VISTA FORTIFOODS PVT. LTD. PRODUCT TECHNICAL DATA SHEET



RUTF (Malai Mix[™]) is a Ready-to-Use food, especially designed for the nutritional rehabilitation of severely acute malnourished children.

Malai Mix[™] is our trade mark for "**RUTF**" (**Ready-to-Use Therapeutic Food**).

Target population

RUTF (Malai Mix[™]) designed for the treatment of severe acute malnutrition in children (from 6 months of age). Is also suitable for adults suffering from severe acute malnutrition.

RUTF (Malai Mix[™]) can also be used for the treatment of moderate acute malnutrition, in the event other products particularly adapted are not available.

RUTF (Malai Mix[™]) should not be given to people who are allergic to milk and/or peanuts.

Use context

The invention of RUTF was done to revolutionized the management of severe acute malnutrition by making home treatment/ ambulatory or outpatient care possible for severely malnourished children with an appetite and without medical complications. (*References (3), (4), (5) and (6) at the end of the document*)

Even though RUTF (Malai MixTM) can be used without surveillance, it should be emphasized that the vulnerable condition of the severely malnourished children treated with RUTF (Malai MixTM) requires a health practitioner's prescription and regular medical check-ups (weekly).

During the first years of life, children living in developing countries are most at risk of under nutrition. Children suffering from severe acute malnutrition are at risk of death or severe impairment of growth and psychological development. That's why it is crucial to correct the nutritional status in these young age groups as soon as possible.

Product benefit

Children who fall under the cut-off for severe acute malnutrition (using Mid Upper Arm Circumference, Weight/Height ratio, and/or nutritional oedema) need to receive an adapted diet that allows them to regain a normal nutritional status. The diet particularly needs to account for a malnourished child's elevated nutrient and energy requirements for catch-up growth. (*Reference (1) and (2) at the end of the document*)

A lipid based nutritional supplement high mineral content, such as RUTF (Malai MixTM), is welladapted to the needs of severe acute malnourished children.

RUTF (Malai MixTM) can be safely used and stored outside the rehabilitation center, enabling home treatment. (see the *"Storage Condition"*)

Recommendations for use

Preparation

RUTF (Malai Mix[™]) can be used directly, as it is, without prior preparation.

USE

RUTF (Malai Mix[™]) can be eaten directly from the sachet without prior cooking or dilution with water. The sachet can easily be opened by tearing off one corner of the sachet.

RUTF (Malai Mix^{TM}) can be eaten by a child on his/her own, without having to be helped by his/her mother or anyone else.

It is recommended to have water suitable for drinking always available for the child when RUTF (Malai MixTM) is used. After opening, the sachet can be used through the day, keeping safe and hygienically.

Severely malnourished children are treated under medical supervision. Medical supervision can be provided as inpatient or outpatient care. Severely malnourished children treated with RUTF (Malai MixTM) should receive regular check-ups by a health practitioner, during which they can also receive their next ration of RUTF (Malai MixTM)

Hand washing with water and soap (mother & child) before consumption is recommended.

RECOMMENDED DOSAGE			
	From 6 months of age Severe acute malnutrition		
Dosage Equivalent kcal / kg body weight/ day	200 kcal / kg body weight / day until the targeted weight is reached That is about 3 sachets per day for a severe acute malnourished child weighing 7 kg		

RUTF (Malai MixTM) is not adapted for well-nourished children nor adults.

RUTF (Malai Mix^{TM}) use should be limited to the treatment of acute malnutrition.

RUTF (Malai MixTM) does not replace breastfeeding.

Breastfeeding is recommended for at least 24 months, and exclusively for the first 6 months of age.

Ingredients

Roasted Bold Peanut, Refined Sugar, Milk Solid, Non-hydrogenated vegetable fat (palm, soy, peanut), vitamin and mineral complex, emulsifier, Anti oxidant.

Note : trans fatty acids < 3% of total fatty acids.

RUTF (Malai MixTM) complies with the nutritional composition recommended by the document « Community-based management of severe acute malnutrition » (Reference (2) at the end of the document).

RUTF (Malai MixTM) does not contain any ingredients of animal origin, except dairy products.

