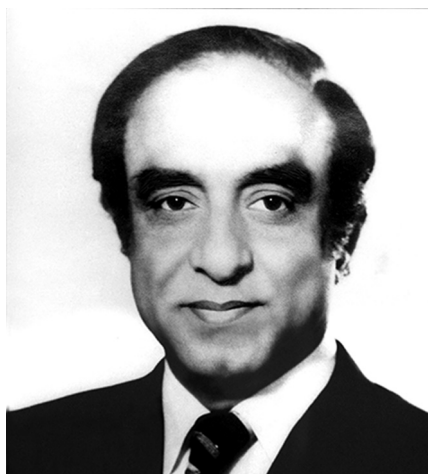




Obituary



Prof. Coluthur Gopalan (1918-2019)

Coluthur Gopalan was born in Salem in November 1918. This was a year that would prove to be a landmark in the history of nutrition science in India in more ways than one because in the same year, the Nutrition Research Laboratories (NRL) was established at Coonoor in the Nilgiris, Tamil Nadu.

Dr Gopalan had his schooling in Madras Christian College High School and after completing his intermediate course he joined Madras Medical College. He obtained his MBBS and went on to take his M.D. in General Medicine from Madras University in 1943. During his student days, he was deeply distressed by what he read about the ravages wrought by the Bengal Famine of 1942. He decided to work towards improving the dietary intake and nutritional status of Indians. Hence, instead of joining a medical college as a lecturer or starting a practice as a clinician, he joined the Stanley Medical College in a nutrition research project. Two years later, he went to the United Kingdom on a Nuffield Foundation Scholarship, the first awardee of this scholarship from India. He completed his research studies and obtained his Ph.D. in a short period of 30 months. He returned to India and joined the NRL

in Coonoor. Dr Gopalan initiated studies in areas such as undernutrition and anaemia that afflicted vulnerable groups including children and, pregnant and lactating women. His holistic studies on nutritional problems in women and children included epidemiological, clinical, biochemical and therapeutic components and provided useful leads to the Government of India for policy and programme formulation to improve the nutritional status of vulnerable segments of population.

He was appointed as the Director, NRL, in the early 1960s after the laboratory was shifted to Hyderabad. The NRL was later renamed as the National Institute of Nutrition (NIN), reflecting the recognition of the institute's growing importance in providing research-based evidence for combating national nutrition problems. Dr Gopalan took over as the Director General (DG) of the Indian Council of Medical research (ICMR), New Delhi in 1973. He initiated the setting up of research institutions for some of the major communicable diseases and strengthened the human resources for medical research. After he retired in 1978, he established the Nutrition Foundation of India (NFI). He was the founder president of the NFI

and mentored and guided the research studies at the NFI from 1978 for over 40 years till he passed away on October 3, 2019.

Dr Gopalan always drew conclusions only after meticulous holistic research studies spanning years and had the courage of conviction to publish research results contrary to commonly accepted theories. He always emphasized the importance of monitoring nutritional intervention programmes closely so as to respond in a timely fashion to changes in the nutrition and health scenarios. In the 1960s, keratomalacia due to vitamin A deficiency was a major problem, associated with very high mortality rates. Dr Gopalan showed the link between undernutrition, vitamin A deficiency and infections (especially respiratory infections and measles) on the one hand and keratomalacia on the other. Based on the findings from his research, the National Programme for Prevention of Blindness, popularly known as Massive Dose Vitamin A Supplementation Programme, was initiated. Two decades later, when keratomalacia became a rarity Dr Gopalan immediately recommended that the Massive Dose Vitamin A Supplementation Programme should be discontinued. He contributed immensely to the initiation of this national programme and then set an example to others by becoming an ardent advocate for terminating the programme when keratomalacia became rare.

In the early 1960s, Dr Gopalan became the Director of the NRL, Hyderabad and developed well-equipped laboratories for biochemistry, pathology, endocrinology and biophysics, and established a field unit and an extension education division. In 1969, the NRL celebrated its Golden Jubilee; recognizing the phenomenal growth and development of NRL, the institution was renamed as NIN. Research contributions and publications from the NIN laid the foundation for many national nutrition programmes including the National Anaemia Prophylaxis Programme (IFA supplementation programme), National Prophylaxis Programme Against Nutritional Blindness (Massive Dose Vitamin A Supplementation Programme), Integrated Child Development Services and Mid-day Meal Programme. In November 2018, the NIN celebrated its centenary year.

Dr Gopalan was a versatile, eminent institution builder who put in a lot of his energy into building institutions and creating a talent pool of scientists to meet the ever-changing nutrition scenario in the

country and in the world. Recognizing the importance of systematic data collection on dietary intake, nutrition and health status of the population, Dr Gopalan established the National Nutrition Monitoring Bureau (NNMB) almost at the same time as the National Sample Survey Organization was established by the Government of India. NNMB surveys provided vital information on ongoing changes in dietary intake and nutritional status of urban, rural and tribal populations over three decades in selected States. In the past two decades, NNMB surveys provided early warning of the sharp decrease in physical activity in urban and rural populations and the emerging problem of overnutrition and non-communicable diseases both in urban and rural areas.

In 1973 when Dr Gopalan became the DG of the ICMR, he invested his time and energy towards strengthening the existing ICMR network of institutions dealing with both communicable diseases and non-communicable diseases and in building institutions devoted to research on leprosy, malaria and filariasis. After he retired as the DG, ICMR, Dr Gopalan built up the NFI as a non-governmental organization devoted to improving the nutritional well-being of Indians. Over the next four decades, he consistently drew attention to problems in implementation of the ongoing nutrition programmes and suggesting midcourse corrections. He ensured that the NFI carried out operational research studies at urban primary health centres and in urban low-income communities and provided leads for improving implementation of the nutrition intervention programmes.

Dr Gopalan recognized the importance of networking among nutrition scientists. He initiated WHO-supported M.Sc. and certificate courses in Nutrition at the NIN for both Indian and South-East Asian students. He established the Nutrition Society of India and the Federation of Asian Nutrition Societies (FANS) as fora for discussion on nutritional problems in India and Asia. Both these societies have grown over the last five decades and are now major professional associations providing useful inputs to national and international agencies pertaining to the management of the emerging problem of triple burden of malnutrition.

Dr Gopalan was an excellent clinician, a research scholar and a mentor of research scientists. These qualities gained him national and international recognition. He was an elected fellow of all the three Indian Science Academies and was a Fellow of the

Royal Society. The National Academy of Medical Sciences gave him the Life Time Achievement Award in 2006. The International Union of Nutrition Sciences awarded him the Living Legend Award in 2013 and the FANS awarded him the Living Legend Award in 2019. The Government of India recognized his contributions by awarding him 'Padma Shri' and 'Padma Bhushan'. On October 16, 2019 the ICMR honoured him posthumously with a Centenary Award.

Over a span of six decades, Dr Gopalan, the Father of Nutrition Science in India, built up institutions and human resources for nutrition research, contributed to

the recognition that optimal nutrition is an essential prerequisite for health and human development and enabled the country to be the global pioneer in initiating intervention programmes to improve the nutritional status of its citizens. We are the inheritors of his legacy and have to rededicate ourselves to realizing Dr Gopalan's vision of achieving the nutrition well-being of all Indians as rapidly as possible.

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