



Nutrilate Nutribar – A Perfect Midday Snack

For 36 months – 18-year-old children & pregnant women

Affordable Nutrition

NUTRILATE puts its foot forward in combating Anaemia and other major deficiencies among the Children through its flagship Millet based products (Millet Nutri Bar and Protein Milk Bar)

Growth Failure And
Nations Burden Needs

Good Nutrition



MALNUTRITION AND ANAEMIC A MAJOR CONCERN

Health and nutrition are critical for growth and human development. Since birth, better nutrition is of utmost importance for a child to have a robust immune system. It is essential to lower the chances of acquiring communicable and non-communicable diseases¹. Any form of undernutrition has significant adverse effects on human health.

India is the home to a sizable number of malnourished children across the world. According to NFHS-5 India, more than one-third of the under-five children (35.5%) were reported stunted, 19.3% were wasted (7.7% were severely wasted), and about one-third (32.1%) were underweight. Anemia can lead to serious health consequences, including impaired cognitive development, decreased immunity, and even death.

BACKGROUND

Anaemia is a condition in which there is a deficiency of red blood cells or hemoglobin in the blood. It is a major public health concern in India, especially among children. According to the National Family Health Survey (NFHS), around 58% of children aged between 6 months to 59 months in India are anaemic. NFHS-5 data clearly indicate rise of anaemia in both children and women. Alarming 67.1 per cent children under the age of five are anaemic. About 60 per cent adolescent girls (15-19 years) and 57 per cent of women in reproductive age (15-49 years) suffer from anaemia.

Anaemia can lead to serious health consequences, including impaired cognitive development, decreased immunity, and even death. Iron deficiency, haemoglobinopathies, vitamin A deficiency and zinc deficiency were associated with an increased risk of anaemia; these associations may vary subrationally.

Anaemia is a condition in which there is a decreased number of circulating red blood cells and/or haemoglobin contained wherein and is the most prevalent nutritional deficiency disorder. The Malnutrition condition can be checked through their BMI which is called Visible Malnutrition and second it testing their haemaglobin level to check any hidden malnutrition. Please find below the Deficiency/ Deficiency Disorder along with their threshold values for haemaglobin test.

>12	11-11.9	8-10.9	<8
No Anaemia	Mild	Moderate	Severe



NUTRILATE has conducted studies among two separate groups of children, one group consisting of 36-72 months old children at an Anganwadi centers in Bijapur district of Chhattisgarh, and the other group consisting of 10-18 years old girl students studying in 60 social, tribal and BC welfare residential schools in Telangana.

The studies were conducted in two stages. In first stage blood samples were collected and tested for Haemoglobin percentage along with their BMI scores. In the second stage Millet Nutri Bar Intervention was given.

Stage 1: Haemoglobin Test

The first stage of NUTRILATE's efforts to combat anaemia involved conducting a haemoglobin test among the children in both groups. Haemoglobin is an essential protein found in red blood cells that carries oxygen throughout the body. Anaemia is a condition where the body does not have enough healthy red blood cells, resulting in fatigue, weakness, and other health issues. The haemoglobin test is a quick and non-invasive way to check for anaemia.

The haemoglobin test was conducted among the children in both groups to determine the prevalence of anaemia. The results of the test showed that a significant number of children in both groups were anaemic, indicating a need for intervention to address this issue.

Stage 2: Millet Nutri Bar Intervention

After examining the anaemic condition among the girls in the second group, NUTRILATE proposed Millet Nutri Bar as the mid-morning snack to consume every day for a period of 3-6 months. The Millet Nutri Bar is made from a blend of millets like jowar, bajra, ragi, and foxtail, which are rich in iron, calcium, and vitamins.

NUTRILATE conducted a study to evaluate the impact of Millet Nutri Bar consumption on haemoglobin levels among the girls in the second group. The study involved providing the girls with Millet Nutri Bar as a mid-morning snack every day for a period of three months. The haemoglobin levels of the girls were tested before and after the intervention.

The results of the study showed that there was a significant increase in haemoglobin levels among the girls who consumed Millet Nutri Bar as compared to the control group. The girls who consumed Millet Nutri Bar had an average increase of 1.7 g/dl in haemoglobin levels, while the control group had an average increase of only 0.5 g/dl.

CONCLUSION



NUTRILATE's efforts to combat anaemia among children through its flagship Millet-based products are commendable. The company's studies have shown that consuming Millet Nutri Bar and Protein Milk Bar can help improve the haemoglobin levels of children, especially those who are anaemic. The use of millets as a key ingredient in these products is a step towards promoting the consumption of traditional products.

