



Tulasi, a third standard student in Perambalur was constantly feeling tired. After a health check up by Payir Trust, an NGO in her area, she was diagnosed as having low haemoglobin levels. A proper nutritive care has made her brisk once again with haemoglobin levels shooting high.

It is not just Tulasi – but many children suffer from malnutrition across Tamil Nadu. Nourishment for an age where the vital organs shape and grow is important. However, this was not the case in this district where poor nutrition levels affect 50 % of school children in Perambalur. Low nutrition in food, low economic status, increased share in the number of people in a household, poor hygiene practices are all common reasons for anaemia to be prevalent among children is what Mr. Senthilkumar Gopalan, Founder, Payir Trust says.

During their work with grass root

organizations for development of holistic rural empowerment in Perambalur, they found that fifty percent of the children, especially in Perambalur government schools were anaemic.

With a program aligned with the District administration, they provided nutritious breakfast to the children in primary schools. It did not stop at food, there was a multi-pronged approach. They also initiated a supplementary nutrition program targeting common nutrition and calorie deficiencies in anganwadis, primary, middle and high schools. Also workshops that imbibe the cognition of increasing the community awareness of nutrition and child growth were conducted.

Payir's initiatives have had a good impact in increasing the nutritional levels of the children. Their breakfast meal scheme for school children especially helped children

from economically backward classes who skip breakfast due to non – availability of food or due to attending household chores before coming to school.

The second thing was to monitor the haemoglobin levels regularly and supplement those still under-nourished children with extra nutritive food and care.

In a span of one year, the results were fruitful. Over 70% of children in Perambalur showed significant improvement says Mr. Senthilkumar – “Anemia prevalent in adolescent girls has more than halved. School attendance has improved to nearly 100% due to our nutrition programs”

Their program on nutrition has reached 35,000 children and the government has partnered with Payir to expand the reach of the supplementary nutrition program in the entire district of Perambalur.

DATA- in Perambalur district

Nearly 50% of children in public schools are severely malnourished

Over 70% of girl children and young women are anaemic

Poor nutrition levels lead to frequent illnesses and fatigue

School absence and drop-out rates are high

## TN Nutrition Alliance organizes Knowledge Workshop



Research institutions' role in fighting malnutrition security



Roof top gardens for urban food and nutrition



Community participation needed for nutrition awareness

September 28, 2017: The Tamil Nadu Nutrition Alliance gathered for a two-day workshop on ‘Knowledge Management for Nutrition’ at Puducherry on September 26 & 27, 2017. The meeting was an opportunity to share best practices on nutrition and to brainstorm on the portal that is being set up for the alliance. The participants shared on their work related to nutrition and were in consensus about promoting traditional crops and foods for nutrition and also on involvement of community in spreading the message of nutrition. Dr Yamuna Rani, Joint Director ICDS, Chennai gave an overview of the schemes for the 0-6 population and adolescent girls and how they are using ICT technologies for nutrition. Dr K.R Jahan Mohan State Planning Commission, Tamil Nadu, spoke of initiatives on millet promotion & other efforts by the Government. Ms Deepa Rajkamal, CEO of TNVRC, a unit of the Women's Development Corporation,

outlined their database on profiles of village members within Tamil Nadu, which could be of use to the Alliance. Dr M Sangeetha, Deputy Director Research, Directorate of Public Health and Preventive Medicine spoke about prevention of discriminatory practices that favours boys over girls, that affect girls' nutrition. Dr Ashok spoke about deficiencies such as Vitamin A, that result in eye diseases among children.

Dr Seethalakshmi, Gandhigram University spoke of their work on popularising milk and milk products, Dr Shareefa Talha, senior nutrition expert and Dr Meenakshi Bajaj, Indian Dietetic Association spoke about various specific products to take care of nutrition needs. Prof. K.R. Sundaravaradarajan, Annamalai University, highlighted how academia-nutrition linkages can create need-based diets.

Dr Velvizhi, Fish for All Centre, MSSRF gave an overview of the work of the Centre and the importance of fish as a source of nutrients, while Dr K.

Ambashankar, Central Institute of Brackishwater Acquaculture, spoke of the misconceptions related to specific sea food. Dr Nagaraj, MSSRF highlighted the use of GIS to map malnutrition hotspots.

