



Meds & Food For Kids

# plumpy'Sup™

## mamba djanm

**Plumpy'Sup** is a soy-based ready-to-use supplementary food, especially designed for the **treatment of moderate acute malnutrition**.

Plumpy'Sup corresponds to the definition of “**RUSF**” (**Ready-to-Use Supplementary Food**) that can be found in scientific literature.

## Product concept and target population

### Target population

Plumpy'Sup has been designed for the **treatment of moderate acute malnutrition (from 6 months of age)** in Supplementary Feeding Programmes.

Plumpy'Sup is also adapted for children who finish therapeutic nutrition programs as a means of **preventing relapse into severe acute malnutrition**.

Plumpy'Sup should not be given to people who are allergic to peanuts, dairy products or soy.

### Use context

Plumpy'Sup can be used in **targeted nutritional supplementation programmes or general supplementation (blanket feeding)** (see references (1), (2) and (3) at the end of the document).

The decision to provide a nutritional supplement is usually based on a context of an abnormal raise of prevalence of acute malnutrition among children under five and the presence of aggravating factors such as poor food security and/or disease epidemic (see reference (1) at the end of the document).

During the first years of life, children living in developing countries are most at risk of undernutrition. Because this is an important period of growth and development, it is crucial to correct the nutritional status in these young age groups as soon as possible.

### Product benefit

People who fall under the cut-off for **moderate acute malnutrition** (using Mid Upper Arm Circumference, Weight/Height ratio) need to receive an **adapted diet that allows them to regain a normal nutritional status**. The diet particularly needs to account for elevated nutrient and energy requirements (see reference (4) at the end of the document).

A lipid-based nutritional supplement with a high vitamin and mineral content, such as **Plumpy'Sup**, is well-adapted to the needs of moderate acute malnourished people. Results that can be achieved with Plumpy'Sup have shown to be superior to those attained with fortified blended flours.

### Preparation

Plumpy'Sup can be used directly, as is, without prior preparation.

### Use



Plumpy'Sup can be consumed directly from the sachet without prior cooking or dilution with water. The product can easily be opened by tearing off one corner of the sachet.

Plumpy'Sup 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 Plumpy'Sup is used.

After opening, the sachet can be used through the day.



Plumpy'Sup is a supplement to the usual diet and should not replace any locally available food that is commonly consumed nor breastfeeding.

### Recommended dosage

	<b>From 6 months of age Moderate acute malnutrition</b>
Dosage Equivalent kcal / kg body weight / day:	A minimum of 75 kcal / kg body weight / day until the targeted weight is reached  <i>That is about 1 sachet per day for a moderate acute malnourished child</i>

**Plumpy'Sup is not adapted for well-nourished children nor adults.**

**Plumpy'Sup does not replace breastfeeding or a varied and nutritious diet.**



**Immediate breastfeeding after birth, exclusively during the first 6 months and recommended for at least 24 months.**

## Ingredients

Vegetable oils (rapeseed, palm, soy in varying proportions), sugar, **whey** powder, skimmed **milk** powder, **peanuts**, defatted **soy** flour, vitamin and mineral complex, stabilizer (fully hydrogenated vegetable fat, mono and diglycerides).

Allergens: **peanuts, soy** and **dairy** products. May contain traces of **gluten**.

Plumpy'Sup does not contain any Genetically Modified Organism (OGM). It contains no ingredients of animal origin besides dairy products.

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

## Mean nutritional value

	For 100 g of Plumpy'Sup				For 100 g of Plumpy'Sup		
	min	max	target		min	max	target
Energy	510 kcal	560 kcal	537 kcal	Manganese	1.2 mg	2.4 mg	1.4 mg
Proteins	11 g	16 g	12.1 g	Sodium	-	270 mg	< 180 mg
Dry skimmed milk protein	3.6 g	-	3.6 g	Vitamin A	550 µg	1150 µg	750 µg
Lipids	26 g	36 g	35 g	Vitamin D	15 µg	20 µg	15 µg
W-3 fatty acids	0.3 g	1.8 g	0.5 g	Vitamin E	16 mg	-	16.7 mg
W-6 fatty acids	2.6 g	6.1 g	4.3 g	Vitamin C	60 mg	-	60 mg
Calcium	535 mg	750 mg	630 mg	Vitamin B1	1 mg	-	1 mg
Phosphorus	450 mg	750 mg	600 mg	Vitamin B2	2.1 mg	-	2.6 mg
of which free Phosphorus*	-	-	550 mg	Vitamin B6	1.8 mg	-	2 mg
Potassium	900 mg	1400 mg	1000 mg	Vitamin B12	2.7 µg	-	2.7 µg
Magnesium	150 mg	225 mg	170 mg	Vitamin K	27 µg	-	27 µg
Zinc	11 mg	14 mg	12 mg	Biotin	60 µg	-	60 µg
Copper	1.4 mg	1.9 mg	1.4 mg	Folic acid	330 µg DFE	-	428 µg DFE
Iron	10 mg	14 mg	11.2 mg	Pantothenic acid	4 mg	-	6.6 mg
Iodine	100 µg	140 µg	140 µg	Niacin	13 mg	-	17.5 mg
Selenium	20 µg	40 µg	20 µg	* considering 30% of P from plant sources			

Usage of the premix recommended by WFP should ensure the nutritional values listed in the table above and related to the specifications of WFP.

