

B. S. Narasinga Rao (1928–2013)

Even as the Prime Minister of India calls 'Undernutrition a curse that we must remove' and terms the problem of malnutrition as 'a matter of national shame', the nation loses an eminent nutrition scientist whose contributions in a variety of areas in food and nutrition biochemistry and technology were significant. At the age of 84, Bagepally S. Narasinga Rao (BSN) was actively writing till almost the last day of his life on 4 January 2013; incisively researched articles on various aspects of nutrition for *NFI Bulletin* and others.

Born on 11 August 1928, Narasinga Rao had his early education in Bagepally (Kolar district of Karnataka) and Bangalore. He graduated from Central College in Bangalore securing first rank in B Sc Honours, winning the gold medal instituted by the Maharaja of Mysore. After teaching chemistry at the Central College from 1949 to 1951, he began his long career at the Nutrition Research Laboratories in Coonoor, Tamil Nadu as Parlakamidi Research Scholar under the guidance of V. N. Patawardhan. On completion of his Ph D in 1955 from the University of Mysore, Rao joined the staff of Nutrition Research Laboratories, which later moved to Hyderabad in 1959 and was renamed National Institute of Nutrition (NIN). Rao was the Director of NIN from 1983 to 1988. His postdoctoral experience was at the Department of Physics, Massachusetts General Hospital during 1959–1961 on a US public health fellowship and subsequent brief stints on WHO and Ford Foundation fellowships.

BSN's significant contributions include: aetiology of protein calorie malnutrition in India – role of fat deficiency rather than protein deficiency; analysis of nutritive value of Indian foods by application

of state-of-the-art, analytical tools; recommended dietary allowance (RDA) of energy, proteins, and some minerals for Indians; role of restricted dietary absorption of iron from Indian diets as cause of iron deficiency anaemia; aetiology of pellagra; fluoride and calcium metabolism, and others. Development of iron-fortified, iodized salt (double fortified



salt) under his guidance is an important and promising food-based approach which can go a long way in combating the dual problem of iodine deficiency disease and iron deficiency anaemia in India. Government order for its production has now come. Rao guided 25 Ph D students and published over 300 articles, including reviews and book chapters.

As secretary of ICMR committees for deriving nutrient requirements for Indians and drawing up RDA, in 1978 and 1988, and as chairman in 2010, Narasinga Rao's role in this important exercise is well recognized. The significant contributions of Indians through evidence-based research in nutrition were chronicled by him in a monumental publication *Development of Nutrition Sci-*

ence in India (Allied publishers, 2005). This project was supported by INSA. With his vast and in-depth understanding of basic and applied aspects of nutrition, Rao served on many national (ICMR, CSIR, DST, CSIR, ICAR, AEC, Sports Authority of India, Planning Commission, Prime Minister's National Nutrition Mission) and international (FAO, WHO, Malaysian Palm Oil Promotion Council) committees. He was the president of the Nutrition Society of India from 2000 to 2004. He was the fellow of the National Academy of Agricultural Sciences and National Academy of Medical Sciences, and received many honours and awards, including the Dr P. B. Rama Rao Memorial Oration of the Society of Biological Chemists, India; Dr S. G. Srikantia Memorial Oration, Dr C. Gopalan Oration of the Nutrition Society of India and Kellogg Oration Award of the Dietetic Association of India.

Narasinga Rao is survived by three children and six grandchildren. With his gentle and humble personality, he had endeared himself to the scientific community. His motto was: 'work sincerely for better understanding and enhancing your knowledge and not for fame or money'. His absence will be felt by many of us in the field of basic and applied aspects of nutrition. A scientist of his calibre did deserve greater recognition from the scientific community.

RAMESH V. BHAT
MAHTAB S. BAMJI*

211, Sri Dattasai Apartments,
RTC Cross Road,
Hyderabad 500 020, India
*e-mail: msbamji@gmail.com