

# Mango peel helps you stay slimmer

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(Medical Xpress) -- It might not be the tastiest part of the fruit, but for anyone wanting to look their best this summer they should think about new ways of eating mango.

Scientists have discovered that chemicals in the peel, but not the flesh, of certain [mango](#) varieties prevent the formation of [fat cells](#).

Their work is published in the latest issue of the [Royal Society of Chemistry](#) journal, *Food and Function*.

The Australian researchers found that the peel of two varieties - Irwin and Nam Doc Mai - successfully suppressed adipogenesis, the process which develops fatty cells in the body. Tropical fruits, such as mango, contain different quantities and mixtures of different phytochemicals (chemicals found naturally in plants), some of which have been shown to block fatty cells from forming.

As mango is rich in phytochemicals and popular in both developed and developing countries, the researchers at the University of Queensland chose to study the ability of three varieties of mangoes to inhibit adipogenesis. They also compared the yellow flesh to the peel.

Greg Monteith, who led the team, said: "A complex interplay of bioactive compounds unique to each peel extract is likely responsible for the differences, rather than just a single component."

The peel from the third variety, Kensington Pride, caused a slight

increase. This was because the researchers identified phytochemicals unique only to Kensington Pride peel, which may explain the increase in lipid accumulation.

The flesh of all three varieties failed to give an inhibitory effect. This is again because of the different phytochemical compositions of the flesh and peel.

Further analysis of the phytochemical composition of the peel and flesh will help to develop food products based on mangoes.

One possible unwanted side effect of eating the peel though is that inhibition of adipogenesis may mean larger adipose cells, which can result in the development of type 2 diabetes. In vivo studies will show the benefit these chemicals could have in the treatment of obesity. In the long term, the team want to understand what genes are important in creating the different phytochemical compositions of the mangoes.

**More information:** Mango fruit peel and flesh extracts affect adipogenesis in 3T3-L1 cells, M-W Taing et al, *Food and Function*, 2012 [DOI: 10.1039/c2fo30073g](https://doi.org/10.1039/c2fo30073g)

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