WEIGHT CONTROL PRODUCT

FIELD OF THE INVENTION

The invention relates generally to a weight control product and more specifically to a weight control product which is formulated to serve as a nutritionally complete meal replacement.

BACKGROUND OF THE INVENTION

The weight control product of the present invention is designed to promote weight loss as a component of a supervised moderate weight control program for individuals who are moderately overweight and desire to lose forty pounds or less. Participants in a moderate weight loss program may use this new weight control product as a daily replacement for two meals, or two meals and up to two snacks, depending upon the calorie recommendations for a particular participant. Furthermore, the new weight control product is designed to be incorporated into a multidisciplinary nutritional program having an educational component that uses the exchange system of the American Dietetic and American Diabetes Associations to teach nutritional and meal planning.

One example of a weight control product is taught in U.S. Pat. No. 4,959,227, wherein the product has a reduced lactose content and contains dietary fiber. U.S. Pat. No. 4,784,861 teaches a "weight-control powder" which is added to food before eating and contains dietary fiber. Commercially available weight control products include: Ultra Slim-Fast ® which is distributed by Slim-Fast Foods, a Division of Thompson Medical Co., Inc., New York, N.Y.; DynaTrim ® which is marketed by the Lederle Laboratories Division of American Cyanamid Company, Pearl River, N.Y.; and OptiTrim ® which is available from the Clinical Products Division of Sandoz Nutrition Corp., Minneapolis, Minn.; all of which are available in powdered form.

Almost all prior art weight control beverage products which are marketed in a powder form require the use of low-fat liquid milk for reconstitution. Some of the prior art weight control products are deficient in certain nutrients, for example ultratrace minerals, and in dietary fiber . There are some prior art weight control products which are reconstituted with water; however most of those products are used in very-low-calorie diets supervised by physicians. They do have some of the nutritional advantages of the weight control product of the present invention. Most of the prior art over-the-counter weight control products, but not those for very-low-calorie diets, rely on fat from milk (butterfat) as their fat source. The fat source of the weight control product of the present invention is high-oleic safflower oil. The fatty acid profile of high-oleic safflower oil permits the weight control product of the present invention to meet the recommendations of the American Heart Association for a diet wherein less than 10% of total calories are from saturated fat and more than 10% are from polyunsaturated fat. The fatty acid profile of butterfat is high in saturated fat. The required use of liquid milk for reconstitution makes some of the prior art products inconvenient if liquid milk is not readily available at the user's location (for example, while traveling or at a job site).

The weight control product of the present invention offers greater convenience to the user while providing a complete and balanced meal replacement. Due to the nutrient composition and sources of the new weight control product it requires only water for reconstitution; no milk is needed to contribute protein or additional nutrients. The new weight control product is a very low lactose formulation (about 3.5 g per serving), which permits its use by most lactose-intolerant individuals.

The agglomerated particles of the new product in a powdered form are easily stirring with a spoon.

The new weight control product contains a new fiber system which does not adversely affect flavor and mouthfeel when present in a greater concentration of total dietary fiber tan is found in prior art weight control products.

DETAILED DESCRIPTION OF THE INVENTION

A most preferred embodiment of the weight product of the invention comprises a spray dried base powder which is dry blended with other ingredients to form the final product. The final product is then agglomerated and packaged in nitrogen-flushed individual serving pouches, or alternatively in a container holding powder for several servings. In an alternative embodiment a weight control product according to the invention comprises a liquid product which is packaged in a suitable container and is ready for consumption. In yet another alternative embodiment a weight control product according to the invention comprises a concentrated liquid packaged in a suitable container, with the concentrated liquid needing to be diluted by a suitable amount of water prior to consumption.

The ingredients for making a two thousand pound batch of a chocolate flavored weight control product according to a most preferred embodiment of the invention are listed in Table I, and the ingredients for making a two thousand pound batch of a vanilla flavored weight control product according to a most preferred embodiment of the invention are listed in Table II.

TABLE I

INGREDIENTS FOR 2,000 POUND BATCH OF CHOCOLATE FLAVORED PRODUCT

INGREDIENT	QUANTITY
Base Powder (Spray Dried, 3% Moisture)	999.20 lb
High Oleic safflower Oil	167.305 lb
Soy Lecithin	1.707 lb
Monoglycerides	1.707 lb
Vitamin D3	1.028 g
Vitamin K	0.258 g
Non-Fat Dry Milk	774.204 lb
Minerals	57.101 lb
Magnesium Chloride	19.693 lb
Sodium Chloride	7.623 lb.
Sodium Citrate	14.769 lb
Potassium Citrate	12.237 lb
Dipotassium Phosphate	2.779 lb
Potassium Iodide	0.8258 g
Premix containing trace minerals and ultratrace minerals	1382.451 g
Zinc Sulfate	282.8495 g
Ferrous Sulfate	272.3429 g
Manganese Sulfate	74.8182 g
Copper Sulfate	40.3676 g
Sodium Molybdate	2.0391 g
Chromium Chloride	1.9841 g
Sodium selenite	0.7722 g
Sucrose-diluent	621.8265 g
Citric Acid	85.3249 g
Vitamin Premix	2553.77 g
Ascorbic acid	1117.27 g
dl Alpha Tocopheryl Acetate	191.53 g
Niacinamide	105.34 g