



Anthocyanins - plant technology that might offer an important role in health, disease protection and sports applications

ANTHOCYANINS are flavonoids naturally found in a number of foods. They are the pigment component that gives the fruit or vegetable their pink, red or purple colour and are stimulated by exposure to sunlight.

Part of a plant's polyphenol make-up, anthocyanins are mainly found in the skin and act as ultra-violet defense and protect against pathogens and pests.

Shown in research to offer multiple health functions, there is emerging evidence of anthocyanins' probable role in the prevention of various diseases. They are one of the main components that make berries a 'superfood'.

Anthocyanins act as antioxidants, which fight against oxidative stress and free radical attacks on the body's cells.

The combination of anthocyanins is important and the key antioxidants in blackcurrants make up 90% of the antioxidant level which do not appear in other berry fruit, such as blueberries.

Anthocyanins found in blackcurrants are also considered to be anti-inflammatory, anti-viral and are highly regarded for their effect on blood flow and vascular health.

While the unique actions of blackcurrant anthocyanins have been suggested in research to have a wide range of potential beneficial effects for brain and eye health, neuro-degenerative age-related conditions, gut health, cardiovascular disease, metabolic disorders such as diabetes and obesity, the implications for sports science are a new discovery.

The actions of anthocyanins in specific varieties of New Zealand-grown blackcurrants have been shown to increase fat oxidation by up to 27%, delay the rise of lactate across all exercise intensities, help control muscle soreness/fatigue and improve endurance.

Scientists believe NZ blackcurrant anthocyanins are responsible for influencing fat metabolism processes during exercise. This action has been found to accelerate fat loss during low and moderate-intensity activity, and considered one of the key mechanisms behind improving performance.

This discovery in 2015 set this New Zealand berryfruit apart from any other, and is the first fruit extract found to have such a profound effect on substrate oxidation.