ANTHOCYANINS AND ANTHOCYANIDINS

Anthocyanins and anthocyanidins (not to be confused with one another) are colored water-soluble pigments and phytonutrients within the same flavonoid family.

ANTHOCYANIN FAST FACTS

- Anthocyanins are known for their rich red, purple, and blue pigments
- Anthocyanidins are the sugar-free counterparts to anthocyanins
- Currants, grapes, berries, have high anythocyanin content, as well as eggplant, red cabbage, and some types of beans and rice

The dietary supplement industry has long-touted the health benefits of anthocyanins and anthocyanidins. Studies have indicated that anthocyanin consumers may have reduced risk of heart attack and heart disease by decreasing blood pressure and preventing arterial stiffness[2]. With the amount of health support anthocyanins offer, it's no wonder the dietary supplement industry has an interest in better understanding these phytochemicals and how to best incorporate them within functional foods, beverages and supplements.

ANTHOCYANIN MVP's

- **Bilberry**: a common raw material in the dietary supplement industry and a close relative to blueberry, studies have indicated a relationship between bilberry anthocyanins and improved visual function[1]. Other studies have also illustrated that bilberry extracts may be effective inhibiting growth of cancerous cells in humans[3].
- **Purple Corn**: a newly emerging source of anthocyanins, purple corn contains, on average, ≥15% anthocyanin content. Several studies have illustrated a possible relationship between purple corn anthocyanins and decreased inflammation in diabetic kidneys[4].

ChromaDex provides a number of chemical reference standards, including but not limited to: apigenindin chloride, delphinidin chloride, malvidin chloride, and a variety of procyanidins. All members of the anthocyanin family can be searched on ChromaDex's online catalog at chromadex.com/chromadex-catalog/

References

1. Shim, S.H., et al., Ginkgo biloba extract and bilberry anthocyanins improve visual function in patients with normal tension glaucoma. J Med Food, 2012. 15(9): p. 818-23.
2. Jennings, A., et al., Higher anthocyanin intake is associated with lower arterial stiffness and central blood pressure in women. Am J Clin Nutr, 2012. 96(4): p. 781-8.
3. Katsube, N., et al., Induction of apoptosis in cancer cells by Bilberry (Vaccinium myrtillus) and the anthocyanins. J Agric Food Chem, 2003. 51(1): p. 68-75.
4. Kang, M.K., et al., Purple corn anthocyanins inhibit diabetes-associated glomerular monocyte activation and macrophage infiltration. Am J Physiol Renal Physiol, 2012. 303(7): p. F1060-9.