealth.org/es/parents/sugar-esp.html]
- Cut Back on Your Kid's Sweet Treats: 10 Tips to Decrease Added Sugars [https://choosemyplate-prod.azureedge.net/sites/default/files/tentips/DGTipsheet13CutBackOnSweetTreats.pdf] (Department of Agriculture) - PDF
  Also in Spanish [https://choosemyplate-prod.azureedge.net/sites/default/files/tentips/DGTipsheet13CutBackonSweetTreats-sp_0.pdf]
  Also in Spanish [https://kidshealth.org/es/kids/carb-esp.html]

Teenagers

- Carbohydrates [https://www.girlshealth.gov/nutrition/basics/carbs.html] (Department of Health and Human Services, Office on Women's Health)
- Low-Carb Diet [http://youngwomenshealth.org/2013/12/06/low-carb-diet/] (Children's Hospital Boston)
  Also in Spanish [http://youngwomenshealth.org/2014/03/10/dieta-baja-en-carbohidratos/]

Women


Patient Handouts

- Calorie count – sodas and energy drinks [https://medlineplus.gov/ency/patientinstructions/000888.htm] (Medical Encyclopedia)
  Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000888.htm]
- Carbohydrates [https://medlineplus.gov/ency/article/002469.htm] (Medical Encyclopedia)
  Also in Spanish [https://medlineplus.gov/spanish/ency/article/002469.htm]
- Counting carbohydrates [https://medlineplus.gov/ency/patientinstructions/000321.htm] (Medical Encyclopedia)
  Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000321.htm]
- Sweetened beverages [https://medlineplus.gov/ency/patientinstructions/000335.htm] (Medical Encyclopedia)
  Also in Spanish [https://medlineplus.gov/spanish/ency/patientinstructions/000335.htm]
- Sweeteners – sugar substitutes [https://medlineplus.gov/ency/article/007492.htm] (Medical Encyclopedia)
  Also in Spanish [https://medlineplus.gov/spanish/ency/article/007492.htm]
MEDICAL ENCYCLOPEDIA

Calorie count - sodas and energy drinks [https://medlineplus.gov/ency/patientinstructions/000888.htm]
Carbohydrates [https://medlineplus.gov/ency/article/002469.htm]
Counting carbohydrates [https://medlineplus.gov/ency/patientinstructions/000321.htm]
Hyperactivity and sugar [https://medlineplus.gov/ency/article/002426.htm]
Sweetened beverages [https://medlineplus.gov/ency/patientinstructions/000335.htm]
Sweeteners – sugar substitutes [https://medlineplus.gov/ency/article/007492.htm]
Sweeteners – sugars [https://medlineplus.gov/ency/article/002444.htm]

Related Health Topics

Carbohydrate Metabolism Disorders [https://medlineplus.gov/carbohydratemetabolismdisorders.html]
Diabetic Diet [https://medlineplus.gov/diabeticdiet.html]
Dietary Fiber [https://medlineplus.gov/dietaryfiber.html]
Dietary Proteins [https://medlineplus.gov/dietaryproteins.html]
Nutrition [https://medlineplus.gov/nutrition.html]

Languages

Chinese – Simplified [https://medlineplus.gov/languages/carbohydrates.html#Chinese-Simplified] (简体中文)
Chinese – Traditional [https://medlineplus.gov/languages/carbohydrates.html#Chinese-Traditional] (繁體中文)
Spanish [https://medlineplus.gov/spanish/carbohydrates.html] (español)

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