

Rooibos Research Summary

A collaborative study by scientists at four international research facilities has found the first clinical evidence that drinking rooibos tea significantly increases the antioxidant capacity in human blood, thereby boosting the body's natural defenses.

Researchers in Rome and Glasgow found that the antioxidant capacity in the blood of 15 healthy volunteers peaked one hour after drinking 500ml ready-to-drink rooibos tea.

“On the basis of the results of our study, we conclude that Rooibos tea is able to deliver antioxidant ingredients to the body, thereby stimulating the body's internal redox network,” says Professor Mauro Serafini, leader of this research project and Head of the Antioxidant Research Laboratory at INRAN, a nutrition research institute in Rome, Italy. *“It is highly possible that, once absorbed in the circulatory stream, the unique ingredients of Rooibos may display other biological activities in the human body. That is why we are planning further intervention studies in humans to investigate the effect of Rooibos tea on the body's strategy of defense to counteract the development of heart disease.”*

By Dr Carl Albrecht, August 2009.

Researchers at South Africa's Medical Research Council found that rats who drank Rooibos tea, as their only source of liquid, for ten weeks, had a five-fold elevation of the ratio of reduced glutathione to oxidized glutathione. Glutathione is a master antioxidant made by the body, especially the liver, and its function as an antioxidant is greatly dependent on favorable cell pH. Taken as an oral supplement, glutathione uptake is typically poor. Our glutathione levels and activity decrease with ageing, smoking and poor body pH. Studies show that adequate glutathione levels can help to counteract heart diseases, cancer and ageing. Consequently, it is reasoned that if Rooibos can elevate the reduced glutathione to oxidized glutathione ratio (GSH/GSSG), this remarkable effect could help to reduce the risk of cancer (and other lifestyle diseases).

In another recent study, South African Jeanine Marnewick, PhD of the Cape University of Technology found that healthy volunteers elevated their blood glutathione levels by 100%, drinking 6 cups of Rooibos tea per day for three months. These results point to growing convergence of evidence that Rooibos could play an important role in reducing the risk of heart disease and cancer. Rooibos tea is naturally caffeine-free, low in tannins and is grown with organic, sustainability guidelines. Research studies help to understand and verify the health promoting properties of Rooibos. Clinical trials are necessary to confirm these health benefits for people. After years of laboratory and animal work on Rooibos in South Africa and around the world, the first clinical Rooibos trials in adults got underway in 2007, in Cape Town. In their laboratory and animal studies, researchers focus on demonstrating that Rooibos indeed delivers desired biological activity such as antioxidant activity and immune support. They explore the precise mechanisms whereby the active ingredients in Rooibos work, the structure of these compounds and how these antioxidants behave in different environments. Many research groups around the world have published articles on Rooibos since the 1960's.

Rooibos studies currently underway at South Africa's Medical Research Council include:

- a) Interactions between toxins and Rooibos flavonoids in biological systems.
- b) Effect of Rooibos on colon cancer.

Flavonoids present in Rooibos extract include: orientin, aspalathin, vitexin, rutin, quercetin, luteolin, and chrysoeriol.