

PRESS RELEASE

TO THE EDITOR

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FUJI GROWS CARDIOVASCULAR BODY OF SCIENCE FOR ASTAXANTHIN

Burlington, NJ, January 7, 2010 - A new human clinical study conducted at Jikei University, Japan showing a positive relationship between AstaREAL astaxanthin supplementation and cardiovascular health has been accepted for publication by the *Atherosclerosis Journal* and is currently in Press and available on line. (Yoshida, H. et al.)¹ With astaxanthin supplementation at a dose of 12mg per day this randomized, placebo-controlled study showed a significant decrease in blood serum triglyceride and increase in HDL-cholesterol levels with a corresponding increase in serum adiponectin, independent of age and BMI.

This study joins a growing arsenal of research involving the study of AstaREAL astaxanthin in the area of cardiovascular benefit conducted throughout the world including Japan, Europe and the US. Three separate studies were performed at Toyama Medical & Pharmaceutical University, Japan showing a significant decrease in blood pressure with delayed onset of stroke in spontaneous hypertensive rats. (Hussein et al. 2005 & 2006)^{2,3,4} Another study conducted at Georgetown University Medical Center, USA also showed a decrease in blood pressure in Zucker Fatty Rats. (Preuss et al. 2008)⁵ The studies at both Toyama and Georgetown also explored the mechanism of action for blood pressure reduction.

A human blood rheology study, performed in Japan, (Miyawaki et al. 2005)⁶ demonstrated that AstaREAL astaxanthin supplementation significantly increased peripheral capillary blood flow. At Linköping University, Sweden (Wei Li et al. 2004)⁷ astaxanthin was studied in hyperlipidaemic rabbits for its ability to decrease macrophage infiltration, apoptosis and vulnerability in atheroma. In another human clinical (Karppi et al. 2005)⁸ performed in Finland using a randomized double-blind study design, AstaREAL astaxanthin supplementation was investigated for its ability to reduce lipid peroxidation in healthy non-smoking men, aged 19-33 years. Finally, a study designed to investigate the mental and physical effects of astaxanthin supplementation on subjects with increased oxidative stress burden was performed at Doshisha University, Japan on 20 healthy postmenopausal women. (Iwabayashi et al. 2009)⁹ After eight weeks of AstaREAL astaxanthin supplementation ABI (ankle brachial pressure index) significantly increased (suggesting reduced lower limb vascular resistance) and a significant reduction in both systolic and diastolic blood pressure was shown.

AstaREAL astaxanthin is a Global Brand of Fuji Chemical Industry Co., Ltd., a Japanese pharmaceutical company with a 63 year history that is the world's leading producer of natural astaxanthin for human nutritional use with state of the art facilities in Hawaii, Sweden and Japan. Fuji has sponsored more than 40 studies over the past 15 years investigating astaxanthin's health benefits, including the 9 aforementioned cardiovascular studies.

Charles DePrince, president of Fuji Health Science, Inc. (a US subsidiary of Fuji Chemical) said, "Fuji is highly committed to supporting astaxanthin research. It is exciting to see scientific data finally reaching critical mass for an important area such as cardiovascular health. I believe astaxanthin will soon be viewed and understood as much more than just another antioxidant."

Some of the other areas of astaxanthin research that Fuji is actively supporting include diabetes and metabolic syndrome. Fuji Chemical also holds seven patents for astaxanthin in human application as well as numerous pending patents. Fuji's AstaREAL brand of astaxanthin is approved for use in nutritional supplementation in the U.S., Europe, and Japan, as well as other markets worldwide.

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Reference:

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