

Tart Cherries May Reduce Inflammation, Lower Risk for Type 2 Diabetes & Heart Disease

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A new study shows tart cherries, one of today's hottest "Super Fruits," may help reduce inflammation, potentially lowering the risk of type 2 diabetes and cardiovascular disease in animals. The study was presented by University of Michigan researchers today at the Experimental Biology annual meeting. As science continues to reveal inflammation may be a marker for many chronic diseases, the researchers say emerging studies like this are important in examining the role diet may play in disease management and prevention.

At-risk rats with metabolic syndrome (obese, pre-diabetic) and lean, healthy rats were fed a cherry-enriched "Western Diet," characterized by high fat and moderate carbohydrate - in line with the typical American diet. Cherry-enriched diets, which consisted of whole tart cherry powder as 1 percent of the diet, reduced two known markers of inflammation by up to 50 percent. TNF-alpha was reduced by 50 percent in the lean rats and 40 percent in the at-risk rats and interleukin 6 (IL-6) was lowered by 31 percent in the at-risk rats and 38 percent in the lean rats.

While inflammation is a normal process the body uses to fight off infection or injury, according to recent science, a chronic state of inflammation could increase the risk for diseases.

"We're learning how important reducing inflammation is for our overall health and lowering the risk for heart disease and type 2 diabetes - two of the most critical health epidemics we have in this country today," said study co-author Dr. Steven F. Bolling, a cardiac surgeon at the University of Michigan Cardiovascular Center who also heads the U-M Cardioprotection Research Laboratory, where the study was performed. **"This study offers further promise that foods rich in antioxidants, such as cherries, could potentially reduce inflammation and lower disease risk."**

Both lean and at-risk rats also experienced lower cholesterol and triglyceride levels on the cherry-enriched diet, two other key risk factors for heart disease. The most at-risk animals also reduced their abdominal fat and total fat mass - particularly important given the link between excess abdominal fat and disease.

Researchers say the animal study is encouraging and will lead to further clinical studies in humans to explore the link between diet, inflammation and lowering disease risk.

The Power of Eating Red

Tart cherries, frequently sold as dried, frozen or juice, contain powerful antioxidants known as anthocyanins, which provide the bright, rich red color. Studies suggest these colorful plant compounds may be responsible for cherries' anti-inflammatory properties and other health benefits.

This new study is the latest linking this red hot "Super Fruit" to protection against heart disease

and inflammation. In fact, research suggests the red compounds in cherries that deliver the anti-inflammatory benefits may also help ease the pain of arthritis and gout. There have been more than 65 published studies on the potential health benefits which can be found in the Cherry Nutrition Report posted on <http://www.choosecherries.com>.

The study was funded by the Cherry Marketing Institute, which provided an unrestricted grant to the University of Michigan to conduct the research and was not directly involved in the design, conduct or analysis of the project. For more information visit <http://www.choosecherries.com>.

Source: *Tart Cherry-Enriched Diets Reduce Abdominal Obesity and Inflammation in Zucker Fatty Rats.* Experimental Biology 2008 702.7, Seymour EM, Urcuyo-Llanes D, Lewis SK, Kirakosyan A, Kaufman PB, Bennink MR, Bolling SF. Presented in minisymposium 702.7, Dietary Bioactive Compounds III: Chronic Disease Risk Reduction