Supplying to children studying in
govt. schools as part of their mid-day
meal snack in five states.

ABOUT NUTRILATE



NUTRILATE is a nutrition bar manufacturing company based out of Hyderabad that has been providing healthy and nutritious snacks to the people of India. The company has been dedicated to producing high-quality nutrition bars made from natural ingredients, with an aim to provide an easy and convenient way for people to get the nutrients they need.

One of the major goals of NUTRILATE is to combat anemia and other major deficiencies among children in India, which is a serious health concern in the country. In this report, we will discuss how NUTRILATE is putting its foot forward in this regard through its flagship Millet-based products, Millet Nutri Bar and Protein Milk Bar.

OUR PRODUCTS

NUTRILATE has taken a unique approach to combat anemia and other major deficiencies among children by introducing Millet-based products, including Millet Nutri Bar and Protein Milk Bar. Millets are a group of small seeded grasses that are rich in essential nutrients like iron, calcium, and magnesium.

Millets are also rich in dietary fiber and have a low glycemic index, making them an excellent food choice for people with diabetes.

The Best that We Produced



Millet Nutri Bar



Millet Chikki is a healthy and delicious snack made from a combination of millets, peanuts, and jaggery. It is an excellent source of iron, calcium, and other essential nutrients that are necessary for the growth and development of children. The jaggery used in Millet Nutri Bar is a natural sweetener that is rich in iron and helps in the absorption of iron from other food sources. Millet Chikki is an excellent snack for children, especially those who are anemic or have iron deficiency.

The products are perfect balance of fiber and protein.



Low fat



Body Detox



Anti Aging

Protein Milk Bar

Protein Milk Bar is another flagship product of NUTRILATE that is made from a combination of millets, nuts, and seeds. It is an excellent source of protein, dietary fiber, and essential nutrients like iron and calcium. Protein Milk Bar is an ideal snack for children who are always on-the-go and need a quick and nutritious snack to keep them going. The combination of millets, nuts, and seeds in Protein Milk Bar provides sustained energy and helps in the growth and development of children.



COMPARISION STUDY:

NUTRIENTS	NORMAL CHIKKI (100 GM)	MILLET NUTRI BAR (100 GM)	PROTEIN MILK BAR (100 GM)
ENERGY (K CAL)	532	510	526
PROTEIN (G)	6.11	18	22.68
CARBOHYDRATE (G)	42	47	45
TOTAL SUGARS	36.13	14.13	6.82
FAT	30.81	22.82	26.75
DIETARY FIBER	5.87	14	16
IRON (MG)	1.1	18.1	13.2

Table 1 : Comparison Study of Nutrients Normal Chikki vs Nutrilate Millet Nutri bar

General Observations: The age range of the mothers was 18-35 Years, consumed the nutri-bar within 5-7minutes and most of the mothers opined that the Nutrilate millet nutri-bar is very taste and their children definitely like the nutri- bar. (Source : Baseline Study done in Aganwadi Centers, Chattisgarh)



- ✓ **Rice Syrup:** A natural sweetener that provides a slow and steady release of energy, without the crash that can come from refined sugars.
- ✓ **Peanut:** High in protein and healthy fats, which can help you feel full and satisfied for longer periods of time. Peanuts are also a good source of vitamins and minerals, including vitamin E, magnesium, and potassium.
- ✓ **Jaggery Powder:** A traditional Indian sweetener that is rich in iron and other minerals. It's also lower on the glycemic index than refined sugar, which means it won't cause spikes in blood sugar levels.
- ✓ **Jowar Crispies:** Made from sorghum, a gluten-free grain that is high in fiber and antioxidants. Sorghum is also a good source of protein and essential vitamins and minerals.
- ✓ **Oats:** High in fiber and protein, oats are a great way to support digestive health and keep you feeling full and satisfied. Oats are also rich in antioxidants and other nutrients that can help support overall health and wellness.
- ✓ **Ragi Crispies:** Made from finger millet, a gluten-free grain that is high in fiber and essential vitamins and minerals. Finger millet is also rich in antioxidants and can help support healthy blood sugar levels.
- ✓ **Watermelon Seeds:** A good source of healthy fats, protein, and essential minerals like magnesium and zinc. Watermelon seeds can also help support heart health and may have anti-inflammatory properties

Nutrilate Millet Nutri Bar in addition to providing energy, macronutrients, pleasure of sweetness, it could provide some essential nutraceuticals if it is fortified, to impart part of RDA requirement to all sections especially children.



THANK YOU

