

# MEDIA RELEASE

NEWS FROM THE UNIVERSITY OF TASMANIA

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ATTENTION: Chiefs of Staff, News Directors

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## Chillies - a hot new way to improve health

The flavour-potent chilli could pack a punch in the future prevention and treatment of diabetes and cardiovascular disease - the leading cause of morbidity and mortality in developed countries.

A UTAS School of Human Life Sciences research team is investigating the biological activity of the two active ingredients of chillies – capsaicin and dihydrocapsaicin.

Their work has shown the capsaicinoid chemicals have the potential to lower blood glucose and insulin levels, reduce the formation of fatty deposits on artery walls and prevent blood clots – minus some of the nasty side-effects of traditional medications.

The research released at today's launch of the UTAS publication, *Research to Reality*, could lead to chillies replacing or being used in conjunction with current medications for treating and preventing cardiovascular disease.

Pro Vice-Chancellor for Research, Professor Johanna Laybourn-Parry said that despite the provision of multiple medical treatments, cardiovascular disease remains one of the biggest causes of death in Australia.

“Cardiovascular disease continues to generate a considerable burden on the population in terms of illness and disability and the development of improved methods for prevention and treatment are essential,” Prof. Laybourn-Parry said.

“Research such as this exciting work is central to the University's role in the community at the local, national and international level.

“UTAS has an annual research budget of more than \$60 million, which is sourced from a wide range of government and private enterprise funding bodies.”

UTAS research fellow at the School of Human Life Sciences, Dr Kiran Ahuja, and her co-researchers are currently assessing the comparative effectiveness of chilli and aspirin on blood thinning. Hyper-aggregation of blood platelets is associated with thrombosis and cardiovascular disease.

The study will investigate what amount of chilli gives the same effect as a standard dose of aspirin on platelet aggregation and will be followed up with a dietary intervention study.

“Aspirin is commonly used to inhibit platelet aggregation, however, it has a nasty side effect, which causes stomach bleeding in patients,” Dr Ahuja said.

Dr Ahuja said it was possible that one day chillies would replace aspirin, or be combined with aspirin, as a medication for the prevention and treatment of cardiovascular disease.

This work on blood coagulation follows on from Dr Ahuja's earlier investigations that showed a potential role of chilli in prevention of diabetes and formation of fatty deposits on artery walls.

Her study published in the *American Journal of Clinical Nutrition* found that eating a meal containing chillies lowered post-meal blood glucose and insulin concentrations. High levels of glucose and insulin are associated with an increased risk for the development of diabetes.

The School of Human Life Science also confirmed that regular consumption of chillies helps prevent the development of fatty deposits on artery walls. Dr Ahuja and her co-researchers found that chillies help reduce the oxidation of LDL-cholesterol and therefore reduces the chance of plaque formation in the arteries.

The chilli versus aspirin project is being funded by the University of Tasmania's Institutional Research Grants Scheme, which supports early career researchers, with \$16,400.

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