

4. While the Malbit is being conditioned as described in step 3, the vitamin/mineral mix is premixed with the milk protein powders (sodium caseinate and Lactalbumin 65) and that mix is then added to the mature Malbit mix, followed by the flavours and the lecithin.

5. The mixing time is controlled to ensure the required open texture is maintained and immediately prior to bar formation the fat is added.

6. After bar formation and metal detection, the product is enrobed with the chocolate coating, cooled, wrapped, further metal-detected and then examined before packing.

The bars thus produced analyse per bar as follows:

Weight	52 grams
Energy	161.8 Kcals
Protein by weight	10.93
Fat by weight	6.17
Available carbohydrate by weight	15.89
Unavailable carbohydrate by weight	6.74
Vitamins and minerals	at least $\frac{1}{2}$ of RDA

EXAMPLE 6

The manufacturing process of Example 5 is repeated to produce a chocolate coated bar having a malt toffee, caramel, peanut or lemon and ginger flavour based on a formulation comprising the following ingredients:

Ingredient	Percentage by weight
Malbit	27.13
Sodium caseinate	7.83
Flavor as appropriate	0.65
Vitamin/mineral mix	1.40
Potassium chloride	1.40
Calcium dihydrogen orthophosphate	0.47
Sodium glycerophosphate	3.24
Calcium carbonate	0.80
Lecithin	1.04
Hydrogenated Palm Kernel Oil	1.57
Lactalbumin 65	19.67
Water	9.91
Milk chocolate composition for coating	25.00
Total	100.00

The bars thus produced analyse per bar as follows:

Weight	52 grams
Energy	162.3 Kcals
Protein by weight	11.10
Fat by weight	6.07
Available carbohydrate by weight	16.12
% Unavailable carbohydrate by weight	7.05
Vitamins and minerals	at least $\frac{1}{2}$ of RDA

EXAMPLE 7

Bars are produced as in each of Examples 1 to 6 except that in the bar centre formulation the Malbit ingredient is replaced by polydextrose and the bar centre formulation includes 50 mg per bar centre of aspartame as artificial sweetener.

EXAMPLE 8

Bars are produced as in each of Examples 1 to 6 except that in the bar centre formulation the Malbit ingredient is replaced by a mixture of 1 parts by weight of glucose (as syrup) with 1 part by weight of polydextrose. Also, if desired, the enrobing coating composition can comprise 2 parts by weight of glucose and 1 part by weight of polydextrose in place of sugar.

EXAMPLE 9

Examples 1 to 8 are repeated except that the bars are produced at half the stated weight and two bars are wrapped together to provide a single product presentation.

It is, of course, to be understood that the invention is not limited to the details of the above specific Examples and that numerous variations in types and amounts of ingredients may be made within the ambit of the invention as broadly defined herein and in the claims.

I claim:

1. A smooth and chewy, low calorie confectionery bar comprising:

fat;
proteinaceous material; and
carbohydrate material including digestible carbohydrate and indigestible carbohydrate, said indigestible carbohydrate being polydextrose or maltitol, said proteinaceous material and said carbohydrate material being present in a weight ratio of from about 1:1 to about 1:10.

2. The confectionery bar of claim 1, wherein the proteinaceous material includes a mixture of monomeric L-amino acids, or natural proteins, or natural proteins reinforced with at least one monomeric L-amino acid.

3. The confectionery bar of claim 1, wherein the carbohydrate material includes at least about 50% by weight of indigestible carbohydrate.

4. The confectionery bar of claim 1, further including at least one compound incorporating an element selected from the group consisting of magnesium, iron, zinc, copper and manganese, at least one of said elements being provided in an amount of at least about 25% of the recommended human daily allowance of said element.

5. The confectionery bar of claim 1 further including the human minimum daily requirement of minerals or vitamins.

6. The confectionery bar of claim 1, wherein the ratio by weight of proteinaceous material to digestible carbohydrate ranges from about 1:05 to about 1:5.

7. The confectionery bar of claim 1, wherein the ratio by weight of proteinaceous material to carbohydrate material ranges from about 1:1 to about 1:4.

8. The confectionery bar of claim 1 further including L-tryptophan as an agent for the control of appetite.

9. The confectionery bar of claim 1 wherein the proteinaceous material includes from about 3 to about 21 grams of protein.

10. The confectionery bar of claim 1, wherein the proteinaceous material includes from about 10 to about 15 grams of protein.

11. The confectionery bar of claim 1 further including at least one mineral or vitamin in an amount of from about 30% to about 100% of the recommended human daily allowance.

12. The confectionery bar of claim 1, wherein the energy value ranges from about 60 to about 200 Kcals.

13. The confectionery bar of claim 1 further including minerals or vitamins in an amount of at least about 100% of the recommended human daily allowance.

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