



EDUCATION GUIDE

Inflammation Power House: Tart Cherry

Among the top 50 foods for antioxidant content, tart cherries rank 14, which is higher than either red wine or dark chocolate. Tart cherries are a power house of complex nutrients including an abundance of anthocyanins (class of flavonoids), plant phenols (including quercetin and ellagic acid). Evidence suggests that tart cherries provide excellent protection against inflammatory and degenerative diseases, cardiovascular disease, metabolic syndrome, neurodegenerative diseases along with muscle injury and pain.

Anthocyanins are responsible for the deep colors in some berries, fruits, and vegetables. Like other anthocyanin-rich foods, tart cherries provide high levels of antioxidants and anti-inflammatory benefits.

Benefits of Tart Cherry

Sleep

Because tart cherries contain melatonin, which helps regulate the body's sleep cycle, they have been found helpful for those with sleep issues. In studying the sleep benefits, Dr. Russel Reiter of the University of Texas Health Science Center stated "We were surprised at how much melatonin was in cherries." They have also been reported to assist with recovery from jet lag.

Metabolic Support

Tart cherry powder was used in research regarding metabolic syndrome using obesity-prone rats. Results showed a reduction in fat mass, weight around the abdomen, elevated fats in the blood and inflammation markers. The conclusion was that tart cherries may help diminish metabolic syndrome and the risk for Type II diabetes.

Muscle Strength & Protection

In multiple blind studies, athletic and non-athletic participants were tested before and after various exercise protocols done over 3 to 10 day time periods. Additional studies were conducted with participants in marathons. With each study, one group drank tart cherry juice and the other group drank a placebo. Results of the research showed a significant reduction in pain and strength loss caused by exercise for those receiving the tart cherry juice. Retention of muscle function overall was also indicated as well as faster recovery time. Knee extension recovery was specifically indicated in the case of the runners.

Joint Inflammation

Researchers at Baylor Research Institute, in a 2007 study, gave a tart cherry supplement to patients with osteoarthritis of the knee. Significant improvement in function and pain was experienced by more than half of the participants over the 8 weeks studied. This study, along with many others, is now building a case to support the ability of tart cherry to reverse inflammatory damage without the adverse side effects of some traditional arthritis medications.

One specific type of inflammatory arthritis is the condition gout. This condition has shown high blood concentration of uric acid along with higher risks for cardiovascular disease. A study conducted by scientists at Boston University found that intake of cherry extract reduced the risk of gout attacks (in those who suffered recurrent attacks) by 45%.

Beneficial Impact on Obesity-related Inflammation

Obesity can be both a cause and a consequence of chronic, low-level inflammation. Belly-fat deposits are a major source of inflammation and the potential cause of several degenerative health issues. Major inflammation markers were shown to be reduced in research conducted with overweight human adults who consumed daily doses of tart cherry juice over the 4 week period of the study.

Cardiovascular Protection

In 2011, research was conducted on serum triglycerides by giving participants tart cherry juice daily. The results showed an average decrease of 17%. Scientists also gave tart cherry powder to mice and found a 26% decrease in cholesterol as well as lowering cardiovascular risk. Results also indicated reduced inflammation in areas specific to the heart.

Cancer Protection

Studies have shown that the anthocyanins (class of flavonoids) such as those abundant in tart cherries may have the ability to turn off genes that affect various aspects of cancer cell replication. These potent flavonoids may also initiate the death of some pre-cancerous cells. Because tart cherries have a unique mix of anthocyanins and plant phenols, they are now being studied for their anti-cancer potential. Specifically, in 2011, a review of past studies concluded that cherries exert a variety of anti-carcinogenic effects.

Brain Protection

Recent studies have shown tart cherries may play a role in protecting neurons from damaging oxidation. Specifically, tart cherries, due to their high anthocyanin and plant phenol content, were indicated in reducing neuro-degenerative damage.

Not All Cherries Have the Same Benefits

All cherries provide substantial quantities of antioxidants and other nutrients. But **tart** cherries deliver a much greater content of various anthocyanins than sweet cherries, as well as higher amounts of beneficial plant phenols and other nutrients. A 2005 investigation extracted plant phenols from both tart and sweet (or black) cherries for further analysis and reported that tart cherries carry twice the plant phenol content as sweet cherries, along with much higher levels of the anthocyanin flavonoids. Tart cherries also contain only a fraction of the sugar and calories.

What the FDA Does NOT Want You To Know

Tart cherries may well be the ultimate super food. Due to their superior plant phenol and anthocyanin flavonoid content, tart cherry compounds may actually make a difference in reducing the risk of osteoarthritis, gout, obesity, cardiovascular disease, metabolic syndrome, diabetes, and neurodegenerative diseases such as Parkinson's and Alzheimer's.

Sources:

<http://www.edenfoods.com/store/cherry-juice-concentrate-organic.html>

<http://www.lifeextension.com/Magazine/2013/6/Anti-Inflammatory-Properties-of-Tart-Cherry/Page-01>

http://www.ehow.com/facts_5305669_health-benefits-tart-cherries.html