Diet Duel: Low-Fat, Low-Carb Square Off Again

By Ruth Kava — October 29, 2015

In this space we’ve covered numerous research articles about dieting and weight loss especially those that evaluate the effects of low fat or low carbohydrate diets (most recently here [2] and here [3]). Although it might seem that the topic has been thoroughly covered, there are apparently still unanswered questions.

Dr. Deirdre K. Tobias of Harvard Medical School and colleagues picked 53 random controlled trials (RCTs) that compared weight loss resulting from decreased fat diets to that from other interventions. All the trials analyzed lasted at least one year. They did a meta-analysis of these studies to see if low fat diets were superior to other interventions. In all, the RCTs included over 68,000 participants.

In 18 studies comparing low-carbohydrate to low-fat diet interventions, the former led to greater weight loss. When compared to other higher fat interventions, the low-fat diets in 19 studies again did not lead to superior weight change. The authors note that the only situation in which low fat diets led to greater weight loss was in eight studies that compared low fat diets to participants' usual diets.

While these results seem to impugn the utility of low fat diets for weight loss, it must be remembered that the studies included a variety of different populations, and in a few cases there were different goals (for example, studies that prescribed a low-fat diet to prevent breast cancer in high risk women). Some RCTs included men with high cholesterol, others obese young adults, and the dietary fat content ranged from 10 to 30 percent of calories. Further, one can not tell from such an analysis how accurately the participants under the various protocols were in adhering to the respective interventions.

In spite of such differences, the authors wrote "...comparisons of similar intervention intensity conclude that dietary interventions that aim to reduce total fat intake lead to significantly less weight loss compared with higher-fat, low-carbohydrate diets. Health and nutrition guidelines should cease recommending low-fat diets for weight loss in view of the clear absence of long-term efficacy when compared with other similar intensity dietary interventions." They also commented "Additional research is needed to identify optimum intervention strategies for long-term weight loss and weight maintenance, including the need to look beyond variations in macronutrient
The idea behind searching beyond macronutrient composition is a good one, but perhaps there really is no one "optimum intervention strategy" for weight loss. Although reducing dietary fat may not have beaten the other interventions covered by this meta-analysis, there have been reports from the National Weight Control Registry [4] of people who used such diets for long term weight loss of at least 30 pounds.