Low glycaemic index or low glycaemic load diets for overweight and obesity

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Summary

Overweight and obese people lost more weight on low glycaemic index diets than on high glycaemic index or other weight reduction diets and their cardiovascular risk marker profile improved

There is a lack of consensus as to the best nutritional management of obesity. We assessed the effects of low glycaemic index or glycaemic load diets in overweight or obese people. Six randomised controlled trials, involving 202 participants, were analysed. Interventions ranged from five weeks to six months duration. Participants receiving the low glycaemic index or load diet lost a mean of one kilogramme more than those on comparison diets. Lipid profile also improved more in participants receiving the low glycaemic index or load diet. No study reported adverse effects, mortality or quality of life data.

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Abstract

Background

Obesity is increasingly prevalent, yet the nutritional management remains contentious. It has been suggested that low glycaemic index or load diets may stimulate greater weight loss than higher glycaemic index or load diets or other weight reduction diets.

Objectives

To assess the effects of low glycaemic index or load diets for weight loss in overweight or obese people.

Search strategy

Trials were identified through *The Cochrane Library*, MEDLINE, EMBASE, CINAHL and manual searches of bibliographies.

Selection criteria

Randomised controlled trials comparing a low glycaemic index or load diet (LGI) with a higher glycaemic index or load diet or other diet (Cdiet) in overweight or obese people.

Data collection and analysis

Two authors independently selected trials, assessed quality and extracted data, including any information provided on adverse effects.

Main results

We identified six eligible randomised controlled trials (total of 202 participants). Interventions ranged from five weeks to six months duration with up to six months follow-up after the intervention ceased. The decrease in body mass (WMD -1.1 kg, 95% confidence interval (CI) -2.0 to -0.2, P < 0.05) (n = 163), total fat mass (WMD -1.1 kg, 95% CI -1.9 to -0.4, P < 0.05) (n =147) and body mass index (WMD -1.3, 95% CI -2.0 to -0.5, P < 0.05) (n = 48) was significantly greater in participants receiving LGI compared to Cdiets. The decrease in total cholesterol was significantly greater with LGI compared to Cdiets (WMD -0.22 mmol/L, 95% CI -0.43 to -0.02, P < 0.05), as was the change in LDL-cholesterol (WMD -0.24 mmol/L, 95% CI -0.44 to -0.05, P < 0.05). No study reported adverse effects, mortality or quality of life data.

Authors' conclusions

Overweight or obese people on LGI lost more weight and had more improvement in lipid profiles than those receiving Cdiets. Body mass, total fat mass, body mass index, total cholesterol and LDL-cholesterol all decreased significantly more in the LGI group. In studies comparing ad libitum LGI diets to conventional restricted energy low-fat diets, participants fared as well or better on th LGI diet, even though they could eat as much as desired. Lowering the glycaemic load of the diet appears to be an effective method of promoting weight loss and improving lipid profiles and can be simply incorporated into a person's lifestyle. Further research with longer term follow-up will determine whether improvement continues long-term and improves quality of life.

Referência:

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