

account for the discrepancy? Among eligible patients at our medical center, both options are presented as clinically equivalent; despite this, in 2013 we observed that 41% opted for conventional WBI and 59% chose hypofractionation,⁵ thereby generating considerable excess cost. This suggests that patient preference may play a significant role in the observed international differences.

It is encouraging that rates of hypofractionated WBI approximately tripled over the study period. In an era of patient-driven medical decision making, still wider adoption is likely to require either clear evidence of superiority or economic incentives that favor the less costly of the 2 medically equivalent therapies.

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Conflict of Interest Disclosures: The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none were reported.

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In Reply Drs Braunstein and Taghian note that patient preference may play an important role in explaining the low uptake of hypofractionated WBI among women with early-stage breast cancer in 2013. In their practice, the authors state that they discuss with patients the clinical equivalence of hypofractionated and conventional WBI. In 2013, they observed that 41% of patients opted for conventional WBI and 59% chose hypofractionation. The authors seem surprised that the rate of hypofractionated WBI was not higher; however, we take a different view of their findings.

In Braunstein and Taghian's data, nearly twice as many women received hypofractionated WBI than in our report, which showed that 34.5% of women who met all eligibility criteria received hypofractionated WBI. This seems to indicate that when patients with breast cancer discuss with their physicians the clinical evidence showing similar long-term cancer control and toxicity between 2 radiation treatment regimens, patients tend to favor the shorter, more convenient, and less costly regimen.

In fact, the rate they observed is on par with adoption of hypofractionated WBI in Ontario, Canada.¹ Evidence has shown great variability in the use of hypofractionated WBI, mostly explained by factors related to the practice and physician rather than patient factors.² There is no normative standard for the ideal rate of hypofractionated WBI among eligible patients nationally, but physicians and patients can agree that it should be higher.

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Low vs High Glycemic Index Diet

To the Editor In the OmniCarb randomized clinical trial, Dr Sacks and colleagues¹ concluded that a 5-week, low glycemic index version of the Dietary Approaches to Stop Hypertension diet did not improve insulin sensitivity or cardiovascular risk factors compared with a higher glycemic index diet.

We are concerned that the duration of the trial was too short. Longer 12- to 26-week studies have demonstrated that low glycemic index diets progressively enhance glycemic control² and insulin sensitivity.³ High-density lipoprotein (HDL) cholesterol level can increase while patients are on low glycemic index diets over time (approximately 10 weeks).⁴ Weight loss maintenance and levels of low-density lipoprotein (LDL) cholesterol and C-reactive protein (CRP) also were improved in overweight and obese participants in the Diet, Obesity, and Genes (DIOGENES) study (26 weeks).⁵

The participants in the OmniCarb study may have been too healthy and insulin sensitive for the glycemic index to have an effect. The Matsuda Index of insulin sensitivity was less than 10 units, the homeostatic model assessment of insulin resistance was less than 2, triglycerides level of approximately 100 mg/dL, HDL cholesterol level of approximately 60 mg/dL, and only 20% had the metabolic syndrome. We would like to see this study repeated in more metabolically compromised individuals with pronounced elevations in cardiovascular risk factors.

For short-term studies, it would be helpful to assess fructosamine as a measure of glycemia, CRP to assess low-grade inflammation, and plasminogen activator inhibitor 1 to assess fibrinolytic activity. If glycemic and insulinemic post-meal excursions are linked to chronic disease, as many believe, then the low glycemic index diet will have advantages for outcomes related to oxidative stress, even in those without diabetes.

The low glycemic index version of the high carbohydrate diet increased LDL cholesterol level compared with the high glycemic index diet, which is the opposite result to that found in meta-analyses. The reason is unclear, but many participants (17%) failed to complete the full 4 diets, with the highest dropout rate while participants were on the high carbohydrate-high glycemic index diet, which may have introduced selective bias.

Given the limitations of dietary studies, it may be helpful for investigators to pool data from similar protocols over a range of risk categories to determine at what level of risk benefits begin. Similarly, division of cohort studies into quantiles of baseline risk can be applied to determine where improvements are seen.

This study does not support the conclusion that there is no effect, only that there is no evidence of an effect in this context. The glycemic index should not be abandoned on the basis of 1 short study conducted in individuals with few risk factors.

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Conflict of Interest Disclosures: The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Dr Brand-Miller reported being the president of and receiving nonfinancial support from the Glycemic Index Foundation Ltd; being the director and receiving research funding from the Sydney University Glycemic Index Research Service; and receiving royalties from *The Glucose Revolution* and *Low GI Diet* book series (De Capo USA, Hachette Australia) and the *World's Best Diet* (Penguin, Australia). Dr Astrup reported serving on advisory boards for Global Dairy Platform USA, McCain Foods USA, and McDonald's USA; receiving institutional grant funding from Global Dairy Platform USA, Arla Foods DK, and the Danish Dairy Research Council; and receiving royalties for the *World's Best Diet* (Penguin, Australia), which was translated from Danish to Dutch, Spanish, and English. No other disclosures were reported.

