

Ingredient	(Wt %)
maltodextrin	36.3000
modified starch	37.5000
soybean oil	24.9000
polyglycerol ester	1.3000

The Fat Base was prepared by:

- 1) Dissolving polyglycerol ester in warm deionized water;
- 2) Adding the solution from step 1 to a kettle containing 40 lbs. cold deionized water;
- 3) Adding maltodextrin and modified starch to the kettle, mixing well, and heating to 165° F.;
- 4) When maltodextrin, modified starch and emulsifier blend reach 165° F., add soybean oil and homogenize at 500 PSI second stage, 3000 PSI total.
- 5) Spray drying the product under the following conditions:
  - INLET 350°-435° F.
  - OUTLET 180°-220° F.
  - PRESSURE 1200°-2200 PSI
  - PRODUCT TEMPERATURE 150° F.

An Amino Acid Premix was prepared having the following composition:

Ingredient	Wt. %
L- glutamine	20.6609
L- leucine	13.9461
L- arginine acetate	13.8887
L- lysine acetate	8.1381
L- isoleucine	6.9731
L- valine	6.9731
L- phenylalanine	5.9033
L- methionine	5.0734
L- threonine	3.8957
L- tyrosine	2.5023
L- histidine HCL	2.4793
L- aspartic acid	2.2957
L- proline	2.1235
L- tryptophan	1.4164
L- serine	1.1823
L- alanine	1.0606
glycine	1.0330
taurine	0.4545

A Vitamin/Mineral Premix was prepared having the following composition:

Ingredient	Wt. %
magnesium gluconate	37.1184
calcium glycerophosphate	26.9952
potassium chloride	11.6979
sodium citrate	9.4483
trace mineral premix*	4.9576
potassium sorbate	3.1494
maltodextrin	2.2496
ascorbic acid	1.0888
vitamin E acetate	1.2148
biotin	0.3779
zinc sulfate	0.3374
ferrous sulfate	0.3014
niacinamide B3	0.2574
vitamin A palmitate	0.2160
calcium pantothenate	0.1449
cyanocobalamin B12	0.0787
copper gluconate	0.0787
manganese sulfate	0.0508
folic acid	0.0504
vitamin K	0.0495

Ingredient	Wt. %
vitamin D	0.0378
pridoxine hydrochloride	0.0315
potassium iodide	0.0247
riboflavin	0.0225
thiamin hydrochloride	0.0204

\*The trace mineral premix comprised 99.8295% maltodextrin, 0.0776% chronic acetate, 0.0690% sodium molybdate and 0.0239% sodium selenite.

The following procedure was utilized in preparing the composition of the invention:

INGREDIENT	Wt. %
MALTODEXTRIN	65.33
AMINO ACID PREMIX	18.26
FAT BASE	10.06
VITAMIN/MINERAL PREMIX	4.659
CITRIC ACID	0.7756
POTASSIUM CITRATE	0.3668
SODIUM PHOSPHATE DIBASIC	0.2851
CHOLINE BITARTRATE	0.2154
L-CARNITINE	0.04150

Add 40.0 grams of maltodextrin to a mixer. Add 18.26 grams of the Amino. Acid Premix and 4.659 grams of the Vitamin/Mineral Premix to the mixer. Blend the following ingredients for ten minutes and add to the mixer:

MALTODEXTRIN	5.33 GMS
CHOLINE BITARTRATE	0.215 GMS
POTASSIUM CITRATE	0.367 GMS
CITRIC ACID	0.776 GMS
L-CARNITINE	0.042 GMS
SODIUM PHOSPHATE DIBASIC	0.285 GMS

Add 10.06 grams of the Fat Base and 20.00 grams of maltodextrin to the mixer and mix for 10 minutes.

We claim:

1. An enternal nutritional composition comprising, based on total caloric content of said composition,

- a) from 4% to 30% lipid component,
- b) from 65% to 80% carbohydrate component, and
- c) from 16% to 25% protein component, wherein said protein component consists of free amino acids in free base or ingestible salt form and comprises based on the free base 22% to 30% by weight glutamine and 11% to 33 by weight arginine, and at least 40% by weight essential amino acids,

wherein said composition has a nonprotein calorie to grams of nitrogen ratio ranging from 150:1 to 80:1.

2. An enternal nutritional composition comprising, based on total caloric content of said composition,

- a) from 4% to 30% lipid component,
- b) from 65% to 80% carbohydrate component, and
- c) from 16% to 25% protein component, wherein said protein component consists of free amino acids in free base or ingestible salt form and comprises, based on the free base, 22% to 23% by weight glutamine and 11% to 12% by weight arginine and at least 40% by weight essential amino acids,

wherein said composition has a nonprotein calorie to grams of nitrogen ratio ranging from 150:1 to 80:1.

3. The composition of claims 1 or 2 wherein said lipid component comprises, based on total caloric content of said composition, 4% to 10% of 14- 24-carbon long chain fatty acids and 0 to 20% of medium chain triglycerides having fatty acid chains Of 6-12 carbon atoms.