NUTRITION FOR PAIN RELIEF

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INTRODUCTION

Wouldn't it be great if certain foods relieved muscle aches and pains and simply eating could help us avoid the soreness that often follows a hard workout? Recent research touted by cherry producers suggests that cherries may have NSAID-like effects (NSAIDs are non-steroidal anti-inflammatory drugs such as aspirin, ibuprofen, and naproxen), dulling the pain in muscles stressed by too much exercise. But the claim that cherries may have NSAID-like effects implies that cherries might have meaningful pharmacological effects akin to drugs. That's not only a mouthful in terms of implied benefits, it's also a mouthful in terms of its legal implications. The U.S. Food and Drug Administration frowns on product claims that state or imply that a food can cure, mitigate, treat, or prevent diseases. Foods aren't drugs and therefore drug-like claims are not permissible for foods. However, regardless of the regulatory issues, if cherries can reduce muscle aches and pains, that would be great news for anyone who exercises. So what does science have to say about the pain-relieving benefits of cherries?

First, A Little Background

Cherries, much like blueberries, cranberries, raspberries, purple grapes, pomegranate, acai berries and other dark fruits, contain nutrients known as flavonoids, secondary plant metabolites that provide the pigmentation characteristics of the fruit and also help protect the fruit from microbes and insects. Daily flavonoid intake is one of the reasons nutritionists recommend we eat several servings of fruits and vegetables each day. (There are more than 4,000 different flavonoids in foods, and we

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typically eat about 1,500 mg of flavonoids every day, so it's not as if our diets are devoid of these micronutrients.) Eating dark fruits such as cherries infuses our bodies with flavonoids such as gallic acid, kaempferol, quercetin, resveratrol, and other compounds with antioxidant and anti-inflammatory properties. Unlike taking an antioxidant supplement, eating a dark fruit provides a large array of micronutrients in the proportions that Mother Nature designed for the health of the fruit. Whether or not that array of micronutrients provides meaningful benefits for us beyond good nutrition is a question that scientists are beginning to address.

Let's Be Skeptical

Let's proceed under the assumption that foods in general, and cherries in particular, do not possess pharmacological properties such as pain relief. After all, the flavonoids contained in even a large bowl of cherries will be diluted to very low concentrations once absorbed into the body – before or after absorption, flavonoids are altered by the body into different forms with potentially less biological activity. It is not fully known how the flavonoids interact with body tissues to produce pain relief, although there are some interesting theories about how that might work. It follows then that flavonoids that produce stellar results in a test tube might not do the same in the body. With that skepticism registered, it's time to note that all of this initial doubt could be overturned by the right assortment of scientific studies.

What Does The Latest Science Say?

A 2009 research abstract from the Oregon Health &

Science University 1 concluded that subjects who ingested 20 oz. of tart cherry juice for seven days preceding the Hood to Coast relay race reported reduced symptoms of muscle soreness after the race compared to runners who drank a placebo beverage. These results suggest that cherry juice might have pain-relieving nutritional properties.

Interestingly, there are other research results that suggest benefits associated with ingesting cherry juice over a period of days or weeks:

- Lessened the muscle pain associated with eccentric arm exercise in fibromyalgia patients[2];
- Reduced markers of inflammation and enhanced recovery of muscle strength after a marathon[3];
- Improved antioxidant defense in the forearm muscles of older adults[4];
- Reduced one marker of muscle damage after exercise in horses[5];
- Decreased some markers of muscle damage and blunted the strength loss associated with eccentric arm exercise in adults[6].

These studies suggest that cherry consumption might be associated with real benefits, associations that will eventually be supported or rejected through further research. At this time, it is impossible to predict with any confidence if cherries have analgesic benefits because these six studies represent only a few pieces of a larger puzzle. Accurate scientific and practical conclusions are made possible only when there are enough pieces of competent science to create a clear view of that larger puzzle. With only a few pieces of the puzzle in hand, the current science on cherries and muscle aches is in its infancy. It is possible that other scientists may not be able to replicate these positive findings. That uncertainty is not solely the stuff of naysayers; uncertainty is part of the very nature of scientific inquiry.

What Should I Do?

If you like cherries, eat up. Cherries are wholesome, healthy, and packed with a wide variety of good-for-you nutrients. Simply put, there is no downside to including cherries (or cherry juice) in your diet and, optimistically speaking, the possible anti-inflammatory properties of cherries just might do your muscles some good. Just keep in mind that it will take years of research and dozens of studies to determine whether or not that optimism is justified.

Content is provided for informational purposes only and is not a substitute for professional advice. You should consult a physician in all matters relating to your health, and particularly in respect to any symptoms that may require diagnosis or medical attention.

References

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