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In Reply Dr Brand-Miller and colleagues suggest that the duration of the OmniCarb study was too short, citing a systematic review and meta-analysis.¹ However, that review only concerned glycemic control in patients with diabetes, a topic that does not pertain to the OmniCarb study. A more relevant meta-analysis² of 14 trials with durations of at least 6 months found no effect of lowering glycemic index on lipid levels or fasting glucose, although fasting insulin was reduced. In addition, the trials cited in our article of at least 6 months' duration found lowering glycemic index did not affect insulin sensitivity or blood pressure.

Brand-Miller and colleagues also claim that low-glycemic index diets lower LDL cholesterol level. However, this appears to be due to concomitant increases in dietary fiber according to a meta-analysis of 28 trials.³ The LDL cholesterol-lowering effect of dietary fiber per se is well-established.⁴ Glycemic index is often confounded by dietary fiber that accompanies some foods that have a low glycemic index. We were careful to design the high- and low-glycemic index diets with similar amounts of dietary fiber. This may be one reason why the low glycemic index diets did not lower LDL cholesterol level or improve the other outcomes.

We do not agree that a low glycemic index diet improves maintenance of weight loss. For example, the DIOGENES study reported that low glycemic index diets reduced regain of body weight after weight loss at 6 months,⁵ but the trend reversed at 1 year and weight regain was greater on the low- vs high-glycemic index diets.⁶

We also disagree with Brand-Miller and colleagues that the results may have been different in more metabolically compromised individuals. In OmniCarb, glycemic index did not improve outcomes in the participants who were obese (body mass index ≥ 30) or who had the metabolic syndrome. These participants were in fact metabolically compromised, having higher baseline fasting insulin, higher homeostatic model assessment index of insulin resistance, and lower insulin sensitivity determined from the oral glucose tolerance test (eTables 13-16 in article supplement).

Bias related to dropouts is unlikely in our trial. The OmniCarb study was a randomized crossover trial in which participants were their own controls. A similar number of participants, 150 to 154, contributed data on the 4 diets (Table 3 in article). Importantly, every result on the effect of glycemic index came from a comparison of 2 diets in the same participants, ranging from 139 to 150 participants, which is a very large number for a fully nutritionally controlled trial, providing excellent statistical power.

The main reasons for participants not completing all 4 diets were changes in schedule, time commitment, work, and other personal reasons. A complete case analysis restricted to the participants who finished all 4 study diets led to virtually identical results (eTable 5 in article supplement).

We believe that the results of OmniCarb in the context of many previous epidemiological studies and clinical trials

should prompt a reevaluation of the health effects of the glycemic index and its relevance to dietary recommendations.

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Electronic Health Records and Adolescent Privacy

To the Editor In their Viewpoint on the confidentiality of electronic health records (EHRs), Dr Bayer and colleagues¹ made a compelling case that the benefits of EHRs must be weighed against the challenges they pose to adolescent and parental privacy. The authors correctly noted that unless clear confidentiality standards inform the design of EHRs, the greater access afforded by new technologies risks compromising patient privacy vis-à-vis minor adolescents and their parents.

However, in the context of adolescent privacy, the authors made an assumption that undermines their argument: namely, that minor consent laws automatically assure confidentiality to adolescents empowered to provide their own informed consent to treatment. Unfortunately, this is not always the case. For example, Nevada law expressly authorizes the treatment of minors for abuse of a controlled substance without parental consent, while simultaneously directing physicians who do so to “make every reasonable effort” to inform the patient’s parents “within a reasonable time after treatment.”² (In the special case of government-funded drug and alcohol abuse treatment programs, state laws such as Nevada’s are preempted by strict federal confidentiality regulations.³)

The Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule defers to state laws that directly ad-

dress the role of parents in obtaining their children’s health information. Thus, to the extent that state law authorizes or requires the disclosure of minors’ health information to their parents or guardians, HIPAA does not afford additional protections to such records. Where state law is silent on the matter, HIPAA grants discretion to physicians’ “professional judgment.”⁴

As the authors pointed out, there is widespread consensus among experts in adolescent health that confidentiality is a key component to overcoming adolescents’ reluctance to seek care for sensitive conditions. Nevertheless, consent and privacy remain distinct legal concepts, such that the ability of minors to independently authorize treatment is “not automatically dispositive” of the right to shield related health information from their parents.⁵ This is true irrespective of whether the record is stored electronically or in hard copy.

The challenge to adolescent confidentiality in EHRs is one not just of technical design but also of law. While the ethics of confidential care may be more or less a settled question within the medical community, the terrain of state laws on this issue remains highly variable.

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Disclaimer: The views expressed are those of the author and do not necessarily reflect those of the US Department of Homeland Security.

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In Reply We agree with Mr Kels that state minor consent laws do not automatically assure confidentiality to adolescents who provide their own consent to treatment under these laws. Minor consent laws do allow disclosure to parents under limited circumstances.

The legal landscape concerning minor adolescent consent to health care is complex and includes state minor consent laws, federal laws and regulations, US Supreme Court decisions, and concepts from common law such as “mature minor.” Designs of EHRs must be sensitive to and incorporate these varied and shifting complexities. In this complicated landscape, policy statements from professional medical organizations identify legal and ethical principles, interpret research that has been conducted on confidentiality, and enunciate standards for health care practice. Health care professionals caring for minor adolescents support efforts to help parents and young people com-