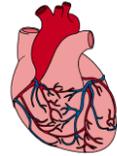


## Sugar and the Risk of Heart Disease



A recent article in JAMA highlights the minimization of the role of sugar in heart disease compared to fat<sup>1</sup>. As early as the 1950's, sugar (sucrose) intake was suspected as a risk factor for heart disease. However, the study suggests that research funded by industry in the 1960's and 1970's focused on fat as the main risk for coronary heart disease (CHD) and less attention was placed on sugar. Recent data has shown an equal risk with fat intake and sugar intake on CHD<sup>2</sup>. This study also demonstrated that the US population has the highest mortality rate due to excess fat and sugar consumption. Armed with this information, doctors can educate their patients at risk and people can make better food choices for themselves and their families.

Over the past decade, the focus on lowering fat intake has led to potentially harmful food choices. Instead of replacing high fat foods with fruits, vegetables, legumes, and whole grains, consumers have often increased their consumption of low-fat or "fat-free" varieties of naturally high-fat foods, such as fat-free snack foods. The result is often an increase in high-glycemic load (GL) refined carbohydrates and sugar. A useful resource is [www.glycemicindex.com](http://www.glycemicindex.com). This site allows you to enter many different foods and determine both the glycemic index (GI) and GL.

There are several ways to achieve a lower dietary GL:

- Replace carbohydrate with protein
- Replace carbohydrate with fat
- Replace a high-GI carbohydrate with a low-GI carbohydrate
- Combine all three methods

None of the above strategies have been proven to be more effective than the other. However, an overall low-GL diet in which carbohydrate sources are mainly comprised of fruits, vegetables, and whole grains, with low consumption of flour-based products, such as bread, other baked products and potatoes, has the most supportive data of its effectiveness. Sugar-sweetened beverages should be consumed at most occasionally, and 100 percent fruit juices should be limited to not more than one small glass per day if at all. These dietary approaches to risk reduction may be particularly effective among the most susceptible individuals, those who are already overweight and insulin resistant<sup>3</sup>. It is important that at risk patients have laboratory studies to check blood sugar levels and lipid panel.

Healthy choices for fat (mono- and polyunsaturated fats) and protein (nuts, legumes, and choose less of fish and poultry) are encouraged because of the association between type of dietary fat and risk of CHD and diabetes. Other elements of the diet, including vitamin supplements, may be important for other reasons.

Avoid foods with granulated sugar and although cane sugar and sugar in the raw are better choices, all sugars should not be consumed in high amounts. Some preferred sweetener choices are stevia (in its natural form), coconut sugar, raw honey, maple syrup and sorghum syrup. The health effects of artificial sweeteners are still in question.

Contribute to the health of yourself and your loved ones by making a conscious choice to be aware of daily sugar intake and the types of sugar ingested. Sugar intake monitoring as part of a healthy diet can go a long way to a healthier life.

References:

1. <http://archinte.jamanetwork.com/journal.aspx>
2. <http://archinte.jamanetwork.com/article.aspx?articleid=2548251>
3. <http://www.uptodate.com/contents/dietary-carbohydrates?source=machineLearning&search=sugar&selectedTitle=1~150&sectionRank=1&anchor=H18#H18>

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