

## Beneficial Effects of Argan Oil on Cardiovascular Risk Factors

Pr Adil EL MIDAOU

**Objective:** The present study was designed to examine the effects of argan oil on two cardiovascular risk factors notably arterial hypertension and insulin resistance as well as on the aortic basal superoxide anion production and NADPH oxidase activity in one nutritional model of hypertensive and insulin-resistant rat.

**Methods:** Sprague-Dawley rats had free access to a drinking solution containing 10% D-glucose or tap water (control) for 5 weeks. The impact of argan oil was compared to that of corn oil given daily by gavage (5 mL/kg) during 5 weeks in glucose-fed rats. Oxidative stress was evaluated by measuring the superoxide anion production and the NADPH oxidase activity using the lucigenin method.

**Results:** Five weeks treatment with glucose led to increases in systolic blood pressure, plasma glucose and insulin levels and insulin resistance index in association with a rise in superoxide anion production and NADPH oxidase activity (sensitive to diphenyleneiodonium) in the aorta. The simultaneous treatment with argan oil prevented or significantly reduced all those effects, yet the same treatment with corn oil had a positive impact only on hyperinsulinemia and insulin resistance.

**Conclusions:** These findings demonstrate that argan oil treatment reduced the elevation in blood pressure, hyperglycemia and insulin resistance through its anti-oxidative properties in glucose-fed rats. Hence argan oil which is now available in the market as consumable food may be of potential therapeutic value in the treatment of arterial hypertension and insulin resistance.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5535876/>