



A DELAYED MORNING AND EARLIER EVENING TIME-RESTRICTED FEEDING PROTOCOL FOR IMPROVING GLYCEMIC CONTROL AND DIETARY ADHERENCE IN MEN WITH OVERWEIGHT/OBESITY: A RANDOMIZED CONTROLLED TRIAL.

Parr, EB ; Devlin, BL ; Radford, BE ; Hawley, JA
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Dietary strategies which focus on the timing and duration of eating and fasting, rather than the type, quality or quantity of foods, appear to improve metabolic health independent of weight loss. Time restricted feeding (TRF) refers to an eating pattern where food intake is limited to a certain duration, e.g. 8 hours. The aim of this randomized crossover trial was to compare the effects of TRF versus extended feeding time (EXT). 11 sedentary men with obesity/overweight had their three meals which contained equal calories and macronutrient composition, either at 10:00, 13:00 and 17:00 or at 07:00, 14:00 and 21:00 for 5 days, and after a 10 days wash-out phase, swapped to the other feeding pattern. The TRF improved blood glucose control after breakfast and lunch and at night. The TRF pattern was well accepted by participants who felt that it improved their general wellbeing, helped them reduce snacking and the structure encouraged good habits. Work, social and family life schedules were noted as potential barriers to adopting TRF.

TWO APPLES A DAY LOWER SERUM CHOLESTEROL AND IMPROVE CARDIOMETABOLIC BIOMARKERS IN MILDLY HYPERCHOLESTEROLEMIC ADULTS: A RANDOMIZED, CONTROLLED, CROSSOVER TRIAL

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Apples contain naturally occurring substances, called polyphenols, which in combination with fibre may be beneficial in preventing heart disease in a number of different ways. However, high quality research on this is lacking. This randomised control crossover trial of 40 individuals with slightly elevated cholesterol, aimed to assess the effects of consuming two apples a day for 20 weeks, on indicators for heart disease and in particular cholesterol levels. The results showed that consuming two apples per day resulted in decreased cholesterol and improved indicators for heart disease. It was concluded that the consumption of 2 apples per day decreased heart disease risk, attributed to the polyphenols and fibre they contain. Health professionals could use this study to recommend 2 apples per day in patients with slightly raised cholesterol in order to decrease their risk of heart disease.



THE EFFECTS OF LOW-ENERGY MODERATE-CARBOHYDRATE (MCD) AND MIXED (MIXD) DIETS ON SERUM LIPID PROFILES AND BODY COMPOSITION IN MIDDLE-AGED MEN: A RANDOMIZED CONTROLLED PARALLEL-GROUP CLINICAL TRIAL

Michalczyk, MM ; Maszczyk, A ; Stastny, P
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Diets high in poor quality carbohydrates and fats and low in fibre are believed to play an integral role in the formation of many different chronic diseases. Calorie restricted diets have previously shown to have health benefits, but these are stringent and hard to maintain. More recently low-carbohydrate diets have shown that they may be better tolerated. This randomised control trial aimed to compare a calorie restricted diet (MixD) with a calorie restricted moderate-carbohydrate diet (MCD) on indicators for chronic disease in 60 overweight and obese men over four weeks. The results showed that MCD resulted in significant loss of body fat without loss of muscle mass compared to MixD and significantly decreased markers for heart disease risk. It was concluded that the amount of body fat can be attributed to the amount and quality of carbohydrates consumed and that consumption of a MCD is more effective for weight loss without compromising muscle mass than a MixD. This study could be used by health professionals to recommend a MCD to middle aged obese men in order to lose body fat, retain muscle mass and reduce their risk of heart disease.



LIPID METABOLISM LINKS NUTRIENT-EXERCISE TIMING TO INSULIN SENSITIVITY IN MEN CLASSIFIED AS OVERWEIGHT OR OBESE.

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Following exercise, various metabolic changes occur which may be of benefit in fighting diseases such as type 2 diabetes and obesity. However, the degree of change may vary depending on whether the exercise has been performed pre or post meal consumption. This 6-week randomised crossover trial of 30 overweight or obese men aimed to determine the effect of exercising before or after breakfast on the use of fats and sugars by the body. The results showed that exercise before breakfast increased fat and sugar use in the body and also resulted in the alteration of eight genes associated with metabolism. Exercise before carbohydrate consumption also increased lipid use and improved insulin sensitivity, however body composition was similar regardless of when exercise was performed. It was concluded that exercising in the fasted state can optimise the body's response without having to change intensity or effort. This study could be used by health care professionals to advise patients with obesity or overweight that exercising whilst in the fasted state could optimise their outcomes without having to increase exercise intensity or frequency.

