The Effects of Intermittent Fasting on Body Composition in Resistance Trained Males: A Review of the Literature

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Background:
Hunter-gatherers of the late Palaeolithic era would often undergo periods of plentiful food (feast) whilst there was an abundance of supplies, as well as periods of food shortage (famine) often due to drought conditions, failure to kill during a hunt, as well as illness. This trend would result in a series of feast-famine or “fasting” practices. Fasting, as with many health and exercise related concepts, has found its way from ancient practice into modern society, with one of the most recent forms of the fasting diet being that of intermittent fasting (IF). Some of the proposed benefits from IF are; improved health, improved insulin response, hormonal response and substrate utilisation, as well as improved body composition.

Purpose:
The purpose of this literature review was to examine the proposed health benefits of fasting, the physiological and metabolic pathways affected by fasting, as well as its effect on body composition changes.

Findings:
Many animal studies have shown intermittent fasting to increase life span, stress relief, insulin sensitivity and improve CVD by reducing blood pressure and heart rate; however the research in human subjects is not conclusive. Metabolic improvements from intermittent fasting are also inconclusive from the current literature in human subjects and as a result there is also a lack of research around intermittent fasting and body composition. Some studies have found no improvements in body composition in relation to intermittent fasting. However, the studies that have found improvements in body composition haven’t addressed the variable of energy intake.