

## Editorial

### **Lenore Arab is leaving as Editor for North America**

Lenore is moving on in her work and this has meant that she can no longer continue as Editor for North America. I would like to take this opportunity to publicly express my sincere personal thanks to Lenore for the massive contribution she has made to Public Health Nutrition. The Nutrition Society also expresses gratitude for the important contribution Lenore has made to the development of the journal as well as Public Health Nutrition within The Society. Her wise counsel, energy, clarity of thinking and dynamism will be missed. We wish her well on her new journey.

### **Dr Marilyn Tseng takes over as Editor for North America**

We are fortunate that we have recruited a new North American editor, Dr Marilyn Tseng. Marilyn works at the Fox Chase Cancer Center in Philadelphia. Her research interest is in diet modification as a means of preventing cancer, particularly in understanding the effects of dietary patterns in high risk groups. Marilyn has already contributed greatly to the journal as a thorough, clear, and timely reviewer of manuscripts, so she has a sense of what she is letting herself in for! The Nutrition Society is extremely grateful that she has agreed to take on this onerous task.

In my last editorial I asked readers for comments on the FAO/WHO expert report on diet, nutrition and prevention of chronic diseases (NCD); comments from two people follow this editorial<sup>1</sup>.

In a related activity that complements the global strategy, The World Health Organization (WHO) recently launched The SuRF (Surveillance of Risk Factors) Report. This contains information on tobacco and alcohol use, patterns of physical inactivity, low fruit/vegetable intake, obesity (as measured by Body Mass Index (BMI)), blood pressure, cholesterol and diabetes (measured by blood glucose) for over 170 of WHO's 192 Member States<sup>2</sup>. The WHO Global NCD InfoBase also holds more than 47 000 pieces of data from over 1400 different sources, including NGOs such as the World Heart Federation and its member organisations. The report highlights the gaps and deficiencies in the data that make comparisons between countries difficult.

In this editorial I want to highlight two papers published in this issue of the journal. The first, by Pomerleau and colleagues, discusses the burden of disease attributable to nutrition in Europe<sup>3</sup>. There is increasing interest in more

precisely defining the burden of disease attributed to nutrition as a way of justifying, in cost and health burden terms, the importance and benefit of improving diet and levels of physical activity. The paper presents Europe-wide data on disability-adjusted life years (DALYS) extracted from the latest World Health Report (from WHO) that highlights the importance of NCDs in Europe. The paper then presents country-specific FAO data on fruit and vegetable intake and death rates from IHD (from the WHO Health for All Database) for those countries to show the close inverse relationship between IHD death rates and fruit and vegetable intake. The authors then collate and summarise estimates of the contribution that fruit and vegetable intake and overweight and inactivity may have on the burden of disease. The most recent estimates from the Global Burden of Disease 2000 study suggest that about 4.4% of the overall burden of disease in Europe could be attributed to low fruit and vegetable intake, and 7.8% to overweight and obesity. This rises to 6.9% for low fruit and vegetable intake and 8.9% for overweight and obesity in countries with low child mortality and high adult mortality.

The most valuable contribution the paper by Pomerleau and colleagues makes to this area of activity is to raise some important methodological issues that need to be considered when making general statements about the attributable burden of nutrition to NCDs, which to date have not been widely considered. 'When assessing the impact of low fruit and vegetable intake, estimates of disease burden are dependent on the availability, reliability and validity and generalisability of data on fruit and vegetable intake, and on current epidemiological knowledge of the association between fruit and vegetable intake and health problems'. They raise concerns about how fruit and vegetables are defined in different countries, and the relative importance of seasonal variations in some, but not all, countries. This highlights the huge gap in our knowledge of exposure to one of the leading determinants of health. The most complex issue raised is how to define the relevant and appropriate reference category (counterfactual) against which risk in low/high consumers is assessed – an attributable burden can only be assessed by having some frame of reference; those eating no fruit and vegetables or, a little bit or . . .? Depending on where this reference level is set, different answers can be obtained. Finally, if fruit and vegetables are protective, this implies that they are protective against some other factor and therefore the protective effect will only be seen when that other factor that is being protected against is also present. For example, fruit and vegetable consumption appears to offer some protection against a wide range of carcinogens,

