Total Wellbeing or TOO MUCH MEAT?

The prestige of CSIRO's name and the label “scientifically proven” are being used to hide the fact that The CSIRO Total Wellbeing Diet has not been compared with a genuine variety of alternatives. Rosemary Stanton and Gyorgy Scrinis say that the Diet’s heavy promotion of meat consumption suits the interests of its sponsors, but ignores the damage to health and the environment associated with too much red meat.

The CSIRO Total Wellbeing Diet has been sitting atop the best-sellers list for many weeks now. The apparent popularity of this diet – if book sales are anything to go by – no doubt has a lot to do with the marketing of it as a “scientifically proven” diet that bears the respected logo of the CSIRO.

With controversy surrounding the effectiveness and long-term healthfulness of other fad weight-loss diets – such as the high-fat, low-carbohydrate Atkins diet – Australians may assume that “their” CSIRO has done the hard work and subjected the various dieting regimes on offer to some fairly rigorous, independent, long-term analysis and comparisons before coming up with their own weight-loss diet. However, there is a disappointing gap between such expectations and the nature and findings of the research studies that actually underpin this “scientific diet”.

The CSIRO diet is presented by its authors as a high-protein, low-fat and low-kilojoule diet. The authors are careful to point out that this is a moderate-carb rather than a low-carb diet as it contains some bread, cereal, yoghurt and fruit and does not restrict vegetables. Importantly, it is a high-meat diet, with animal-derived foods making up much of the protein content and central to the recommended meals.

The main reference cited in the book is a published research paper that reports on the results of their “major study” comparing just two specific diets with 120 people for only 12 weeks. One group of dieters ate the researchers’ preferred meat-centred, high-protein and moderate-carb diet. The portions of meat – at 100 grams for lunch and 200 grams for dinner – were high relative to the overall size of the meal. A second “high-carb” group was fed a similar diet, but some of the meat was replaced with rice or pasta.

The CSIRO study didn’t rigorously compare a range of high-protein diets with a range of high-carb diets, but merely compared its high-meat diet with one contrived high-carb diet. CSIRO did not, for example, compare its meat-based high-protein diet with a high-protein plant-based diet, where some of the meat would be replaced with legumes or nuts.

The results of this narrowly framed and rather loaded research study was that both trial groups actually lost a statistically comparable amount of weight over 12 weeks. In a 1-year follow up of 66 diabetic people who followed the CSIRO’s two diets, only 38 stuck it out and there was still no significant difference in their loss of weight or body fat. To suggest that these studies have “scientifically proven” that a high-protein diet is superior seems an exaggeration of the research findings.

As for the book’s claim that the CSIRO diet reduces abdominal fat in women better than other diets, this applied only to women with high triglyceride levels. Other women and men had no greater reduction in their belly fat with the high-protein diet. Similarly, the claim that this high-protein diet is more “satisfying” and therefore easier to maintain than the high-carb diet is also not established by their research study, which only speculates that this may be the case.

CSIRO Responds

Dr Manny Noakes, one of the authors of The CSIRO Total Wellbeing Diet, disputes the criticisms made by Rosemary Stanton and Gyorgy Scrinis. She claims the diet was based on extensive research conducted both by CSIRO and others. Noakes claims that the one published study that Stanton and Scrinis refer to, which is mentioned prominently in publicity for the diet, was only part of the research used, and this work was initially publicly funded. “We did a lot of research before we spoke with industry, and we approached them rather than they approaching us.”

Noakes also says that the work was “done at arms length” from the sponsors and that ethics committees had checked it. “Working with industry is what CSIRO does,” she said.

“No one eating style will suit the entire population,” Noakes says. “The 1,2,3,4,5+ Plan, which is on the CSIRO website [www.csiro.au/proprietaryDocuments/12345_Plan.pdf], is more in sync with Stanton’s preferences but the Total Wellbeing Diet is a particularly easy and nutritious way to lose weight.”

Noakes also disputes that the consumption of meat is environmentally unfriendly, claiming that environmental impact comes from the amount consumed and that larger amounts of vegetables need to be eaten to give the same nutritional content as meat.

Stephen Luntz
It could well be that the particular high-carb diet they tested was not satisfying for reasons other than its low-protein or low-meat content, such as the blandness of the foods chosen or because – as the researchers state – it was actually deficient in some nutrients, particularly calcium and iron.

Like most fad diets, the CSIRO diet is framed and marketed in terms of its chemical–nutrient composition, particularly in terms of the relative proportion of macronutrients (protein, fat, carbs). The implication is that the macronutrient profile tells us all we need to know about foods and diets, and that achieving some optimum ratio of these macronutrients will achieve specific outcomes, such as losing weight and feeling satiated.

But the macronutrient profile – and more generally the reduction of food to its known chemical–nutrient components – conceals as much as it reveals about food and diets. Carbs can come in the form of whole grains and legumes or in the form of refined, sugary and fatty processed foods and drinks.

Similarly, protein and fats can be derived from a variety of food sources – meat or plant-derived foods, unprocessed or highly processed foods, and so on. To speak as if the food sources of these carbs, fats, proteins and calories are not important when it comes to constructing healthy, slimming and satisfying meals is to fall into an extreme nutritional reductionism.

More importantly, the focus on macronutrients does not directly address one of the central problems with the contemporary food supply and diet – and a major contributor to the obesity epidemic – which is the increased availability, promotion and consumption of highly processed foods and drinks over the past couple of decades.

The CSIRO diet may well “work” for those who try it, at least in the short term, if the aim is simply to lose weight. There’s no mystery to this. Any diet that recommends a kilojoule-restricted food intake is going to “work”, at least for a while. There are no great scientific breakthroughs at work here, just a bit of dietary common sense.

The real challenge is to maintain a good bodyweight over the long term by adopting a health-giving, tasty, affordable and ecologically sound diet.

This can arguably be best achieved by eating a diet centred on unprocessed plant-derived wholefoods, such as wholegrains, legumes, nuts, fruits and vegetables. Incorporating adequate levels of physical exercise is equally important.

The CSIRO’s research was partly funded by Meat and Livestock Australia and Dairy Australia, so it is no surprise that beef, lamb and dairy products figure so highly in the recommended meals and weekly meal plans. The CSIRO’s endorsement of a high-meat diet is an indication of the extent to which its scientists have taken on the role of consultants to industry in their bid to raise funding, and their willingness to deliver research findings that industry finds agreeable.

How responsible is it, though, to be recommending such a high-meat diet in the context of concerns over the ecological sustainability and health problems associated with high meat consumption?

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