

Tart Cherries – Your new functional food training friend

Recent and ongoing research suggests that particular compounds found in tart cherries provide unique health benefits, which are showing promise as a favourable performance and recovery aid for active individuals. Two components within the stone fruit are of particular interest; melatonin, and the natural anthocyanins (a type of flavonoid, aka antioxidant). It is the anthocyanins which give cherries their deep, rich colour. Importantly though, the anthocyanins possess anti-inflammatory properties, which can reduce the inflammation and pain after intense training. But before you go and buy buckets of cherries from the local grocer, it's important to note that all cherries are not the same. Tart cherries (also called montmorency cherries) have significantly more anthocyanins and phenols than your standard sweet cherries.



Proposed Benefits

Studies looking at supplementation with tart cherry extract have implied a number of proposed health benefits, which include; improved sleep quality, recovery from mechanical stress (think HIIT and resistance training), metabolic stress (think prolonged endurance cycling), and even improvements in both arthritis and gout symptoms. The antioxidants within the fruit are said to “mop up” increased volumes of potentially harmful free-radicals in the body, which can be caused by intense or prolonged training. When considering the influence of tart cherries on sleep, it is the high levels of melatonin contained within the cherry that plays a role here. Melatonin is a molecule that is critical in regulating the sleep-wake cycle in humans, and tart cherries are one of the few known

food sources of melatonin. Supplementation with this concentrate in one particular study delivered improved sleep efficiency and sleep quality in younger healthy, active people. There are also a select number of studies that have seen improved melatonin levels in older individuals with insomnia; however more research into effective sleep enhancement is certainly required.



<http://www.natural-alternative-therapies.com/benefits-of-tart-cherry-juice/>

Antioxidants, Anti-inflammatory, & Recovery

In studies from a variety of exercise types, tart cherry supplementation has led to improved recovery following exercise, decreased pain while running, and reduced strength loss after damaging exercise. It is the antioxidant-rich capacity of the cherries, which inhibits certain inflammation systems within the body which is responsible for the effect here. This process has the potential to help athletes recover more quickly from their training or competition session, in preparation for the next. Field research examining runners covering approximately 27km found that cherry tart supplementation resulted in athletes having reduced perception of pain post event. In theory, and put simply; recover more efficiently >> get more out of your next conditioning session >> performance gains.

The supplementation protocol for tart cherries is yet to be fully established, as more research is needed (recurring theme warning). Several of the endurance exercise studies, however, have supplemented for approximately ~5-7 days prior to exercise, during exercise, and for 1-2 days after the exercise event. For those people more focussed towards resistance training (strength conditioning and cross fit-style exercise) tart cherries appear to be an effective dietary supplement to lessen muscle soreness, limited strength loss during recovery, and decrease markers of muscle breakdown in resistance trained individuals.

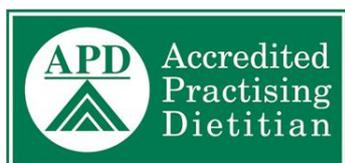
Considerations

- They add kilojoules, depending on the form being used to supplement (30ml concentrate roughly equals that of a sports gel (400-500kj). Therefore, this needs to be considered, particularly for those with energy budgets and body composition targets.
- As always, consult with your AccSD before commencing any new supplement, and with your doctor if taking prescription medication.
- Researchers have previously cautioned that high dose antioxidant supplements around exercise can dampen the effects of adaptation. No blunting effects on adaptation, however, have been demonstrated with any functional food supplementation, although there is certainly a growing need for research in this area. Regardless, many scenarios exist where accelerated recovery of performance is more important than physiological adaptation, such as cycling tours and tournament-based competitions; as a result, tart cherries have all the makings of offering a worthwhile strategy for physical recovery following strenuous exercise.

Bottom Line

Supplementation with concentrated tart cherry products may be worth considering if an individual has already optimised daily training nutrition practices and their competition fuelling. This is on top of a well-structured training program and appropriate sleep patterns. In such an instance, tart cherries may provide a small % increase in performance. Most likely, it is the individual training daily or twice daily who will benefit the most. If you feel that any of the aforementioned can benefit you, visit a SDA sports dietitian to get the best individualised advice on nutrition and supplement optimisation.

This article was written by Accredited Sports Dietitian Andrew Hall



Source: <https://www.sportsdietitians.com.au/tart-cherries-your-new-functional-food-training-friend/>

Reference

Sleigh, AE, Kuehl KS, Elliot DL . Efficacy of tart cherry juice to reduce inflammation among patients with osteoarthritis. American College of Sports Medicine Annual Meeting. May 30, 2012.

2. Kuehl KS, Perrier ET, Elliot DL, Chestnutt J. Efficacy of tart cherry juice in reducing muscle pain during running: a randomized controlled trial. J Int Soc Sports Nutr 2010;7:17-22.