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# A Comparison of Obesity Interventions Using Energy Balance Models

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Title: A Comparison of Obesity Interventions Using Energy Balance Models

Abstract: An energy balance model of human metabolism developed by Hall et al. is extended to compare body composition outcomes among standard and proposed obesity interventions. Standard interventions include drastic diet and endurance training with typically poor outcomes. Proposed interventions include resistance training to preserve lean mass and metabolic rate and a reverse diet. We observe that the proposed interventions may lead to continued maintenance of a healthy body composition following a diet.