Mean nutritional

	For 100g of I	Malai Mix [™] For 92 g			For 100g of Malai Mix [™]		For 92 g
	Min	Max	(serving size)		Min	Max	(serving size)
Energy	520 kcal	550 kcal	500 kcal	Selenium	20 µg	40 µg	28 µg
Proteins (% of total energy)	12.80% of energy	16.20% of energy	10% of energy (=13,34 g)	Sodium	-	290 mg	< 267 mg
% of milk proteins	50 % of total proteins	-	> 50 % of total proteins	Vitamin A	0.8 mg	1.2 mg	0.8 mg
Lipids (% of total energy)	45% of energy	60% of energy	56% of energy (= 31.28 g)	Vitamin D	15 µg	20 µg	17 µg
Fatty acid n-6 (% of total energy)	3% of energy	10% of energy	7 %	Vitamin E	20 mg	40 mg	25 mg
Fatty acid n-3 (% of total energy)	0.3% of energy	2.5% of energy	≈ 0.7 %	Vitamin C	50 mg	132 mg	50 mg
Moisture	-	2.5 g max	2.3 g max	Vitamin B1	0.5 mg	1.5 mg	0.46 mg
Calcium	300 mg	600 mg	368 mg	Vitamin B2	1.6 mg	3.0 mg	1.66 mg
Phosphorus	300 mg	600 mg	368 mg	Vitamin B6	0.6 mg	0.9 mg	0.64 mg
Potassium	1100 mg	1400 mg	1012 mg	Vitamin B12	1.6 µg	3.0 µg	1.5 μg
Magnesium	80 mg	140 mg	101 mg	Vitamin K	15 µg	30 µg	19.0 µg
Zinc	11 mg	14 mg	11 mg	Biotin	60 µg	90 µg	64 µg
Copper	1.4 mg	1.8 mg	1.4 mg	Folic acid	200 µg	400 µg	207 µg
Iron	10 mg	14 mg	9.2 mg	Pantothenic acid	3 mg	6 mg	2.8 mg
lodine	70 µg	140 µg	92 µg	Niacin	5 mg	9 mg	5.3 mg

value

RUTF (Malai MixTM) complies with the "Guidelines for Formulated Supplementary Foods for Older Infants and Young Children" of the *Codex Alimentarius* CAC/GL 08-1991.

All added mineral salts and vitamins included in RUTF (Malai MixTM) are on the "Advisory Lists of Nutrient Compounds for Use in Foods for Special Dietary Uses intended for Infants and Young Children" of the *Codex Alimentarius* Standard CAC/GL 10-1979 (amended 1983, 1991, 2009).

All raw materials are "food grade" in compliance with general recommendations of *Codex Alimentarius* (Codex Standard Peanut 200-1995, Codex Standard Skimmed Milk Powder 207-1999, Codex Standard Sugar 212-1999, Codex Standard Vegetable Oil 210-1999).

RUTF (Malai MixTM) is packaged in 92g flexible foil under protective atmosphere (Under Nitrogen) in order to optimize the product's shelf life, and sachets are air and humidity tight.

Packaging material of the sachet is suitable for food contact.

Logistic Information

Best Before date

Best before date (« BB ») is **<u>24 months</u>** from the manufacturing date stated on each sachet.

After opening, the sachet Consume within 24 hours (Keeping sachet safely and hygienically).

Storage Condition

It is recommended to keep the product in a dry and cool place, at a temperature below $30 \,^{\circ}\text{C}$ (86 $^{\circ}\text{F}$) away from direct sun light.

RUTF (Malai Mix^{TM}) is a ready-to-use paste that does not need to be mixed with water, and that doesn't allow bacterial proliferation because of its low water activity (a_w) (*Reference (6) at the end of document*). RUTF (Malai Mix^{TM}) can therefore be safely used and stored outside the rehabilitation center, enabling home treatment.

It is recommended not to stack the pallets.

Serving size unit

92g sachet providing 500kcal.

Loading plan

	PER CARTON
Unit	150 sachets of 92 g
Net Weight / unit	13.8 kg
Estimated Gross Weight / unit	15.134 kg
Dimensions / unit	37 x 29 x 28 cm

	PER Pallet	Loaded 20' container	Loaded 40' container
Unit	66 cartons	11 pallets (726 cartons)	23 pallets (1518 cartons)
Net Weight / unit	910.8 kg	10,018 .8 kg	20,948.4 kg
Estimated Gross Weight / unit (without pallet)	998.844 kg	10,987.28 kg	22,973.41 kg
Dimensions / unit	100 x 120 x 15 cm		

Sea transport :

<u>Air transport :</u>					
	PER Pallet	Loaded lorry			
Unit	44 cartons	26 pallets (1144 cartons)			
Net Weight / unit	607.2 kg	15,787.2 kg			
Estimated Gross Weight / unit (without pallet)	665.896 kg	17,313.296 kg			
Dimensions / unit	100 x 120 x 15 cm				

Production Unit:

Located at Jaipur (Rajasthan), India.

Having a production capacity of 6 MT per day.

Vista possesses the following certifications:

- WHO-GMP
- HALAL
- ISO 22000-1: 2014(FSSC)
- ISO 9001: 2015
- ISO 14001:2015











References

(1) WHO, 1999 "Management of severe malnutrition: a manual for physicians and other senior health workers"

(2) Community-based management of severe acute malnutrition, A Joint Statement by the World Health Organization, the World Food Programme, the United Nations System Standing Committee on Nutrition and the United Nations Children's Fund, May 2007

(3) *Outpatients care for severely malnourished children in emergency relief programmes: a retrospective cohort study. S.Collins, K. Sadler, the Lancet, vol 360 December 7, 2002.*

(4) Home based therapy for severe malnutrition with ready-to-use food. Manary MJ, Ndkeha MJ, Ashorn P, Maleta K, Briend A. Arch Dis Child. 2004; 89: 557-61.

(5) Home-based therapy for oedematous malnutrition with ready-to-use therapeutic food. Ciliberto MA. P. Acta Paediatr. 2006 Aug;95(8):1012-5.

(6) Ready-to-Use therapeutic food for treatment of marasmus. A. Briend et al. The Lancet, vol. 353, May1999.

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