



## COMPLICATIONS | BIOMEDICAL RESEARCH

### **Project: Mechanisms of sustained metabolic benefits of intermittent fasting**

**Through donor support, Dr. Hoon-Ki Sung, Associate Professor with the Department of Laboratory Medicine & Pathobiology at the University of Toronto, is examining whether intermittent fasting can help prevent liver disease in people with type 2 diabetes.**

In healthy individuals, blood sugars are controlled by a hormone called insulin, which lowers blood sugar levels. For people with type 2 diabetes, they can no longer produce or use enough insulin to control their blood sugars, which can lead to health complications such as liver disease, kidney failure, and even death.

Currently, medications to treat liver damage in people with diabetes are costly and ineffective over the long run. Intermittent fasting is an alternative that holds the promise of long-term, low-cost improved liver health.

A 2023 clinical study demonstrated that intermittent fasting led to the remission of type 2 diabetes in patients and improved liver function; however, we don't know if these benefits persist after fasting is stopped.

Dr. Sung is studying how intermittent fasting helps improve liver health.

**Dr. Sung and his team's research will improve our understanding of how intermittent fasting can be used as a preventive, curative, safe and low-cost treatment for liver damage in people with diabetes.**