

(number needed to treat, 2.6). Individuals that will benefit include older patients (age >80 years), those ineligible to receive tissue plasminogen activator (tPA), and those with internal carotid artery or M1 occlusion. We agree with the authors that the findings “have global implications on structuring systems of care”¹ to ensure no eligible patient is missed under these expanded criteria.

Regional areas have poor access to the stroke specialist care that is required for rapid assessment and diagnosis of acute stroke. We seek to highlight the effective use of telemedicine to identify patients for endovascular thrombectomy in regional areas, and facilitate patient transfers² to hospitals that are able to perform this complex procedure.

Victoria is a state in southeast Australia covering 227 416 km². The Victorian Stroke Telemedicine (VST) Program³ will provide a 24-h clinical service for acute stroke care to 16 hospitals, hundreds of kilometres from metropolitan-based stroke neurologists, 7 days per week, 365 days per year.

Within months of the endovascular thrombectomy trial results, the first eligible regional case was identified through VST in May, 2015. 1 year later, 30 cases have been transferred for endovascular thrombectomy (30% of tPA cases) and a Victoria State Government-supported statewide protocol has been developed.⁴

Transfer logistics continue to be improved and the ability to expedite patient access to the newest treatment for acute stroke care using telemedicine is promising. Telemedicine networks should be developed and leveraged to improve equity of access to optimal stroke therapies.

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**Kathleen L Bagot, Dominique A Cadilhac, Peter J Hand, Michelle Vu, Christopher F Bladin*
kathleen.bagot@florey.edu.au

Division of Public Health/Stroke, The Florey Institute of Neuroscience and Mental Health, University of Melbourne, Melbourne 3084, VIC, Australia (KLB, DAC, MV, CFB); Department of Medicine, Monash University, Clayton, VIC, Australia (KLB, DAC, CFB); and Department of Neurology, Royal Melbourne Hospital, Melbourne, VIC, Australia (PJH)

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Weighing up dietary patterns

The Seminar by George Bray and colleagues (May 7, p 1947)¹ summarises current guidelines and findings concerning weight loss—an important clinical issue. However, we believe their recommendations are based on flawed interpretations of the evidence they refer to.

Recommendation of weight loss by lifestyle changes, diet, and physical activity seems plausible and is the main approach. However, randomised controlled trials suggest that although weight loss is possible in the short term, it is not sustainable in the long term. Bray and colleagues referred to the look AHEAD study,² which reported a weight loss of 4.7% compared with the control group after 8 years, and the Diabetes Prevention Program Outcomes Study,³ which did not find a statistically

significant weight loss compared with the control group after 10 years. Another randomised controlled trial of dietary interventions⁴ showed a statistically significant 3.4% weight loss after 6 years for individuals only in the Mediterranean diet group. None of these studies showed maintenance of a clinically significant weight loss, which is usually defined as 5% of bodyweight.

Despite these negative findings, we acknowledge that a healthy lifestyle can have tremendous benefits, such as reduction of cardiovascular mortality with a Mediterranean diet.⁵ Therefore, we recommend shifting the current strategy from aiming for weight loss to advising of healthy lifestyles regardless of their effect on weight.

We declare no competing interests.

**Florian L Stigler, Taavi Tillmann, Adrian M Moser*
florian.stigler@medunigraz.at

Institute of General Practice and Evidence-based Health Services Research, Medical University of Graz, 8036 Graz, Austria (FLS); Department of Health Services Research and Policy, Faculty of Public Health and Policy, London School of Hygiene & Tropical Medicine, London, UK (FLS); Steiermärkische Gebietskrankenkasse, Graz, Austria (FLS, AMM); and Research Department of Epidemiology and Public Health, University College London, London, UK (TT)

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George Bray and colleagues (May 7, p 1947)¹ recognise that a Mediterranean diet can both produce weight loss and improve glucose metabolism, but conclude that low-glycaemic index and low-glycaemic load diets are

inconclusive for weight loss, and raise safety concerns by referring to a meta-analysis indicating a reduction in fat-free mass.²

Bray and colleagues claim a lack of efficacy of low-glycaemic index diets, but only reference a 5-week trial.³ The investigators overlooked the much larger European 6-month DiOGenes trial⁴ in 773 adults, which showed the effectiveness of both low-glycaemic index and low-glycaemic load diets for weight control. They also failed to consider findings showing a 14% reduced prevalence of childhood overweight or obesity⁵ and a pronounced reduction in inflammation⁶ with such diets, with no adverse effect on fat-free mass. We find no evidence for Bray and colleagues' concern over loss of fat-free mass. Weight reduction is always accompanied by some loss of fat-free mass, and excessive loss was not signalled by the sensitivity analyses in the cited meta-analysis.² By contrast, preservation of fat-free mass by low-glycaemic index diets has been found in animal studies, meta-analyses in children and adolescents,⁷ and the DiOGenes study.

Low-glycaemic load diets are more effective for weight loss in insulin-resistant obese people than in insulin-sensitive obese people,⁸ an observation that could contribute to individualised dietary management.

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*Arne Astrup, Jennie Brand-Miller, David J A Jenkins, Geoffrey Livesey, Walter C Willett, for the International Carbohydrate Quality Consortium ast@nexs.ku.dk

Department of Nutrition, Exercise and Sports, University of Copenhagen, 1165 Copenhagen, Denmark (AA); Charles Perkins Centre Research and Education Hub, The University of Sydney, Sydney, NSW, Australia (JB-M); Department of Nutritional Sciences, Faculty of Medicine, University of Toronto, Toronto, ON, Canada (DJAJ); St Michael's Hospital, Toronto, ON, Canada (DJAJ); Independent Nutrition Logic, Wymondham, UK (GL); and Harvard School of Public Health and Harvard Medical School, Boston, MA, USA (WCW)

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Authors' reply

The two letters in response to our Review¹ 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 diet² and the Dietary Approaches to Stop Hypertension (DASH) plan³—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 and those with hypertension,⁵ sleep apnoea,⁶ or osteoarthritis. During the 10 year follow-up of the Diabetes Prevention Programme,⁴ 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 In individuals who lose weight and maintain the lower weight, blood pressure remains low⁶ and sleep apnoea can be substantially improved over 4 years.⁷ 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 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 The reduction in triglycerides noted by Schwingshackl and Hoffmann in their meta-analysis⁹ could be the result of differences in carbohydrate intake, which is the major factor affecting insulin and



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