Increasing gut defences

Research at UTAS is helping to build stronger stomachs.

Led by Dean of Health Science Professor Raymond Playford, the research team has been investigating a simple compound called DMOG that triggers the body to increase production of growth and healing compounds to protect against injury.

Prof Playford said the gastrointestinal tract possessed the amazing ability to digest food but not to digest itself, thanks to strong defence mechanisms. But certain situations could cause these defence barriers to break down, such as the use of aspirin-type drugs.

The healthy body can undertake a series of repair processes to heal the defect, including increasing various growth or healing proteins.

“But artificial production and delivery of these proteins to stimulate repair is complicated and expensive,” Prof Playford said.

Preliminary studies with the DMOG compound have recently been published in the journal Laboratory Investigation showing administration of the compound protected the stomach against injury from aspirin-type drugs. The research suggested DMOD stimulated the early processes of repair and increased production of two proteins within the body that help healing – Hypoxia inducible factor and vascular endothelial growth factor.

“These are early, preliminary results but potentially very exciting. The use of relatively simple compounds to stimulate repair has great potential for gut injury and other conditions,” Prof Playford said.

To arrange an interview please contact the media office on 6226 7489.

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