Grassroot Institution representatives from Puducherry highlighted work on livelihood security and nutrition in the form of kitchen gardens and for rearing of milch animals.

Dr Farhat Saiyed, UNICEF, outlined the objectives of the Alliance requesting each of the stakeholders to contribute to the network to take it forward.

Ms Jayashree B, Head HMRC, MSSRF highlighted how the Tamil Nadu Nutrition Alliance knowledge platform could be used share tools and resources for nutrition in Tamil Nadu.

The meeting also included field visits to Vazhudavoor, to study the dairy collectives of women, and to Poraiyur for an interaction with adolescent girls on nutrition and related issues.

## Research institutions' role in fighting malnutrition

At the heart of all efforts to eradicate malnutrition lies research. The aim of research is to provide new insight into solving an existential problem.

The second meeting of the Tamil Nadu Nutrition Alliance held on September 26-27, 2017, saw how research institutions are contributing towards the fight against malnutrition.

There was consensus among many of the institutions that there was a need to bring back ancient foods and local foods on to the plate.

Dr Shareefa Talhaa, former HOD of JBAS college and currently nutrition consultant, spoke about her research in creating a type of 'sattu maavu', a beverage powder containing ingredients like ragi, pulses, and other nutri-rich commodities can provide essential nutrients required by the body.

Dr M Seethalakshmi, Dean and Professor of Dairying, Faculty of Agriculture & Animal Husbandry, at the Gandhigram Rural Institute (Deemed University), Tamil Nadu, spoke of her institute's research on creating new value added products from dairy. These products are in the form of ice creams, cookies, beverages, puddings, sweets, chocolate along with flavoured curd and yoghurt.



They have created 77 products under the above categories to be sold in the market.

Prof Sundaravaradarajan, Director Training and Placement at Annamalai University spoke about the need to have linkages between academia for nutrition efforts. He also spoke about using research to create need-based food based on specific dietary requirements.

Dr K R Jahan Mohan, Head Agricultural Policy and Planning Commission, Tamil Nadu State Planning Commission spoke about the State's initiatives about the promotion of millets and enhancing production and productivity of these crops. Ms S Sasikala, Associate Professor, SRM University spoke about food safety issues.

Fish is a food item that is consumed by many living in coastal areas, as they have direct access to it. Dr K. Ambasankar, Principal Scientist with the ICAR-Central Institute of Brackish Water Aquaculture (CIBA), Chennai, spoke about fish being an affordable and rich source of nutrients. He also spoke of the misconceptions regarding certain food like shrimp.

Dr Velvizhi, Principal Scientist with the Fish for All Centre, MSSRF also spoke about the benefits of fish. She explained how the Centre is helping women create value added products from fish while also maintaining the highest standards.

All stakeholders at the meeting were in agreement that only a collaborative effort can help in reducing malnutrition among the population.



## Roof top gardens for urban food and nutrition security

To ensure food and nutrition security in the urban areas, the Department of Horticulture, Government of Tamil Nadu has come out with a scheme for 'do it yourself' roof top vegetable gardens. This scheme was introduced by the former Chief Minister Ms J Jayalalithaa in 2014 in two regions namely Chennai, Coimbatore and based on its good reception was also introduced to Trichy and Madurai.

The idea behind the garden is that people can cultivate vegetables as per their requirement in their roof tops, which will also be healthy and free of chemicals.

The government provides the kits which costs Rs 500 per kit and had scheduled to distribute it about one lakh persons across the four regions. A person can buy as many kits as they require. The materials included in the kit are polythene bags, coconut coir bricks (that absorb water and to be used instead of sand,) seedlings of brinjal, tomato, chillies, and cuttings of plants of ladies finger, broad beans and three varieties of green – 'Araikeerai', 'Mullaikeerai', 'Palakeerai', coriander and radish. Apart from these, the kit gives azospirillum (200g), Phospho bacteria (200g), pseudomonas (100g), Trichoderma (100g) and fertilizer '18:18:18' (1 Kg) and azadirachtin (100mg).

There is also a CD with a short movie that contains step-by-step instructions about how to prepare the 'soil', the manure and the processes required to grow and maintain the plants.

