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Research Links Carbohydrate with Heart Disease

A new study has linked certain types of carbohydrate with an increased risk of heart disease.

Starting in 1984, a team of researchers from **Harvard Medical School tracked 75,521 women over ten years**. Publishing their findings in the American Journal of Clinical Nutrition, they report that carbohydrate based foods with a high **glycemic index*** increase the risk of coronary heart disease.

The term glycemic index refers to the speed at which carbohydrate is digested and absorbed. High glycemic index foods are digested rapidly, leading to a large increase in blood glucose. Foods with a low glycemic index digest more slowly, and produce only a gradual rise in blood glucose.

Previous studies have shown that a high carbohydrate diet can increase levels of low-density lipoproteins (LDL, or the "bad" cholesterol) and reduce high-density lipoprotein (HDL, or the "good" cholesterol). This adverse lipid profile has been linked with an increase in the risk of coronary heart disease (CHD).

In this particular study, the two foods contributing most to the high glycemic load were baked potatoes and cold breakfast cereals. These foods were previously classed as complex (as opposed to simple) carbohydrates, and play a central role in the UK dietary guidelines. However, glycemic index was a stronger predictor of heart disease than the traditional classification of simple and complex.

It's also worth mentioning that the increased risk of CHD associated with high GI foods was seen mostly in women with an average or above average weight. There was little link between glycemic index and CHD in women with low body weight. This explains why certain populations with a low prevalence of obesity (rural China for example), are at less risk for CHD despite their consumption of a high carbohydrate diet.

"These data add concern", say the researchers, "that the current low-fat, high-carbohydrate diet recommended in the United States may not be optimal for the prevention of CHD".

* Rick Mendosa gives a complete listing of the glycemic index of several hundred common foods

Reference

Liu, S., Willett, W.C., Stampfer, M.J., Hu, F.B., Franz, M., Sampson, L., Hennekens, C.H., & Manson, J.E. (2000). A prospective study of dietary glycemic load, carbohydrate intake, and risk of coronary heart disease in US women. **American Journal of Clinical Nutrition, 71, 1455-1461**