“Mechanisms Linking Prolonged Nightly Fasting with Cancer Risk”

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Abstract:
Obesity is an epidemic. Identification and validation of feasible, effective approaches to reduce obesity-related cancer risk is needed. Research studies indicate that time-restricted feeding can protect against obesity, high insulin levels, fatty liver, and inflammation - all of which can increase cancer risk. Through this PEDAL15-funded study, researchers will test whether, in comparison to a short fasting interval, a 13-hour or greater nightly fasting interval is associated with lower blood glucose levels, lower inflammation, lower levels of obesity, and improved sleep. Scientists will also investigate the association of prolonged nightly fasting with metabolites in the blood, such as sugars and fats, and the association of nightly fasting with the gut microbiome (a collection of all microorganisms and viruses that live in the intestines). If habitual prolonged nightly fasting improves metabolic health and reduces obesity-related cancer risks, this would be a crucial discovery in the prevention of cancer in adults.