

Good Practice and Adverse Drug Reactions

Beneficial effects of Cherries

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I remember well the time we were growing up in our beloved Haiti when my brother and I were waiting for the neighbor beautiful cherries to be ready to pick-up. They were delicious and we have never seen some so large and succulent. We did not have the permission to pick them up and often it was forbidden to steal them. So we invented all the tricks possible to reach the trees without being discovered. Mother was well aware of our malignant intentions and she promised "Aunty Jeanne" that she will make sure that we did not have any access to the trees.

Unfortunately, the temptation was such that just by looking at them was bringing water to our lips and my brother and I were already fixing our strategy to invade the backyard and take over our beloved fruit. It was important to avoid being caught because the punishment will be severe from Mom. We did not know at that time how nutritive were the cherries, but we knew they tasted good.

I have learned later in medical school how cherries, especially from the island of Haiti, had a high content in Vitamin C. There are also other properties and benefits you gain in eating such delicate fruits. Researchers have demonstrated that cherries contain compounds that reduce inflammation and it is one of the reasons why I have taken the habits of recommending such fruits in anybody suffering from an acute gouty arthritis.

Cherries improve sleep and support heart health. It seems that there may be more than one hundred types of cherries depending on which country you visit, but they can be of two kinds: tart or sour cherries (*Prunus Cerasus*) and sweet cherries (*Prunus Avium*). How to benefit in eating cherries depends on the way they are consumed.

[Prunus Cerasus](#)



Prunus Avium

Cherries are low in calories, but have significant amounts of Vitamin C and high amount of polyphenols. They are rich in amino-acids like tryptophan but also contain hormones like serotonin and melatonin. Cherries have also elements like iron and potassium. Phenols (phenolic compounds) are a variety of plant compounds which offer an anti-inflammatory benefits as well as an anti-oxidant effects. Tart cherries have a high concentration in phenolic compounds while Sweet cherries contain a more specific polyphenol called “anthocyanin”. It is advanced that one cup of tart cherry (140g) contains 19 g of sugar, 13gr of carbohydrates, .98 gr of fiber, 4.76 milligrams of Vitamin C, 141 mg of Potassium, no fat, (saturated or trans-fat).

“Rainier Cherry”(Washington State).



Cherries are useful in boosting up the mechanism of defense in the body through its anti-inflammatory effect. The fact was appreciated in a study performed ten years ago, revealing that chronic inflammation can contribute to the development of other chronic diseases while an imbalance between anti-oxidants and free radicals may cause cell damage in the body. It is believed that oxidative stresses occur in presence of an imbalance of antioxidants and free radicals.

Cherries are a rich source of polyphenols and vitamin C which are known for their antioxidant and anti-inflammatory effects. It has been

demonstrated, in a study in 2019, that consuming tart cherry juice over a three months period can lower sign of DNA damage, inflammation and oxidative stress in adults between the ages of 65 and 80 while another study performed earlier, has demonstrated that both type of cherries decrease the oxidative stress and the inflammation in the body.

Many studies have also suggested that “tart cherries” enhance the recovering phase through exercises, because of their high concentration in polyphenols added their anti-oxidative effects. It seems also that the phenols aid in controlling inflammation and pain similarly to any non-steroidal anti-inflammatory medications. A recent meta-analysis has also demonstrated that cherry concentrates under the form of juice or in powder, have improved endurance and boosted performance. Finally, a trial among 16 soccer player seems to have enhanced recovery among soccer players performing in spring activities.

Actual researches are also promising because it has demonstrated the presence of “melatonin” and “serotonin” in cherries, enhancing a control on the sleep-wake cycle. Pilot study claimed that cherry juice enhances sleep in adult older than 50 which suffer from insomnia.

One knows already the effects of cherries in alleviating pain in gouty arthritis but other studies have also demonstrated its analgesic affects in osteoarthritis as well. It also improves mobility in improving the quality of life. It may render the cartilage healthier. We have already discussed the beneficial effects in inflammatory arthritis and especially in Gout, helping in lowering the level of uric acid and lowering the flair-ups in acute crisis.

Cherry protects the cardiovascular system especially when High blood Pressure and High levels of Low density of lipoproteins (bad cholesterol, LDL) may represent risks factors. Cherries may also reduce the risk of Diabetes while controlling inflammation which can promote resistance to insulin, leading to a type 2 Diabetes. Also the polyphenols found in in the sweet and tart cherries can decrease as well, inflammation and oxidative

stress. So indirectly, cherry may help also in increasing the insulin sensibility, helping in the management of Diabetes.

Unfortunately, cherries are high in “salicylates” and many may develop a sensibility to this compound when consumed in large amounts. Be careful also to avoid any choking hazard when young children are eating this fruit.

In summary, cherries are a rich source of nutrients and phytochemicals which offer anti-inflammatory and anti-oxidative properties able to manage various conditions like Diabetes, cardiovascular disease, gouty arthritis etc. Cherries also improve sleep and boost exercise performance in alleviating joint pain and discomfort.

The name of Cherry also refer to the cherry tree and its wood “Cherry” and apply as well to almonds and visually similar flowering tree in the same Genus Prunus but used as an “ornamental cherry” better known under the name of “cherry blossom”. A wild cherry also exist, growing anywhere outside of cultivation. DO not confuse because the Cherry Prunus Avium tress often called “Wild cherry “in the British Isles (cherry blossom).



Cherry blossom tree

There are also other varieties around the world like the “*Prunus campanulata*” (Taiwan and Formosa), “*Prunus jamasakura*” (Mountains of Japan), “*Prunus incise*” (Fuji), “*Prunus fruticosa*” (Mongolia), *Prunus pseudocerasus* (China), “*Prunus nufa*” (Himalaya), “*Prunus tomentosa*” (bush cherry) etc. There are many cherries around the world, keeping a little the same property. The word “cherry” is also used for species that bears fruit similar in size and shape to the cherries like the Jamaican cherry or the Spanish cherry but do not represent the *Prunus* genus family.

It is believe that this fruit has been consumed throughout prehistoric times but cultivation was first recorded by the Roman after cherries were brought to Rome by Lucius Licinius Lucullus from Anatolia or Pontus region in 72 BC. Cherries were introduced in England by order of Henry VIII who tested it in Flanders. They arrived in North America around 1606 in the New France colony of Port Royal (Annapolis Royal of the recent time) in Nova Scotia in 1629.

Cherry trees require a certain number of chilling hours each year, to break dormancy and bloom as well to produce the fruit. They have a short growing season but can grow in any temperate latitudes. Cherries blossom in April, in the northern hemispheres to be harvested in the summer. It is in June in southern Europe and North America and mid-July in Canada etc. In the southern hemisphere, it is harvested in December.

Cherry trees can be difficult to grow and to keep alive. There is a black cherry aphid which is a “cherry black fly” (*Myzus cerasi*) attacking the leaves to curl them in promoting a fungal growth on the leaves and the fruits. Others in Europe (cherry fruit fly *Rhagoletis cerasi*) and their larva will feed on the fruit itself and lay their eggs in the immature fruits and exit through a little hole, leaving a fungal infection.

The cherry kernels, accessible by chewing or breaking on the hard-shelled cherry pit contain “amygdalin”, a chemical that release hydrogen cyanide when ingested, generally 4 to six but swallowing the pits whole causes no complications.

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