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'Beach body' row misses the key points about protein and weight loss

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Sales of protein-based health products are booming. Exercise by Shutterstock

Author



Oliver Witard

Lecturer in Health & Exercise Science ,
University of Stirling

Protein-based fitness products are now big business. Once aimed largely at athletes and hardcore gym-goers seeking to “bulk up”, protein shakes, powders and bars are now being consumed by “ordinary” people seeking to lose weight or tone their bodies. UK sales increased from £73m in 2007 to £170m in 2012 and are expected to reach £358m by 2017.

This rise can be partly explained by the creation of more protein-based weight loss products aimed at women. While some of these products have been criticised for inappropriate marketing strategies, it’s also worth asking whether protein-based food replacements are even worth the money.

Weight loss is most often accomplished by restricting dietary energy intake. This means consuming fewer calories. But exactly what we eat also affects how our bodies change.

Conventional weight-loss diets usually include around 15% of total daily energy intake from protein and can lead to as much as half of lost weight coming from muscle mass. Muscle mass – alongside its part in athletic performance – plays an important and often under-appreciated role in reducing the risk of diseases including obesity itself. So when losing weight it's better if it comes from fat mass.

The power of protein

The body needs dietary protein to maintain muscle mass. High-protein diets are also widely recognised to control food intake by making you feel fuller for longer compared with high carbohydrate or fat foods. This helps explain why such diets have been shown to help reduce weight regain following weight loss.

High-protein diets are also linked to greater weight loss from fat mass and the preservation of muscle. Several scientific studies in overweight/obese women have examined weight-loss diets that include around 30% of total daily energy intake from protein. The studies found that these high-protein diets were more likely to direct weight loss to fat mass and away from muscle, particularly when combined with exercise training.



Recent ads for protein-based products have caused controversy. Stephen Harris

Numerous protein-based products from a range of reputable (and some non-reputable) companies are being marketed for weight loss. Typically, these products contain the dairy-based proteins casein and/or whey and have a low carbohydrate and fat content. The combination of the fast-digested whey protein and slow-digested casein protein is touted as providing the ideal combination for promoting healthy weight loss.

But protein-rich food sources, such as milk and low-fat yoghurts, offer equally beneficial and often cheaper alternatives to protein-based supplements. Indeed, a high-protein, low-energy diet rich in such dairy foods has been shown to promote fat-mass loss and muscle-mass gain during a short-term period (16 weeks) in overweight and obese women.

Safety concerns

The safety of high-protein diets for weight loss is also important. People with kidney problems, for example, should be cautious about increasing the amount of protein they eat. But no evidence exists that high-protein diets will cause kidney damage in otherwise healthy people. Other issues linked with high-protein diets, such as loss of bone mass, dehydration, kidney stones and atherogenesis (where fat is deposited in the arteries) have not been proved with evidence. In fact, there is evidence that increased protein intake leads to improved bone health.

A more realistic potential problem with high-protein, energy-restricted diets is the fact that removing carbohydrates from your meals could provide your body with less fuel for exercise. And wherever feasible, exercise should be championed as a key part of any successful weight loss strategy.

This means a high-protein diet needs careful planning. Indeed, there's only so much protein your muscles need to repair themselves. Anything more than that is simply passed out of the body.

High-protein diets, irrespective of food or supplement source, do effectively promote weight loss and the health concerns surrounding these diets are not well founded. But poor marketing strategies pose a danger to the public health message that carefully managing how much protein you eat is a healthy way to lose weight.

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Clint Witchalls

Health Editor

