

## CLINICAL STUDY: MEAL REPLACEMENTS

Efficacy of low-calorie, partial meal replacement diet plans on weight and abdominal fat in obese subjects with metabolic syndrome: a double-blind, randomized controlled trial of two diet plans – one high in protein and one nutritionally balanced.

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**What is the study about?** This study in Korea followed 75 obese people for three months to see the effects of a diet using two meal replacements a day with either a standard amount of protein (Formula 1 plus milk) or a high amount of protein (Formula 1 plus milk, plus Personalized Protein Powder). The study participants also had certain conditions that often occur in overweight people, such as high blood pressure, a large waist circumference, above normal blood sugar or abnormal values of certain fats in the blood.<sup>†</sup>

**What did the study attempt to find out?** In addition to seeing the effects of the two different diets on weight loss, the researchers also wanted to see if subjects taking in the higher amount of protein in the diet would lose more body fat and/or more belly fat than those taking in a standard amount of protein. They also wanted to study the effects of the diets on the other weight-related conditions.

**What did the study subjects have to do?** The subjects were assigned by chance to the high protein diet or the regular protein diet. The women followed a 1,200 calorie diet, and the men followed a 1,500 calorie diet for weight loss. The diets included two meal replacements a day and the subjects were followed for 12 weeks.

**What happened?** At the end of 12 weeks, both groups lost weight and both groups lost weight in the belly area. But, in the subjects who followed the diet most strictly, the people in the high protein group lost more body fat (and less lean body mass) than the people consuming the standard amount of protein.<sup>†</sup>

**Have the results been published?** Yes. The study was published in the *International Journal of Clinical Practice*, February 2009.

**NOTE:** A clinical study is a study that is conducted by a group of researchers on human subjects to answer a particular question or hypothesis.

\* Belong Cho, M.D., was a member of Herbalife's Nutrition Advisory Board.

<sup>†</sup>These results are not a guarantee of similar results. Individual results from consumption of Herbalife® products may vary.