

Protection against acute and chronic oxidative damage in rat liver by rooibos (*Aspalathus linearis*) and honeybush (*Cyclopia intermedia*) teas.

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The increasing popularity of rooibos and honeybush as health beverages can be ascribed to their antioxidant, antimutagenic activities as well as caffeine-free and low tannin contents. In the present study the protective effects of aqueous herbal tea extracts against fumonisin B₁ (FB₁), a food borne carcinogenic mycotoxin, and carbontetrachloride (CCl₄)-induced liver damage in rats, were investigated. For the chronic-induction of oxidative damage, rats were treated with tea extracts for 2 weeks prior and 3 weeks during the FB₁ feeding (250 mg FB₁/kg diet). Lipid peroxidation induced by FB₁, was significantly (P<0.05) decreased by aqueous extracts of processed rooibos and honeybush and unprocessed honeybush. Processed and unprocessed honeybush also significantly (P<0.05) reduced the FB₁-induced serum cholesterol levels. Unprocessed rooibos and honeybush teas significantly (P<0.05) to markedly increased the liver function enzymes induced by FB₁, respectively. For the acute induction of oxidative damage, rats consuming the various tea extracts for 10 weeks received a single gavage dose of CCl₄ (0.05 ml/100g body weight). The unprocessed herbal teas significantly (P<0.05) protected against the induction of liver and kidney serum enzymes. Protection against induced oxidative damage in the liver is likely due to the modulation of the oxidative status by the herbal teas.