

the effects of ARONIA-PASCOE® Aronia extract are mediated by its potent antioxidant properties. Furthermore, treatment with ARONIA-PASCOE® Aronia extract lowered markers of pro-inflammatory processes including highly sensitive C reactive protein. Thus ARONIA-PASCOE® Aronia reduces the factors that directly promote atherosclerosis.

Oxidative stress is involved in the metabolic abnormalities associated with metabolic syndrome and type-II diabetes which are conditions in which atherosclerosis and hypertension invariably occurs. Adiponectin is a biologically active molecule that is secreted by adipose tissue and supports the action of insulin. The levels of adiponectin are decreased in obese or insulin resistant subjects and reflect the disturbance of metabolism in these patients (Tsuda, Ueno et al. 2006). An increase in adiponectin concentration was also observed following treatment ARONIA-PASCOE® Aronia extract and this indicates positive metabolic effects.

All the effects that are observed in this study are clinically-relevant and occurred after 6 weeks which is impressive. Also both placebo and ARONIA-PASCOE® Aronia extract treated groups were receiving statin treatment. This would mean that ARONIA-PASCOE® Aronia extract offers additional benefit on top of standard chemical drug treatment in reducing blood pressure and inhibiting atherosclerosis.

It is concluded that intake of flavonoids of a high antioxidant potency such as those present in ARONIA-PASCOE® inhibits the progression of atherosclerosis in patients after myocardial infarction and under statin treatment (Naruszewicz, Daniewski et al. 2003).

References

- Naruszewicz, M., M. Daniewski, et al. (2003). "Effect of anthocyanins from chokeberry (*Aronia melanocarpa*) on blood pressure, inflammatory mediators and cell adhesion molecules in patients with a history of myocardial infarction (MI)." *Atherosclerosis Suppl* 4(2): 143.
- Tsuda, T., Y. Ueno, et al. (2006). "Microarray profiling of gene expression in human adipocytes in response to anthocyanins." *Biochem Pharmacol* 71(8): 1184-97.