



MEDICINE 2040

Rewriting the future of healthcare

A MACHINE LEARNING APPROACH TO SELECT THE TYPE OF INTERMITTENT FASTING IN ORDER TO IMPROVE HEALTH BY EFFECTS ON TYPE 2 DIABETES.

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Intermittent fasting (IF) means cycling between periods of eating and fasting. The main types of IF are: Complete alternate-day fasting which involves alternating fasting days with eating days; Time-restricted feeding Allows eating within specific time frames the most popular time frame is the 16:8 fast (16 hours of fast and 8 hours for eating); Religious fasting like Ramadan fasting which occurs one month in every year.

IF can be effective in reducing metabolic disorders and age-related diseases. Specifically changes in metabolic parameters associated with type 2 diabetes. However, there remain questions about the effects of the different types of IF with respect to the age in which fasting begins, the gender and level of diabetes type 2.

Here we describe a machine learning approach to select the best type of IF to improve health by effects on diabetes 2. For the purposes of this research, the health outcomes of interest are changes in the Glucose, HbA1c and Insulin.

The different types of Intermittent Fasting offer promising nonpharmacological approaches to improving health at the population level, with multiple public health benefits. Further research should be done to understand better the mechanism of the Fasting on improving health.