

BRINGING NUTRITION TO BABIES

On World Prematurity Day, CE talks to Neolacta Life Sciences, a Bengaluru-based company which produces mother's milk-based products for pre-mature babies



70 Calorie is priced at ₹450 for 15ml and the Fortifier is priced at ₹550 for 5ml.

Neolacta make their own equipment to provide two products — fortifier and 70 Calorie

INITIAL RESISTANCE

In the last 18 months, the Neolacta team collected data to show that the products were a success. In Chennai, they have tied up with around 15 private hospitals. "Most doctors have noticed that the infant mortality rate has come down. Some have even noticed that the rate of NICU has come down and we have testimonials from doctors telling it is safe to consume," says Sarabhi.

• Anushree Madhavan

India has the highest number of pre-term babies, according to the 2010 data from the World Health Organization. Around 38.18 lakh babies are born premature every year in India — thrice the numbers in China, which stands at 11,76,000. To reduce the premature mortality rate, Bengaluru-based Neolacta Life Sciences makes two mother's milk-based products. "This is one of the three companies all over the world, and the only one in Asia that produces mother's milk-based products," says Sarabhi Aggarwal, MD, Neolacta Life Sciences. Sarabhi's family is from Australia, where they had their own dairy farm and an engineering company. Putting together the two fields together, Sarabhi makes their own equipment to produce two products — fortifier and 70 Calorie.

"The rate of prematurity has been rising across the world because of various factors like change in lifestyle, having babies at a later stage in life, and even environmental changes. The reason we chose to set up our plant in India is we want to be committed to the intact arrival of pre-mature babies here," he says. Neolacta products are for babies in the NICU (Neonatal Intensive Care Unit) environment.

What is a pre-term baby?

When a baby is born before 37 weeks, or ahead of the term, they are called pre-term babies. "Prematurity has nothing to do with the weight, but the term. It is in the last trimester that the babies develop most of their major organs in the womb," explains Sarabhi. Majority of mothers who have pre-term babies struggle with insufficient or no lactation. As a result, the babies suffer from sepsis, NEC (necrotising enterocolitis) or gas pain. "Flow to 30 per cent of the babies with NEC are given anti-biotics, 50 per cent have to undergo surgery, and 90 per cent of those babies do not make it," he says. Hence, to save the babies, it

is necessary to administer 100 per cent mother's milk-based products. "Usually, most of them introduce bovine-based substitutes, which contain a lot of risk factors. As the babies' gut is not fully developed, bovine products can cause short-term and life-long problems," he shares.

Neolacta's products

In the last 18 months, Neolacta products have benefited more than 1,300 babies in Bengaluru, Chennai and Hyderabad. After collecting data over 18 months, and testing 16,000+ mothers, Neolacta noted that Indian mothers have less calorie count than the western mothers and that is one

of the reasons for the high premature births. "The babies need a lot of protein. In India, we have a low protein diet. The baby needs more. So, we extract the cream from a large pool of mother's milk and add it to a smaller quantity to prepare this product. It has around 70 calories and this is given to the babies in NICU as per requirement," explains Sarabhi. The other product, a fortifier, ensures that the baby gets all the protein that it needs, which is used by the babies in the mother's womb. "The babies can consume 100ml-180ml per kg per day. If they have their own mother's milk then they get 1.8g to 2.2g from 100ml consumption. But according to global guidelines, a pre-term baby needs 3.5g-4.5g per protein a day. This fortifier helps them get 2.5 times more protein. This is an es-

clusive mother's milk diet that derives carbohydrate, protein and fat from donor mother's milk," he says.

Screening donors

Neolacta has tied up with a few private hospitals in Chennai, Bengaluru and Hyderabad from where they receive information about mothers who have exclusive milk. They counsel families to explain the benefits of donating mother's milk.

"After counselling, they have to fill a questionnaire. We then conduct a series of tests to rule out all kinds of diseases. So far, we have not had any mother with HIV or Hepatitis B because these tests are done frequently. But, the donors that people in India are not aware of is Hepatitis C. There have been many mothers who we had to reject because they had Hep C. The test costs are borne by us," he says. Once the mother passes all the tests, they are selected as donors. In rural areas, NGOs help the team get donor mothers.

"We nursing has been a practice in the past and women in the rural areas are aware of that. So, most of the time it is easier to convince a rural mother than an urban mother as she knows the importance of breastfeeding," he says.

Once the mothers are screened, Neolacta gives them sterilised bottles to express breast milk. "We encourage people to express naturally and not using pumps," he says. It is then collected and stored cold and transferred to the labs where the milk is stored in -20 degrees

celsius. From the deep freezer, it is transferred to a facility in a frozen condition. "We then send it for microbiological testing in the lab to rule out any kind of bacteria present in it. If we detect anything, that bottle is discarded. The pure ones are processed and pasteurised and sent for analysis. Only when it passes the analysis we give it to the customers," he explains. They have had a few hundreds of donors so far and becoming a donor mother is voluntary. "We have had women who have expressed for a day a week, and even some who have donated for full six months."

The south

Neolacta is currently focusing on educating mothers and hospitals in south India about the need for a mother's milk-based product for premature babies. "The quantity that we receive now is just about enough for the three states here. We are educating a broader community and conducting medical education programmes with doctors to make them understand the benefit of these products. Most doctors are open to it as they have all studied abroad and know the importance of providing an exclusive mother's milk-based diet," he says. As demand grows, they will branch out to other states too.

Neolacta is now the Chennai market six months ago. "In Chennai, there are five to eight hospital banks, but they are unable to meet their own internal requirement. We have visited those banks. While they are state-of-the-art, the storage space is less. We have set up a central processing facility where we have better control over the quality. Our products complement what those milk banks are using. The blood banks in Chennai can benefit from our fortifier in the long run we want to tie up with government institutions too," he says.

While Neolacta looks at profit, they also provide their medications free of cost to those who cannot afford them and are referred by a doctor they know.

(The reporter was invited for a job tour by Neolacta)

Enlarge



BENEFITS FOR DONORS

in areas where MGO workers interact with them often, the women are given a nutritional diet of jaggery and groundnuts. After delivery, once the mother starts expressing, they are given iron and protein-rich foods.