ROOIBOS TEA

African Red Tea

Ideal liver treatment. Reduces hunger by optimizing glucose and insulin interactivity. Increases Superoxide Dismutase.

- **Superoxide Dismutase (SOD) is an enzyme that repairs cells and reduces the damage done to them by superoxide, the most common free radical in the body.**

Summary

The health benefits of rooibos tea seem to be mostly due to the flavonoids aspalathin and nothofagin, although other compounds in rooibos may also play a part. Here's a summary of the benefits:

- Acts as an antioxidant and increases SOD levels
- Prevents DNA damage
- Cardiovascular protection through ACE inhibition
- Suppresses fasting glucose levels
- Improves glucose uptake and insulin secretion after a meal
- Aids in liver tissue regeneration
- Lowers blood pressure
- Acts as a bronchodilator and antispasmodic
- Inhibits lipid peroxidation and brain aging
- Rooibos extract improves immune defects such as HIV

- Feeding normal, healthy rats given rooibos tea instead of water had significantly higher serum superoxide dismutase (SOD) levels than the control rats). They also had less DNA damage, a result that confirms the findings of an earlier study). Futhermore, when the rats were given dextran sodium sulfate to induce colitis, the rooibos group had higher SOD levels, and the drop in hemoglobin levels seen in the control group was prevented. Thus, rooibos tea seems to be anti-inflammatory and have the potential to prevent DNA damage.

  The cardiovascular benefits of rooibos tea

  Due to their effects on vasodilation and vasoconstriction, angiotensin I-converting enzyme (ACE) inhibitors and nitric oxide (NO) are used to treat conditions such as high blood pressure and heart failure. In one study, the effect of green tea, black tea and rooibos tea on ACE and NO was compared in healthy human volunteers). None of the three had a marked effect on NO concentration, but both green tea and rooibos tea inhibited ACE activity, suggesting that they have cardiovascular benefits. This is in contrast to an earlier *in vitro* study which found that only green tea and black tea inhibited ACE).

Closely related to cardiovascular disease is diabetes. The good news is that that rooibos tea may help with this as well. In a mouse model of type 2 diabetes, aslapathin suppresses the increase in fasting blood glucose levels. It also improves glucose tolerance, apparently through stimulating glucose uptake in muscle tissues and insulin secretion from the pancreas). Drinking rooibos tea during a meal may not be a bad idea.

Rooibos tea for liver disease and respiratory problems

In rats, rooibos tea aids in liver tissue regeneration after prolonged intoxication. Compared to the rats receiving water during the regeneration period, the rooibos group had less fibrotic tissue in their livers and lower tissue malondialdehyde levels. The authors conclude that rooibos tea "can be recommended not only for the prevention but also as a co-adjuvant for the therapy of liver diseases."

Rooibos tea also has therapeutic potential for respiratory ailments. According to a study on rats, in addition to lowering blood pressure, rooibos tea is both a bronchodilator and an antispasmodic). This helps explain why rooibos tea is commonly used for gastrointestinal and respiratory problems. The flavonoid chrysoeriol seems to be mainly responsible for the bronchodilator and antispasmodic effect.

Rooibos extract fights HIV

Rooibos tea extract seems to be helpful in antigen-specific antibody production by increasing interleukin-2 (IL-2) production *in vitro* and *in vivo*). According to the authors, rooibos tea intake "may be of value in prophylaxis of the diseases involving a severe defect in Th1 immune response such as cancer, allergy, AIDS, and other infections."

Another study found that an alkaline extract of rooibos tea leaves suppressed HIV-induced cytopathicity). Green tea extract, on the other hand, was ineffective. The authors conclude that HIV infection may be suppressed by the daily intake of the alkaline extract of rooibos tea. Note that the extraction mechanism is important here, because regular rooibos tea does not have anti-HIV activity). See the abstracts for details.

Rooibos tea, lipid peroxidation and brain aging

The uncontrolled oxidation of lipids, which can happen during cooking or inside the body, leads to the formation of advanced lipid peroxidation end-products (ALEs). The accumulation of such products is one of.

Lipid peroxides also accumulate in the brain. Rooibos tea may help prevent this damage, however. Rats given rooibos tea instead of water accumulate

significantly less aging damage in the brain than rats given water). In fact, the 24-month old rats given rooibos tea for most of their lives had brains similar to young 5-week-old rats. This is quite a remarkable result.

One study found that out of the flavonoids tested, quercetin and EGCG (found in green tea) were the best inhibitors of lipid peroxidation, while aspalathin had a similar potency as catechin). Nothofagin was of no use here, however. Since polyunsaturated fats or, it seems like a cup of green tea or rooibos tea with a meal containing polyunsaturated fats might be useful.

The difference between red and green rooibos tea

Typically, rooibos leaves are oxidised before they are used to make rooibos tea. This process, which is not exactly the same as the fermentation process used in making black tea, gives them the familiar reddish-brown color and the slightly sweet taste. However, unoxidised rooibos tea is also available, if you know where to look. The color and taste are quite different; I personally prefer the red version, but green rooibos tea is not bad either.

Like in the case of regular tea, the oxidation process also affects the flavonoid content of the tea. Unoxidised rooibos tea contains more about twice as much total flavonoids as oxidised tea and 10-fold higher levels of aspalathin and nothofagin). In the studies that have directly compared the two, the unoxidised version seems to generally come out on top. For example, unoxidised rooibos tea seems to protect rats from liver cancer more effectively than oxidised tea). The antimutagenic activity of the two depends on the mutagen in question, however).

Since nothofagin and especially aspalathin are not really found in any other plant, rooibos tea looks like a valuable addition to one's health regimen. Even people who are not fans of green tea usually like the taste of rooibos tea. Since rooibos contains no caffeine, it can be also enjoyed in the evening.