

Embargo: 26 November 2008

CLINICAL TRIAL SHOWS ROOIBOS CAN HELP PREVENT HEART DISEASE

ANNOUNCED AT ROOIBOS SCIENCE CAFÉ, MTN SCIENCENTRE, CANAL WALK

Cape Town, 26 November 2008: Results from a new clinical trial on the health properties of Rooibos show that this popular herbal tea may help to prevent the development of heart disease. "We have found that Rooibos is particularly effective at reducing oxidative damage to lipids (fats), thereby helping to prevent or slow down atherosclerosis, or the hardening of arteries," says Dr Jeanine Marnewick, who led the clinical trial at the Oxidative Stress Research Centre at the Cape Peninsula University of Technology.

"We measured the effect of Rooibos by looking at two markers in the blood that are indicators of oxidative lipid damage, namely conjugated dienes (CDs) and malondialdehydes (MDAs)", Marnewick explains. "We observed a decrease of nearly 35% in CDs in the blood of the Rooibos-drinking participants and a 50% decrease in MDAs."

Oxidative damage in lipids is accepted as a very important step in the development of atherosclerosis. CDs are formed during the early stages of oxidation (destruction) of important cellular components such as lipids (fats). MDAs are oxidation endproducts of polyunsaturated fatty acids that causes defects in protein synthesis and enzyme inactivation in human cells. Patients with coronary artery disease usually have a higher MDA level than normal.

"We also monitored oxidative stress by measuring the ratio of oxidized vs reduced glutathione (GSH) in the blood," Marnewick explains. "Our results show a significant improvement - and therefore decreased risk of heart disease - in the study participants who drank six cups of Rooibos per day."

Forty men and women between 30 and 60 years, each with two or more risk factors for developing heart disease, participated in the study. They drank six cups of Rooibos per day for six weeks and followed a modified diet free of other flavonoid-rich foods to make sure the health effect could be ascribed to Rooibos only.

More ...

This study also generated the first human safety data in a controlled clinical trial environment, scientifically showing that short-term consumption of Rooibos is safe for the liver and kidneys while keeping various blood parameters (such as blood pressure and cholesterol levels) in a normal range.

"We are excited about these results and are in the process of compiling a manuscript for submission to a scientific journal for peer review and ultimately publication," Marnewick adds. Heart disease is a major killer in South Africa and many other countries. Therefore the positive results of this study may help to increase the relevance of Rooibos as a safe and affordable way to reduce this health risk.

"While there is a convincing body of anecdotal evidence about the health benefits of Rooibos, our industry is committed to investing in world class research in order to verify where and how Rooibos is most effective and how people can benefit from this unique South African beverage," says Mientjie Mouton, director of the SA Rooibos Council's product research portfolio. "We are hopeful that the outcome of this and future clinical trials will enhance the credibility of Rooibos as a leading functional food product."

Marnewick plans to continue her Rooibos research by looking at genetic differences between the study participants (to possibly explain why some people responded differently to Rooibos), and will also investigate how the bio-active compounds in Rooibos prevents DNA damage (an important step in the development of cancer). She also wants to investigate the effect of Rooibos on stress levels, by measuring changes in the cortisol (a stress-related hormone) in the blood.

Funding for this study came from the Cape Peninsula University of Technology, National Research Foundation (Technology and Human Resources for Industry - THRIP - project), and the South African Rooibos Council.

Issued by: South African Rooibos Council

Enquiries: Soekie Snyman; 082-6497077; Email: ssnyman1@telkomsa.net

Interviews: Dr Jeanine Marnewick, CPUT

Tel: 021-460 8314; Fax: 021-460 3193; Mobile: 082-8979352;

Email: MarnewickJ@cput.ac.za

Background information on Rooibos science and industry: www.sarooibos.org.za