Reply to PW Estep III

Dear Sir:

We thank Dr Estep for agreeing with our position (1) that liquid meal replacements (MRs) can promote both satiety and weight loss. Not everyone, however, shares our point of view. Our colleague, Dr Mattes, has recently argued (2) that the success of MRs in promoting weight loss is unrelated to physiologic satiety. Instead, he suggested that, because of their weak satiety value, liquid MR products were widely consumed for the purpose of weight gain (3).

The notion that successful weight control depends on how the products are used was the second major premise of our review. We pointed out that MR shakes are consumed instead of meals, whereas caloric beverages are consumed with or between meals (1). We also suggested that dietary behavior rather than the metabolic response to sugar was the principal factor responsible for weight change. After all, the sugar content of soft drinks, fruit juices, flavored milks, and MR shakes is approximately the same (1).

Estep makes the additional point that, in contrast to most caloric beverages, MR shakes necessarily contain protein, fat, and fiber. These nutrients may not only induce but also prolong satiety (1). He further describes the amounts of protein and fiber in MR shakes as average to “very high.” That is not exactly correct. MR shakes contain approximately the same amount of protein as is found in an equivalent amount of 11 fl oz of low-fat milk (1%). We also contain up to 45 g carbohydrates, including 34 g sugars. That they still are capable of promoting weight loss suggests that dietary behavior, not sugar biochemistry, is the critical component of weight loss—or weight gain.

Both authors have received past and current research funding from US and international food companies and industry associations. Neither author has any ties to manufacturers of meal replacement products. Neither of the authors had a personal or financial conflict of interest.

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