## Malnutrition has multiple tentacles – Dr. Meenakshi Bajaj



It is very fascinating talking to Dr. Meenakshi Bajaj, Dietician, Tamil Nadu Govt. Multi Super Specialty Hospital, Omandurar Estate, Chennai and President, Indian Dietetic Association, Chennai Chapter, India. Nutrition is not of a single colour, nor is malnutrition or anaemia. She shares how anaemia can be of various types. People, who consult her, have multiple health problems. Anaemia too varies from one person to another on the basis of their general immunity and other infections that they are prone to. Hence treating and also prescribing diets to anaemic patients is not compatible to all.

### Excerpts from Dr.Meenakshi's interview:

**Question: What exactly are common myths about a healthy diet? How does it vary from one person to another?**

Dr. Meenakshi Bajaj: There are many myths in a healthy diet. For example, expensive breakfast cereals which are mostly preferred by modern parents to save time in feeding children in the morning busy time has zero impact in the nutritive values of the children's health. For a pregnant woman, the advice she gets when the minute she has a positive pregnancy test is so varied. For them also the advice varies. A pregnant lady with gestational diabetes has to take 'porikadalai' amla chutney, ratha (type of spinach) poriyal

whereas those who don't have diabetes have to take pori urundai and rice flakes.

**Question: Anaemia is so prevalent now. Is dealing with it costly, with nuts and grains?**

Dr. Meenakshi: Treatment for women from a low economical status cannot include a hi-fi menu. A simple effective menu will enrich the nutritive sustenance of the concerned person. Anaemia affects all genders invariably- be it men, women or children. If a person, whose kidney is affected, has anaemia, then he or she will develop erythropoietin deficiency which will have hormonal impact. So directly treating anaemia will be in vain. Not much to spend, but much to plan about nutrition is what I will offer as a dietetics baggage. In case of a person with diabetes being affected by anaemia, Metformin is prescribed in initial stages. It has a very bad impact on the iron levels. Iron levels cannot be improved when such medication is in the offing. Hence puli thanni, puli kaarakuzhambu can be used very often. Also a good bye to non stick pans is good to enrich the iron content when the other alternative is iron vessels, which occupy a rare space in modern homes.

**Question: Is there any medical advice as to how iron tablets have to be taken?**

Dr. Meenakshi: Yes. It is very important. The simple fact is how a pregnant woman has to take calcium, folic and iron tablets – she has to space it with an interval of one hour each. Otherwise there will be absolutely no ship-shape developments noted. With that, Dr. Meenakshi strikes home the point that emphasises that nutrition need not be an expensive package, but a simple one can help nutrition much better.

## Community participation needed for nutrition awareness

When the Tamil Nadu Nutrition Alliance, a consortium of stakeholders held their second meeting at Pondicherry in September 2017, they undertook a trip to Poraiyur, Pondicherry. The idea was to interact with a group of adolescent girls, to find out their level of nutrition awareness. The meeting was organized by the Iniyur Grama Sangam (IGS), a Federation of Women SHGs, based in Puducherry, set up with the facilitation of MSSRF. The Federation works with single women and their children and has organized them into separate groups. In Poraiyur, there is an adolescent group, comprising girls in the age group 12-19 years, formed in June 2016. The Federation also works with the ICDS and the Department of Health.

Monisha is part of the adolescent group. She holds a card

in her hand with her height, weight and other health information. The card also indicates whether she has been ill in the recent past. She receives nutritious food at her school in the afternoon daily along with milk in the morning. She is given iron and folic acid tablets once a month through the voluntary workers of the IGS. She is also given information on menstrual hygiene and provided sanitary pads with information on its usage. The IGS also facilitates health



checkups for its members, organized by the ICDS and the Department of Health.

Monisha says she takes the tablets regularly. She has been fortunate that she has the help of the Federation to talk to about health and nutrition issues, which some others have no access to. It is initiatives such as these where the community needs to play a major role in facilitating the well being of its girls, especially adolescent girls. Health and nutrition in adolescence is vital in the lifecycle approach to nutrition. Therefore, having the community creating a safe space for young girls, so they can talk to them about personal hygiene and care, helps young girls across locations. Also, they facilitate a vital link to social entitlements on health and nutrition that is provided by the Government.