



Intermittent Fasting: The Solution to Overeating and Food Conservation

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Introduction

- The world population is nearing 10 billion people
- Numbers from the past 5 years: 13% of the world is obese, 39% of the world is overweight, while only 8-9% of the world is starving
- Many people in the world have too much to eat, while others have too little
- Intermittent fasting (IF) for those who are non-starving is the solution to feeding 10 billion people and solving worldwide obesity
- Intermittent fasting includes cycling between periods of eating and fasting
- Types of fasting: alternate-day fasting, whole-day fasting (5:2), and time-restricted feeding
- Alternate day fasting: 24 hours of not eating followed by 24 hours of normal eating
- Whole-day fasting: not eating for two, 24 hour periods throughout a 7 day week (often 5 days of normal eating, 2 days of fasting)
- Time-restricted feeding: 14-20 hour periods of fasting each day
- Intermittent fasting aids in weight loss, reduction of body fat, and other health benefits

INTERMITTENT FASTING MADE SIMPLE



Figure 1. Intermittent Fasting Made Simple
+Mariska. (2021, February 16). What is intermittent fasting and the what are the benefits? Retrieved April 15, 2021, from <https://mariskarichters.com/2019/11/20/what-is-intermittent-fasting/>

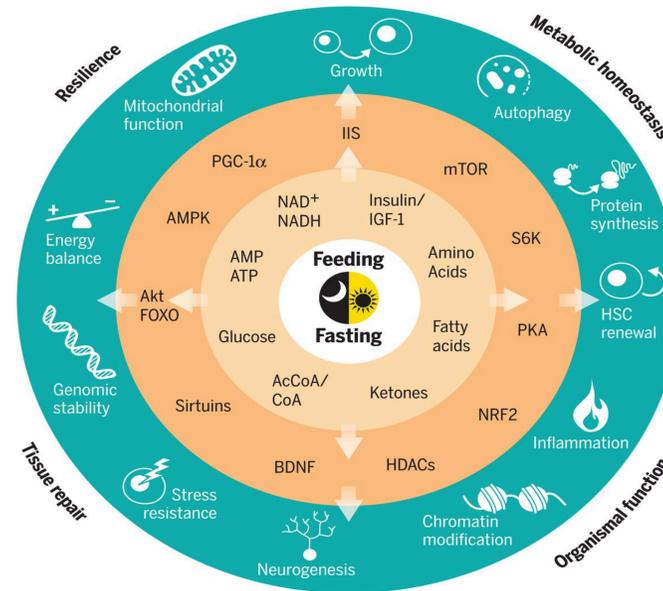


Figure 2. Fasting time and energy restriction share biological responses implicated in metabolite-controlled longevity pathways.
Francesco, A., Germanio, C., Bernier, M., & Cabo, R. (2018, November 16). A time to fast. Retrieved April 15, 2021, from <https://science.sciencemag.org/content/362/6416/770/tab-figures-data>

Presentation of Research

- Intermittent fasting gained mainstream popularity in the last 10 years, but has been around for a long time
- IF research in mice has shown effectiveness in weight loss and reduction of body fat
- Other health benefits in mice: lower BP, lower resting heart rate, slowed neurodegenerative disease, slowed cancer growth
- IF studies in humans show effectiveness in weight loss and lower BMI for obese and healthy weight
- Hunger levels decrease during IF
- IF in humans lowers risk of coronary artery disease and reduces chronic inflammation
- IF by itself or in combination with exercise is better than exercise alone
- Other health benefits of IF: slowed tumor growth, alignment of circadian rhythm, slowed rate of cognitive decline

Presentation of Research cont.

- People who practice IF may be at risk of developing unhealthy eating habits and possible eating disorders
- IF should not be practiced in those who are type 2 diabetic, pregnant, under the age of 18, or grossly underweight
- Studies are not in total agreement whether IF is better than continuous energy restriction at losing clinically significant weight
- More research is needed on long term effects of IF, which type of IF is best, accuracy of health benefits

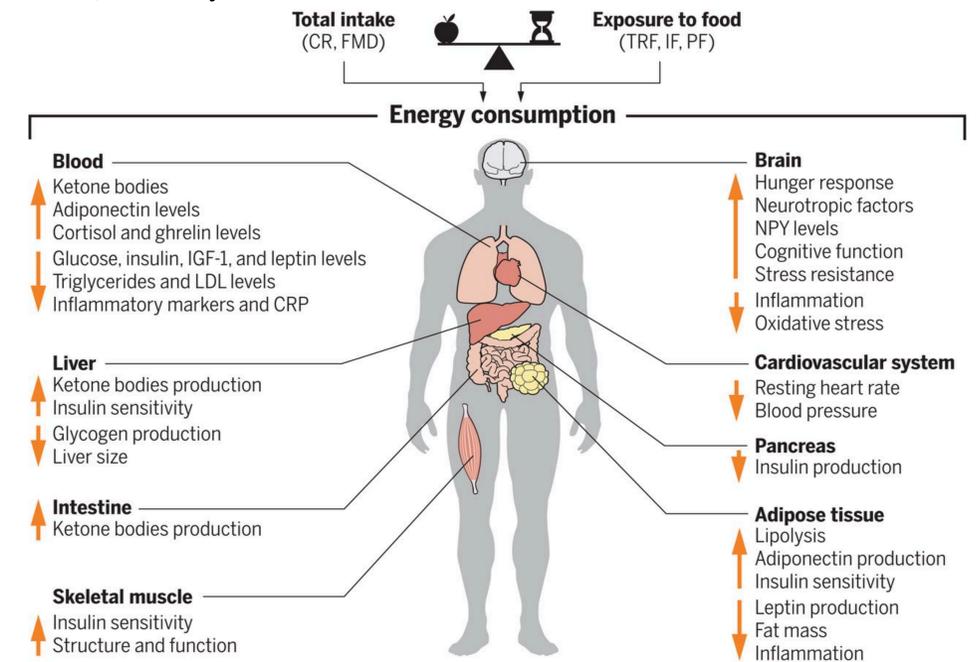


Figure 3. Systemic effects of caloric restriction or intermittent fasting.
Francesco, A., Germanio, C., Bernier, M., & Cabo, R. (2018, November 16). A time to fast. Retrieved April 15, 2021, from <https://science.sciencemag.org/content/362/6416/770/tab-figures-data>

Conclusions and Recommendations

- Intermittent fasting works for many, and there is evidence to prove it
- Changing the status quo diet to intermittent fasting can solve the skewed distribution of obese, overweight, and starving people in the world
- IF has the potential for health risks, so it should be approached with informed caution
- Studies show IF results in weight loss, lowered BMI, fat loss, and numerous general health benefits
- More research is needed to confirm the accuracy of health benefit claims
- IF can help eliminate excessive food consumption and food demand
- IF in the general population can help feed 10 billion people