## Quality Standards

Plumpy'Sup 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 Plumpy'Doz are on the "Advisory List 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) or in the *Technical note: supplementary foods for the management of moderate acute malnutrition in infants and children 6–59 months of age*. Geneva, World Health Organization, 2012.

All raw materials are "food grade" in compliance with general recommendations of *Codex Alimentarius* (STAN 200-1995, STAN 207-1999, STAN 212-1999).

Plumpy'Sup is packaged under protective atmosphere 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 according to European Regulation 1935/2004, 27th October 2004.

### Best Before End date

Best before end date (« BB End ») is **24 months** from the manufacturing date stated on each sachet.

### Storage

Plumpy'Sup is best stored below 30°C (86°F), in dry and hygienic conditions.

Plumpy'Sup is a ready-to-use paste that does not need to be mixed with water, and that doesn't allow bacterial proliferation because of the low water activity ( $a_w$ ). Plumpy'Sup can therefore be safely used and stored outside the rehabilitation center, enabling home treatment.

It is recommended not to stack the pallets.

The shipping cartons are designed to withstand long transport times. Their size was chosen to optimize the various possible kinds of shipment

### Serving size unit

100 g sachet providing 540 kcal

### Loading plan

	CARTONS
Unit	150 sachets of 100 g
Net Weight / unit	15 kg
Estimated Gross Weight / unit	16 kg
Dimensions / unit	40 x 30 x 20 cm

A carton of Plumpy'Sup can treat 4 moderately acutely malnourished children (weighting 7 kg each one) for about 1 month.\*

*\* This estimation is only meant to provide guidance for stock management. It is not intended to be used for ration calculation and does not take into account appetite or other criteria that are linked to the individual.*

Since 2005, Nutriset has developed a worldwide network of local producers (the PlumpyField® network) in order to facilitate access and availability of quality-controlled nutritional products in areas with a high prevalence of malnutrition. These partners produce products of the Nutriset range and apply the same quality assurance system to ensure that the products produced locally meet the same quality standards and nutritional specifications.

Plumpy'Sup is available from the following PlumpyField® partners:

- In **Burkina Faso** by **InnoFaso**, based in Ouagadougou  
[omar.coulibaly@innofaso.com](mailto:omar.coulibaly@innofaso.com), M. Omar COULIBALY
- In the **USA** by **Edesia**, based in North Kingstown  
[info@edesianutrition.org](mailto:info@edesianutrition.org), Ms. Navyn SALEM
- In **Ethiopia** by **Hilina Enriched Foods, P.L.C** based in Addis Ababa  
[infos@hilinafoodseth.com](mailto:infos@hilinafoodseth.com), Mrs. Hilina BELETE
- In **Haiti** by **Meds & Food For Kids (MFK)**, based in Cap-Haïtien  
[pwoff@mfkhaiti.org](mailto:pwoff@mfkhaiti.org), Ms. Patricia WOLFF
- In **India** by **Nutrivita Foods**, based in Pune  
[nilkamalj@nutrivita.in](mailto:nilkamalj@nutrivita.in), M. Nilkamal JOSHI
- In **Madagascar** by **JB / Tanjaka Food**, based in Antananarivo  
[thierry.barday@basan.mg](mailto:thierry.barday@basan.mg), Mr. Thierry BARDAY
- In **Niger** by the **Société de Transformation Alimentaire (STA)**, based in Niamey  
[direction@sta.ne](mailto:direction@sta.ne), Mr. Ismaël BARMOU
- In **Sudan** by **Samil**, based in Khartoum  
[hisham@yagoubgroup.com](mailto:hisham@yagoubgroup.com), Mr. Hisham S. YAGOUB

## References

- (1) UNHCR and WFP. *Guidelines for selective feeding - The management of malnutrition in emergencies*. May 2009
- (2) WFP and DSM. *Ten Minutes to Learn About Nutrition programming*. Sight and Life Magazine Issue n°3/2008 – Supplement.
- (3) Webb et al. *Delivering Improved Nutrition: Recommendations for Changes to U.S. Food Aid Products and Programs*. 2011. Boston, MA: Tufts University.
- (4) Golden MH. *Proposed recommended nutrient densities for moderately malnourished children*. Food Nutr Bull. 2009; 30: S267-342.

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