

A new study has shown that a low GI, low calorie diet is more effective for controlling hunger, and improving weight loss and insulin sensitivity than a low-fat, high GI diet.

## A low glycemic index diet with moderate amounts of carbohydrates is effective for weight loss, improving satiety, and improving metabolic risk factors

Obesity is one of the most significant health concerns worldwide and is related to health issues such as hypertension, type 2 diabetes, cardiovascular disease, and some cancers. Low-glycemic index (GI) diets have shown to have beneficial effects in many chronic conditions such as these, but their impact on weight loss, satiety and inflammation are still somewhat inconclusive.

In a new study published online in the *American Journal of Clinical Nutrition*, researchers compared the effects of 3 diets on weight loss, satiety, inflammation and other metabolic markers. The randomized controlled study included 122 overweight or obese men and women aged 30 to 60 years. During the study period of 6 months, participants were randomly assigned to one of 3 isocaloric, energy-restricted diets: 1) a moderate-carbohydrate and high-GI diet (HGI), 2) a moderate-carbohydrate and low-GI diet (LGI), 3) or a low-fat and high-GI diet (LF) patterned after the American Heart Association Diet.

Reductions in BMI were greater in the LGI group than the LF by week 16 and at the completion of the study. Measurements of insulin sensitivity, fasting insulin and beta-cell function were all significantly better in the LGI group than the LF group. Although the differences in the 3 groups didn't reach statistical significance, there was a tendency for a greater improvement with a low-GI diet with respect to hunger, satiety, lipid profiles and other inflammatory and metabolic markers.

The results of this study showed that a low-calorie low-GI diet with moderate amounts of carbohydrates is more effective than a high-GI low-fat diet at decreasing body weight and improving markers of insulin metabolism.

Martí Juanola-Falgarona et al. Effect of the glycemic index of the diet on weight loss, modulation of satiety, inflammation, and other metabolic risk factors: a randomized controlled trial. *Am J Clin Nutr* doi: 10.3945/ajcn.113.081216.