# Wheat Soy Blend

This processed, blended commodity is used primarily as a weaning food, mixed with water as a beverage or gruel, in Maternal Child Health (MCH) and emergency programs. It is used to a lesser extent in other types of programs.

**A. NUTRITIONAL VALUES** (PER 100 g) These are average values, taken from the U.S. Department of Agriculture, Agricultural Research Service (USDA:ARS) 1998 USDA Nutrient Database, Release 12, Laboratory Home Page, (http://www.nal.usda.gov/fnic/foodcomp). These nutrient values are provided as a guide for use in the calculation of food aid rations: users should be aware that shipments of food aid may vary from these exact values. The values for thiamin, riboflavin, niacin, vitamin A, calcium and iron represent the total of the natural values plus the minimum specification (converted to a 100 g basis). NOTE: The values do not contain nutrients from Wheat Protein Concentrate; values for water, energy, protein, lipids, carbohydrates, and fiber were estimated.

## **B.** COMPONENTS

53% Bulgur Flour
20% Wheat Protein Concentrate
20% Soy Flour, defatted.
4% Soybean Oil, stabilized.
3% Vitamins & Minerals, added as premix.

## **C. SPECIFICATIONS**

Milled and processed from bulgur flour, defatted soy-flour, and soybean oil. The wheat-soy blend shall conform in every respect to the provisions of the "Federal Food, Drug, and Cosmetic Act," as amended, and the regulations promulgated thereunder, including any Defect Action Level guidelines issued by the Food and Drug Administration (FDA) which may be applicable to wheat-soy blend. For micronutrient addition level standards, refer to Section I, p. 7. (See Table next page.)

Nutrient	Amount	Unit
Water	8.8	g
Energy	354.5	Kcal
Protein	21.5	g
Total Lipid	5.9	g
Carbohydrate	46.9	g
Fiber, total dietary	13.18	g
Ash	2.0	g
Calcium	842	mg
Iron	17.85	mg
Magnesium	227.26	mg
Phosphorus	294	mg
Potassium	694	mg
Sodium	13.8	mg
Zinc	5.5	mg
Copper	1.0	mg
Manganese	2.2	mg
Selenium	2	mcg
Vitamin C	40	mg
Thiamin	0.54	mg
Riboflavin	0.50	mg
Niacin	8.19	mg
Pantothenic acid	3.7	mg
Vitamin B-6	$0.47^{1}$	mg
Folate	275	mcg
Vitamin B-12	1	mcg
Vitamin A	2323.00	IU
Vitamin E	8.3	mg-ATE
Vitamin D	198.00	IU
Iodine	56.88	mcg

<sup>1</sup>0.17 mg added as Pyridoxine HCL

ITEM	<b>REQUIREMENT</b> <sup>1</sup>			
	Minimum	Maximum		
Moisture, %		11.0		
Protein (Nx6.25), %	20.0			
Crude Fat, %	6.0			
Ash, %		6.6		
Crude Fiber, %		2.5		
Lysine, %	0.9			
Total Bacteria Count per gram		50,000		
Material that will pass through a				
U.S. Standard No. 8				
woven-wire-cloth sieve, %	97.0			
Salmonella, E. Coli and Coagulase Positive Staphylococci will be negative				

#### CHEMICAL AND PHYSICAL REQUIREMENTS

<sup>1</sup>Unless otherwise specified, all analyses except moisture are expressed on a moisture-free basis.

Source: USDA:FSA:PDD:EOB, December, 1997. Contact 202-690-3565 http://www.fas.usda.gov/excredits/wheatsoy.html

### **D. PACKAGING**

25 kg (55 lb.) multi-wall paper bags. Three plies of paper (minimum) with an inner polyethylene or polypropylene plastic liner. The outer paper ply is treated to provide wet strength and must have a plastic liner facing the product of 3 mil (minimum) low density polyethylene.

## E. SHELF LIFE

At least one year.