

## Arthritis / Inflammation / Gout

Arthritis sufferers long have hailed the mysterious healing power of Michigan's tart cherries. The swollen fingers, the aching knees, the pains - all gone, thanks to the magic potion in cherries.

But only recently has scientific research proved these claims.

Michigan State University studies have confirmed that the compounds that give tart cherries their bright red shade also relieve pain. The compounds also are rich in antioxidants, which slow the body's natural process of deterioration, MSU and other scientific studies show.

As word spreads of cherry wonders, many of the state's 850 cherry farmers - who are responsible for 75-percent of the nation's tart cherry supply - are fiercely marketing their products. Juice concentrates dried and canned cherries, pie filling, frozen cherries, even tablets and chewable wafers are hot items.

Eight years of ongoing study for MSU researchers show that tart cherries have an anti-inflammatory property called anthocyanin.

**In addition, the antioxidants cherries contain are ten times more active than those in vitamin C.**

At the University of Texas Health Science Center, research scientists found tart cherries rich in melatonin. The melatonin is an antioxidant said to reach and kill "free radicals", which are toxins believed to cause or worsen diseases.

**For decades, tart cherries have quietly grown a devoted fan base of arthritis and gout sufferers who routinely consumed the fruit (particularly as juice) to help soothe their symptoms.**

**In fact, the suspicion that cherries might help with arthritis and gout was first proposed in 1950 (Blau 1950). This preliminary study found that daily cherry consumption helped to relieve "gout attacks" and the pain associated with arthritis. After eating cherries, the patients in the study had lower blood levels of uric acid. Elevated levels of uric acid are associated with the onset and progression of gout.**

What's more, a growing body of science continues to show that tart cherry consumption may help relieve arthritis and gout symptoms.

A recent study by University of Michigan researchers revealed a cherry-enriched diet reduced inflammation markers in animals by up to 50 percent. Other studies indicate that the anthocyanins in cherries may be beneficial for a range of inflammatory-related conditions, including arthritis.

Studies also suggest antioxidant-rich foods, like cherries, may help reduce levels of nitric oxide, a compound associated with osteoarthritis and rheumatoid arthritis.

Good news for those looking for natural health solutions. In a recent survey most respondents said they'd prefer to eat or drink foods with health promoting properties over medical treatment or dietary supplements. Reducing joint pain and inflammation were among the priority conditions. Also in the survey, 81% of consumers said they'd add more cherries to their daily diet if they knew the health benefits were virtually equal to dietary supplements.

"Arthritis pain can be very debilitating, limiting activity and overall quality of life," says," said Leslie Bonci, Director of Sports Medicine Nutrition in the Department of Orthopedic Surgery at the University of Pittsburgh. **"As a registered dietitian, I like to recommend food as the first solution to good health.** Cherries are great because they have these powerful anti-inflammatory properties and are easy and convenient to eat, from topping cereal or creating a smoothie, or just drinking it as a juice."

## **Cherries lowers Blood Urate Levels**

New research adds to the in vitro evidence that compounds in cherries may inhibit inflammatory pathways. Dr. Robert A. Jacob with the U.S. Department of Agriculture Western Human Nutrition Center at the University of California at Davis and a team of researchers reported the findings from their study in the June 2003 issue of The Journal of Nutrition. Ten healthy women, ages 20 to 40, consumed 45 fresh sweet cherries.

The results show that all the women had lower blood uric acid levels after consuming the cherries; the average reduction in blood uric acid levels was 15 percent. Gout, a painful disease of the joints, is associated with high uric acid levels. These high uric acid levels also can indicate future heart attacks and strokes. Information about the study also was featured in the December 2003 issue of Prevention magazine.

Dr. Jacob believes that the anthocyanins in the cherries is what caused the decrease in blood urate and that eating cherries may help lower heart attack and stroke risk. Jacob says canned or dried tart cherries and tart cherry juice contain the same anthocyanins as the fresh sweet cherries used in the study. One serving of cherries a day should have some benefit, according to Dr. Jacob.