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**Weighing up dietary patterns: Authors’ reply**

The two letters in response to our Review[1](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib1) pose two different, but related, questions: should we recommend weight-loss diets and is one diet better than another? We think that two dietary patterns—the Mediterranean-style diet[2](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib2) and the Dietary Approaches to Stop Hypertension (DASH) plan[3](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib3)—are valuable for most of the population in either normal-calorie or low-calorie versions. Florian Stigler and colleagues suggest that we should stop recommending weight loss, but we would argue that weight loss can be very beneficial for individuals who are at risk for diabetes,[4](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib4) and those with hypertension,[5](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib5) sleep aponea,[6](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib6) or osteoarthritis. During the 10 year follow-up of the Diabetes Prevention Programme,[4](http://www.sciencedirect.com/science/article/pii/S0140673616313599%22%20%5Cl%20%22bib4) the cumulative incidence of diabetes was reduced by 32% in people initially randomised to the intensive lifestyle group, even though average weight of the control and intervention groups no longer differed. Average weight loss in trials masks considerable heterogeneity of response; for example, in the Look AHEAD study, more than 50% of participants in the intensive lifestyle intervention group maintained at least a 5% weight loss, and some participants maintained a much higher level of loss.[5](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib5) In individuals who lose weight and maintain the lower weight, blood pressure remains low[6](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib6) and sleep apnoea can be substantially improved over 4 years.[7](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib7) We thus believe that removal of the recommendation for weight loss for individuals who are at high risk for disease would be ill advised.

The idea that one or another macronutrient combination such as a low-glycaemic diet might have a miraculous effect on weight loss is the basis for the letter by Arne Astrup and colleagues. In our Review we said “The jury is still out about low-glycaemic index or low-glycaemic load diets”,[1](http://www.sciencedirect.com/science/article/pii/S0140673616313599%22%20%5Cl%20%22bib1) compared with their assertion that low glycaemic diets are effective and safe for weight management. We maintain our original stance. If a diet has effects on cardiovascular risk factors such as triglycerides, LDL cholesterol, HDL cholesterol, and blood pressure these effects should be apparent within a few weeks; no such effects were seen in the carefully conducted clinical trial of Sacks and colleagues.[8](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib8) The reduction in triglycerides noted by Schwingshakl and Hoffmann in their meta-analysis[9](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib9) could be the result of differences in carbohydrate intake, which is the major factor affecting insulin and triglycerides. In the well-designed and executed DiOGenes study,[10](http://www.sciencedirect.com/science/article/pii/S0140673616313599%22%20%5Cl%20%22bib10) the low-glycemic index diet was only effective in maintaining reduced weight when coupled with a high protein diet. When coupled with a low protein diet, weight gain parallels that in the other three groups. Similarly in the adolescent component of this trial,[11](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib11) the biggest contrast in change of body-mass index *Z* score seemed to be between the low protein and high protein diets, and the difference in glycaemic index was unimportant. In another trial of low-glycaemic and high-glycaemic diets cited by Astrup and colleagues, “weight loss did not differ between groups” and the “Change in body fat percentage [the primary endpoint] also did not differ between groups for the full cohort over the course of the study (p=0·81)”, which does not support low-glycaemic index diets. [12](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib12) Although C-reactive protein declines more in people on low-glycaemic index diets than people on high-glycaemic index diets,[13](http://www.sciencedirect.com/science/article/pii/S0140673616313599#bib13) this reduction is not enough to deter us from our initial conclusion that “The jury is still out about low-glycaemic index or low-glycaemic load diets”. We thus believe that weight loss by dieting has clinical merit, but that evidence favouring any one macronutrient diet remains weak.

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