Lactose intolerance is experienced as gastrointestinal discomfort, nausea, gas in the abdomen and intestines, abdominal cramping and distension, belching or flatulence, and/or watery stools-after ingestion of lactose-containing foods. An estimated 70% of the world's population has low levels of intestinal lactase, the enzyme necessary to digest lactose. Although there is no evidence that human intestinal lactase concentrations fall as a function of age alone, the prevalence of intestinal lactase deficiency does increase with age in susceptible populations. Many prior art weight control products which come in a powder form must be mixed with milk, and, therefore, are not desirable for lactose-intolerant individuals. A one cup serving of milk contains from 10 to 16 g of lactose. While many of the less sensitive lactose intolerant individuals can tolerate approximately 5 g per serving, greater amounts taken at one time are likely to cause discomfort. A lactase enzyme treated non-fat dry milk, or condensed skim milk, which is processed to have a very low lactose content is the primary source of protein in the weight control product. As used herein and in the claims "milk" is understood to refer to cow's milk. As used herein and in the claims milk is understood to have a low lactose content when at least 70% of the lactose of the milk has been hydrolyzed to glucose and galactose.

The weight control product of the invention is designed to be incorporated into a multidisciplinary program having a nutrition education component that uses the exchange system of the American Dietetic Association/American Diabetes Association (ADA/ADA) to teach nutrition and meal planning. The weight control product of the invention comprises two lean meat exchanges, one bread exchange and one fruit exchange in this system. This "match" of macronutrients in the weight loss formulation of the invention with the ADA/ADA exchange system imparts advantages for using the weight loss formulation of the invention in teaching this system.

While certain representative embodiments and details have been described for the purpose of illustrating the invention, it will be apparent to those skilled in the art that various changes and modifications may be made therein without departing from the spirit or scope of the invention.

What is claimed:

1. A weight control product comprising a powder which contains low lactose milk and a dietary fiber system wherein taken as a whole the fiber system by weight comprises 35% to 45% dietary fiber which is both soluble and fermentable, 5% to 15% dietary fiber which is both soluble and non-fermentable and 45% to 55% dietary fiber which is both insoluble and non-fermentable, said powder being reconstitutable in water.

2. A weight control product according to claim **1** wherein said dietary fiber system comprises by weight 10 to 13% of said product.

3. A weight control product according to claim **2** wherein the dietary fiber which is both soluble and fermentable is gum arabic, the dietary fiber which is both soluble and non-fermentable is sodium carboxymethylcellulose, and the dietary fiber which is both insoluble and non-fermentable is oat hull fiber.

4. A weight control product according to claim **3** wherein about 25% to 30% of the calories provided by the product are contributed by protein, about 45% to 55% of the calories provided by the product are contributed by carbohydrate, and about 20% to 30% of the calories provided by the product are contributed by fat.

5. A weight control product according to claim **4** wherein the source of the protein is lactase enzyme treated nonfat milk and a milk protein isolate; the source of the carbohydrate is selected from the group consisting of sucrose, glucose, galactose produced by the enzymatic hydrolysis of the lactose of the nonfat milk and residual lactose and a starch hydrolysate having a dextrose equivalent of 10–25; and the source of the fat is high oleic safflower oil.

6. A weight control product according to claim **5** wherein one serving of the product provides about 240 calories.

7. A weight control product according to claim **1** wherein the dietary fiber which is both soluble and fermentable is gum arabic, the dietary fiber which is both soluble and non-fermentable is sodium carboxymethylcellulose, and the dietary fiber which is both insoluble and non-fermentable is oat hull fiber.

8. A weight control product according to claim **7** wherein about 25% to 30% of the calories provided by the product are contributed by protein, about 45% to 55% of the calories provided by the product are contributed by carbohydrate, and about 20% to 30% of the calories provided by the product are contributed by fat.

9. A weight control product according to claim **8** wherein the source of the protein is lactase enzyme-treated nonfat milk and milk protein isolate; the source of the carbohydrate is selected from the group consisting of sucrose, glucose, galactose produced by the enzymatic hydrolysis of the lactose of the nonfat milk and residual lactose and a starch hydrolysate having a dextrose equivalent of 10–25; and the source of the fat is high oleic safflower oil.

10. A weight control product according to claim **9** wherein one serving of the product provides about 240 calories.

11. A liquid weight control product comprising low lactose milk and a fiber system wherein taken as a whole the fiber system by weight comprises 35% to 45% dietary fiber which is both soluble and fermentable, 5% to 15% dietary fiber which is both soluble and non-fermentable and 45% to 55% dietary fiber which is both insoluble and non-fermentable.

12. A liquid weight control product according to claim **11** wherein an eight ounce serving of the liquid weight control product contains about 7 grams of said dietary fiber system.

13. A liquid weight control product according to claim **12** wherein the dietary fiber which is both soluble and fermentable is gum arabic, the dietary fiber which is both soluble and non-fermentable is sodium carboxymethylcellulose, and the dietary fiber which is both insoluble and non-fermentable is oat hull fiber.

14. A liquid weight control product according to claim **13** wherein one eleven ounce serving of the product contains about 240 calories, about 25% to 30% of the calories being contributed by protein, about 45% to 55% of the calories being contributed by carbohydrate, and about 20% to 30% of the calories being contributed by fat.

15. A liquid weight control product according to claim **14** wherein the source of the protein is lactase enzyme treated nonfat milk and a milk protein isolate; the source of the carbohydrate is selected from the group consisting of sucrose, glucose, galactose produced by the enzymatic hydrolysis of the lactose of the