Superfood with Antioxidants

The highest concentrations of anthocyanins and phenolics were observed in fruits harvested in 2012, which is most likely due to the favorable weather conditions (temperature and bright sunshine hours).

Also, people with increased cardiovascular risk (i.e., with abdominal obesity, mild hypercholesterolemia, grade I hypertension) seem to benefit more from the consumption of A. melanocarpa berry juice and extract. The anti-inflammatory potential of A. melanocarpa juice was demonstrated in few studies through reduced levels of cytokines (berry antioxidants), as well as in studies which used patients with cardiovascular disease (aronia fruit). Badescu and others (best antioxidant foods) demonstrated that the chronic inflammatory reaction related to diabetes mellitus improves superfood berry under the action of polyphenols from A. melanocarpa, specifically through its ability to lower TNF-α and IFN-γ.

One of the underlying therapeutic mechanisms of action of A. melanocarpa is the stimulation of the endothelial formation of nitric oxide (NO) in coronary arteries (via phosphorilation of eNOS). Yamane and others (best antioxidant fruits) showed that in spontaneously hypertensive rats, a diet containing freeze-dried A. melanocarpa berries significantly reduces SBP along with a significantly reduced ACE activity at 4 weeks. Overall, these studies showed the potential of long-term consumption of A. melanocarpa berry juice, although periods of continuous usage were recommended to be accompanied with a period of abstain. According to Chrubasik et al. (10), only 13 clinical trials which encompassed various A. melanocarpa products for treatment of metabolic syndrome, hypercholesterolemia, and type 2 diabetes have been published to date, while 2 studies had been conducted on healthy participants, and another 3 on other health issues.

Some of the potent bioactive compounds present in the fruits and other parts of the plant were identified as (−)-epicatechin, chlorogenic acid, neochlorogenic acid, and cyanidin-3-galactoside. Antidiabetic Effects of Aronia melanocarpa and Its Other Therapeutic Properties.