ranging from helicobacter infection to components of processed red meats, as well as some factors promoting atherosclerosis. Does this mean that in those who are not exposed to these factors, fruit intake does not matter? We can't say, but it does highlight the need to think about overall dietary patterns and the possibility of interactions and confounding. This effect may explain some of the apparent contradictions in studies in different countries with different dietary patterns. This discussion may seem a bit esoteric to practitioners reading this who simply want to know that there is good evidence to support recommendations for most people to eat more fruits and vegetables, but it is not. Until we have definite answers to these questions and concerns we can not be precise about the specific role of different aspects of diet in the burden of NCDs. There is, however, little debate that nutrition (diet and activity) is at least as important as smoking and alcohol in the burden of diseases in Europe.

The second paper that I would like to highlight comes from Hendricks and colleagues from South Africa<sup>4</sup>. This study assessed the effectiveness of a take-home nutrition supplementation programme (a State-subsidised scheme) aimed at malnourished pre-school children (<6 years of age) and pregnant and lactating women in the Northern Cape Province of South Africa. The scheme has been in place since 1960; it was integrated in 1994 into the broader health facility-based programme (which covers growth monitoring, case-management of nutrition-related disease, counselling and micronutrient supplementation). Discharge from the scheme occurs after three consecutive months of adequate weight gain. The supplements are given out monthly and include 2 kg of full-cream milk to infants 0–71 months and 4 kg of a fortified (with many nutrients) maize and milk mix (protein vitamin mix- PVM) to infants and children aged 6–71 months. Pregnant and lactating mothers are provided with 1 kg of full-cream milk and 4 kg of PVM.

The present study is the first time the scheme has ever been evaluated for impact. Nutrition programme managers were interviewed and the growth of children in the scheme was assessed through retrospective review of clinic records. About 76% of the budget allocated to the scheme over the last year had been used; 85% of the health

facilities in the province participated in the scheme; coverage was estimated to have been 50% for eligible children and 60% for eligible pregnant and lactating women. The impact on growth was assessed further in 319 children enrolled over a year; 10% of those with a Z-score below  $-2$  moved into the normal range; there was an improvement in the Z-scores of 25% of enrolled children. The key issues raised by the study included: lack of staff training and awareness of criteria for admission and discharge from the scheme; inadequate nutrition counselling; and no standardised monitoring. The scheme appeared to have more impact in children of <2 years of age, with little impact in older children. The authors conclude that food supplementation is probably still necessary given the high burden of hunger and poor household food security that exists in many parts of South Africa. They believe, however, that supplementation of at-risk groups is unlikely to have maximum benefit if it is not multi-focal and part of a broader package of nutrition-related interventions. To ensure sustainability they believe that more emphasis needs to be given to establishing community-based nutrition programmes that are linked to nutrition intervention clinics, underpinned by ongoing training of staff and standardised monitoring systems.

Barrie Margetts  
Editor-in-Chief

## References

- 1 Feedback on WHO/FAO global report on diet, nutrition and non-communicable diseases. *Public Health Nutrition* 2003; **6**: 425.
- 2 New WHO surveillance tool captures key country risk factors to bring global chronic disease epidemic under control. Web site <http://www.who.int/mediacentre/releases/2003/pr41/en> (verified 10 June, 2003).
- 3 Pomerleau J, McKee M, Lobstein T, Knai C. The burden of disease attributable to nutrition in Europe. *Public Health Nutrition* 2003; **6**: 453–61.
- 4 Hendricks MK, le Roux M, Fernandes M, Irlam J. Evaluation of a nutrition supplementation programme in the Northern Cape Province of South Africa. *Public Health Nutrition* 2003; **6**: 431–7.