Nutrition News

Department of Human Nutrition



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Another Good Reason to Consume Whole Grains, Fruits and Vegetables

We have known for years that whole grains, fruits and vegetables are important parts of a heart - healthy diet. We also have known that reducing saturated fats – found in butter, whole milk and fatty meat – is important for a healthy heart. However, as we cut out saturated fats from our diets, we began adding more carbohydrates—often more processed and refined

Is the risk for heart disease going down as a result of substituting carbohydrates for saturated fat?

The short answer is: It depends on the kind of carbohydrate. The results of a recentlypublished, 12-year longitudinal study of 53,000 men and women suggest that replacing saturated fat with unrefined carbohydrate foods such as whole grains, yogurt, fruits and nonstarchy vegetables is associated with a somewhat lower risk of MI (myocardial infarction, or heart attack). A more troublesome and significant finding is the positive association of refined or processed carbohydrates with higher risk of MI. It is suspected that meals of refined carbohydrates may result in high blood glucose concentration (with corresponding insulin response) that may lead to an increased risk of ischemic heart disease by 1)increasing inflammation of blood vessels and 2)promoting dyslipidemia (e.g., higher triglycerides). When carbohydrate releases glucose more slowly, as is typically the case with less refined foods, there may be less insulin required, leading to better glucose and lipid control. What can the consumer do?

We can lessen our risk of a heart attack by continuing to reduce our intake of saturated fat and substituting monounsaturated oils such as canola and olive instead. We can also limit the amount of refined and processed foods we eat, and increase our consumption of more unrefined carbohydrates that typically have more fiber. This helps moderate the rate at which glucose is released into the blood.

Tip: To enjoy more refined foods, eat them along with some less refined foods, which will reduce the detrimental impact.

| Eat more often | Eat less often |
|----------------------------------|-------------------------------------|
| Stone ground whole grain bread | Refined grains and cereals such as: |
| Legumes: lentils, peas and beans | -white bread |
| Rolled oats | -saltine crackers |
| Yogurt | -pretzels |
| Whole fruits | -pastries |
| Brown or converted rice | Short grain rice |
| Non-starchy vegetables | White potatoes |

Source: Intake of carbohydrates compared with intake of saturated fatty acids and risk of myocardial infarction: importance of the glycemic index. American Journal of Clinical Nutrition.2010;91:pp.1764-8

For more information about healthy eating, contact your local extension office.

The Food Assistance Program can help people of all ages with low income buy nutritious foods for a better diet.

To find out more, call toll-free 1-888-369-4777.

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In each case, credit Karen Hudson, MEd, RD, LD, Family Nutrition Program Coordinator, Department of Human Nutrition; Kansas State University; Another Good Reason to Consume Whole Grains, Fruits and Vegetables; June 2010.

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