

Ecklonia Cava Extract: SuperAntioxidant?

by Mason Ballenger

Ecklonia Cava Extract, or ECE, is a standardized series of molecules that originate from Ecklonia cava, a specific species of brown algae. ECE represents a unique variety of polyphenols known as phlorotannins, which have a unique structure that promotes biological activities not obtained from land-based plants.

Many scientists believe that ECE is a unique type of antioxidant. They estimate that Ecklonia Cava Extract is stronger than green tea extract by a factor of 10 to 100 times. It is also 40% fat soluble, which lets its effects be spread throughout more of the body than other antioxidants. It also stays in the blood significantly longer than other antioxidant compounds - up to twelve hours, by some estimates. The ORAC value, or antioxidant score, of ECE is also very high: 8300 mol TE/100g.

ECE is known as a super antioxidant. Its polyphenols have up to eight interconnecting rings, compared to the four rings of green tea catechins. This contributes to its powerful free-radical scavenging ability. Also, it has the ability to cross the blood-brain barrier.

Peroxynitrite is believed to be a dangerous free radical that ECE is especially good at neutralizing. Peroxynitrite has been linked to everything from chronic fatigue syndrome and fibromyalgia to multiple chemical sensitivities, and many more conditions. ECE also contains important inflammatory mediators, and has demonstrated neutralizing abilities towards oxidized LDL cholesterol particles.

Ecklonia Cava Extract was administered to a group of established fibromyalgia patients in an 8-week, placebo-controlled, double-blind study. The participants reported positive results: higher energy levels, sounder sleep, reduced pain, improvement in general condition, and more good days per week. They study also indicated that ECE increased overall nighttime sleep, and reduced the time it took to fall asleep in these patients.

ECE has been shown to be beneficial in fighting obesity, promoting weight loss, and providing cardiovascular benefits. Ecklonia Cava Extract contains heart-healthy compounds that scavenge free radicals in the bloodstream and promote healthy cholesterol levels. Its weight loss benefits have also been studied in rats and humans. Laboratory rats given ECE showed greater physical activity and decreased body fat. Young adults given a drink containing Ecklonia Cava Extract showed decreased body fat and increased muscle mass.

Ecklonia Cava Extract may help protect against Alzheimer's disease. Laboratory rats given ECE showed an inhibition of beta-amyloid formation in the brain, a substance which accumulates in Alzheimer's disease. Ecklonia Cava Extract has also been linked to general improvements in brain function. Many benefits have been observed: protection of neural cells, enhancements in brain activity related to memory formation, increased blood flow to the carotid artery, as well as general improvements in memory, relaxation, and alertness.

Many other benefits of ECE have been studied. The unique compounds in Ecklonia Cava Extract have been shown to aid with a variety of conditions, such as arthritis, inflammation, allergies, asthma, erectile dysfunction, and diabetes. As this fascinating substance continues to be researched, even more benefits may reveal themselves.

About the Author: Mason Ballenger has studied a variety of nutritional supplements and antioxidants. He believes that ecklonia cava extract is a highly beneficial supplement that should be part of any nutritional regime.