The IMPORTANCE of TART MONTMORENCY CHERRY CONCENTRATE by Immunotec

Immunotec's Cherry Concentrate is derived from pure flash-pasteurized Montmorency Tart Cherries, one of nature's miracles. Tart Cherries are an important source of phytonutrients, is derived from the Greek word "phyton" for "plant" and means a "nutrient from a plant" that promotes good health.

Anthocyanins are a water-soluble pigment that gives the deep, rich color to tart cherries and belong to a group of compounds called flavonoids. Epidemiological evidence suggest that due to the protective effects associated with the antioxidant activity, the higher the amount of flavonoids in the diet, the lower the risk for heart disease. And among the flavonoids found in plant foods, anthocyanins possess the greatest antioxidant power.

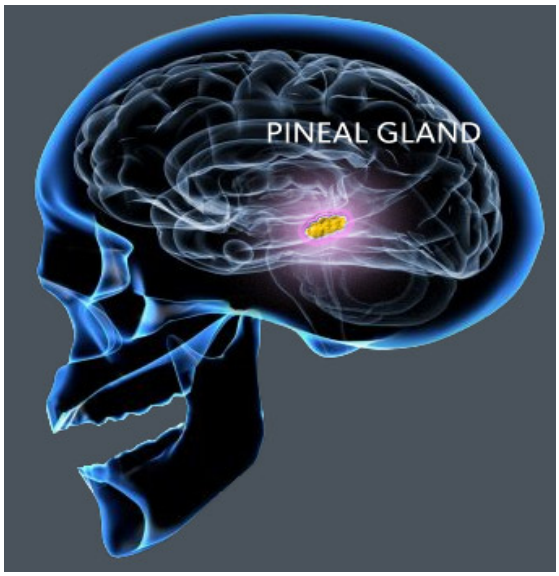
Free radicals are created by environmental toxins, drugs, alcohol, or as the by-product of digestion. They steal electrons from our cells and instead create weak and unhealthy cells. Therefore, neutralizing free radicals is essential to good health.

The brain is particularly susceptible to oxidative damage from free radicals, since it accounts for approximately 20% of the oxygen consumption but is only 2% of the body weight. Numerous studies indicate that the anthocyanins abundant in tart cherries may protect brain cells from oxidative damage.

Tart cherries are also naturally high in vitamin A, C, B6, E, folic acid, thiamin, betacarotene, fiber, phosphorous, potassium, iron and magnesium, and have virtually no fat or sodium.

But the surprising quality of tart cherries came from Dr. Russel Reiter, a preeminent scientist and the Dean of Melatonin Research at the University of Texas, when he discovered Montmorency cherry concentrate contained significant amounts of melatonin. Melatonin is soluble both in fat and water and can enter some cells that vitamins cannot. For example, vitamin E is soluble in the lipid (fat) part of the cell only and vitamin C in the water part. But melatonin is soluble in both. For this reason Dr. Reiter says, eating cherries with high melatonin concentrations will increase the antioxidant capacity in the body. He also extols the benefits of consuming natural melatonin through foods to obtain the beneficial antioxidant compounds. **Brunswick Labs discovered that tart cherries contain a class of compounds called super oxide dismutase (SOD) that acts as potent scavengers of dangerous free radicals. Very few natural foods contain SOD and the human body is often lacking in them.**

Melatonin is a hormone produced by the pineal gland (the size of a pea) in the brain, located between the two hemispheres that helps regulate natural sleep patterns and biorhythms, but is also distributed throughout the body.



The pineal gland doesn't just produce melatonin, but is the richest site of serotonin production in the brain. Serotonin converts to melatonin and works to regulate the function of all organs of the Endocrine System including the Pituitary Gland, the Thyroid and Parathyroid glands, the Thymus, Pancreas and the Ovaries and Testes. Every endocrine organ and gland secretes their hormones to the blood, where the pituitary gland stimulates the secretion of these hormones, than the pineal gland regulates the amount of melatonin to counteract the level of hormones that are too high. If melatonin drops too low, the pineal gland will convert available serotonin to melatonin to assist with REM sleep.

Melatonin also controls the timing and release of the female reproductive hormones, and helps determine when menstruation cycles start and when menopause begins. Melatonin also stimulates cells called osteoblasts that promote bone growth. Depleted levels of melatonin may contribute to the development of osteoporosis, increased risk of breast and prostate cancer, rheumatoid arthritis, epilepsy and heart disease.

Many medications alter melatonin production. SSRIs, sleeping pills, benzodiazepines, alcohol, caffeine, tobacco, anti-inflammatory medications, many cardiovascular medications, steroids, aspirin and ibuprofen all suppress or deplete melatonin secretion.

SSRIs, Benzodiazepines and Sleeping pills initially increase melatonin production, but the rebound effect is actually reduced levels and less production. Additionally, SSRIs allow too much serotonin to accumulate in the pineal gland thereby forcing it to over-produce melatonin from the excess serotonin during the day. This excess production also increases the levels of melatonin in the eyes, and could correlate to visual/eye problems. This may help to explain the light sensitivity, spots and blurred vision that many antidepressant and benzodiazepine users report. SSRIs then deplete and interfere with the normal absorption of melatonin throughout the body, which can also lead to hormonal issues.

Continued use of Benzodiazepines and Sleeping Pills interfere with the natural Rapid Eye Movement (REM) sleep stages where dreaming occurs. But SSRIs can also interrupt the normal REM stages and can cause vivid and troubling dreams that carry into the conscious state. During the night, we shift from the predominant non-rapid eye movement (NREM) dreamless sleep to short segments of REM where dreams occur. Both NREM and REM sleep cycles are necessary to have restorative effects. But sleep medications and benzodiazepines dramatically reduce the length of time we spend in the dream stage and instead keep us in a light dreamless sleep.

Natural sleep doesn't just support physical health, but has a profound effect on our brain as it organizes and archives memories, and is essential to the creative process.

Melatonin has been shown to assist in restoring natural sleep patterns, but there is evidence that the dose of melatonin in many standard supplements is too high, and should not exceed 0.1mg to 0.5mg. The body typically secretes between 5 and 25 micrograms (mcg) of melatonin nightly – therefore a 2 milligram (mg) tablet of melatonin is 80 times greater than what the body needs. In high doses tolerance can set in and the melatonin receptors become less responsive. Tart cherries contain 13.5 nanograms (ng) of melatonin per gram of cherries, slightly more than is normally found in human blood.

Melatonin also stimulates the body's most powerful master antioxidant, Glutathione.

Many commercial melatonin tablets are synthetic. Ingesting a natural food source, such as tart cherries is a healthier alternative.

Most cherry concentrates are fully pasteurized to extend the shelf life, but the extended high temperatures also destroy the essential nutrients and enzymes.

Immunotec's Cherry Concentrate is the only flash-pasteurized tart cherry extract on the market. Flash-pasteurization ensures no preservatives are needed, but the extract is heated only for 5-10 seconds to ensure surface bacteria is eliminated while the critical enzymes and nutrients are retained.