

# Cinnamon extract could ease metabolic syndrome

## NanoGreens10 Cinnamon Blend Features the Cinnamon Extract, Cinnulin PF

10/18/2006 - **A daily supplement of cinnamon extract may boost antioxidant defenses and reduce the oxidative stress linked to the metabolic syndrome, suggest results from a small placebo-controlled, double-blind study from the US.**

*"This study tells us that the active compounds found in [cinnamon](#) extract may be helpful in reducing the risk of these diseases by providing cells protection from harmful oxidation,"* said Dr. Richard Anderson from the U.S. Department of Agriculture and a collaborator on the study.

[Metabolic syndrome](#) (MetS) is a condition characterized by central obesity, hypertension, and disturbed glucose and insulin metabolism. The syndrome has been linked to increased risks of both type-2 diabetes and CVD.

Fifteen per cent of adult Europeans are estimated to be affected by MetS, while the US statistic is estimated to be a whopping 32 per cent.

The new study, presented earlier this month at the 47th American College of Nutrition annual meeting, adds to a growing body of research reporting that active compounds in cinnamon may improve insulin sensitivity in people with impaired fasting blood sugar levels.

The study is said to be the first to show an effect of cinnamon extracts on [antioxidant](#) status in humans and adds further support to the potential beneficial effects on glucose metabolism.

Twenty-four participants with impaired fasting glucose were recruited for the placebo-controlled, double-blind study, led by Dr. Anne-Marie Roussel from the Joseph Fourier University in France. They were randomly assigned to receive either a daily dose of 500 milligrams of cinnamon extract (Cinnulin PF, Integrity Nutraceuticals) or a placebo for 12 weeks.

At the end of the study the researchers found that plasma antioxidant levels, as measured by ferric reducing ability of plasma (FRAP) and plasma SH (thiols) were both significantly increased, relative to the placebo group. Plasma levels of the compound, malondialdehyde (MDA), a reactive carbonyl compound related to oxidative stress, were also decreased as a result of cinnamon supplementation, but were unchanged in the placebo group.

NutraIngredients.com has not seen the original data, nor has it been published to date in a peer-review journal.

Dr. Anderson said in a statement that the results of Dr. Roussel's study were *"extremely positive."*

*"People with impaired insulin function are at a higher risk of developing life-threatening chronic diseases, including diabetes and heart disease, the number one killer in the U.S. This study tells us that the active compounds found in cinnamon extract may be helpful in reducing the risk of these diseases by providing cells protection from harmful oxidation,"* he said.

A previous study by Dr. Anderson reported in 2003 (*Diabetes Care*, Vol. 26, pp. 3215-3218) that just 1g of the spice per day reduced blood glucose levels, as well as triglycerides, LDL cholesterol, and total cholesterol in a small group of people with type 2 diabetes.

A placebo-controlled, double-blind study published in May (*Journal of the American College of Nutrition*, Vol. 25, pp. 144-150) reported that cinnamon and a cinnamon extract (Cinnulin PF) could reduce blood pressure in spontaneously hypertensive rats (SHR).

There have been toxicity concerns over consistent consumption or high doses of whole cinnamon or fat-soluble extracts.

Tim Romero, vice president, [Integrity Nutraceuticals](#) International, marketer of Cinnulin PF, welcomed the results: *"Cinnulin PF provides a safe and effective nutritional solution to millions of people suffering from impaired insulin function and pre-diabetes."*

*"Moving forward we will continue to invest our time and resources in additional clinical studies to further validate the science in support of Cinnulin PF,"* he said.

According to Integrity, Cinnulin PF contains standardized quantities of the active components of cinnamon, two trimers and one tetramer classified as double-linked type-A polymers, but not the potentially harmful compounds.

Cinnulin PF is claimed to be the only cinnamon extract standardized for these compounds

