South African Nutrition Congress 1992

The great success of the congress reflects the interest in many different facets of nutrition by practising professionals, and the hard work of all those involved in its organisation. A number of 'firsts' for the country were featured: it was the first time that all professional and scientific societies involved in nutrition held such a joint function; it was an exceptional experience in that it covered all the nutritional problems facing the country; and it was attended by 93 delegates and 16 overseas speakers, a record for nutrition congresses. These and other events certainly testify to the expected growth of nutrition in the future.

It would be an impossible task to summarise the Congress in any detail, yet certain aspects came to the fore and an attempt will be made to put some of them in perspective:

Malnutrition
Malnutrition and its high prevalence, be it in the community or the hospital, featured prominently in the proceedings and urgent, co-ordinated action was deemed necessary by all, despite the fragmented nature of available data. Concern was also expressed that malnutrition is not being diagnosed and its prevalence is higher than currently believed. The latter has tremendous implications for the restructuring of existing training facilities in the country, not only for the diagnosis of malnutrition, but also for its early identification and cost-effective management. Another area of interest regarding malnutrition centred on the need to define the prevalence of specific nutrient deficiencies, an area that also holds implications for the training of nutrition professionals. Certainly, the exciting prospects of a positive nutrition intervention policy for the country were typified in the Chilean model, as presented by Dr F. Monckeberg. However, this successful model must be interpreted correctly and not selectively, and must be adapted to the needs and peculiarities of the country if it is to be equally successful in South Africa. In this regard, the correct conceptualisation of needs and imaginative leadership will be of paramount importance for its success.

The dietitian in PHC
Ms Pauline Kuzwayo, Department of Human Nutrition, Medunsa, highlighted the special role of dietitians in primary health care (PHC) in southern Africa. She emphasised the importance of nutritional care as an integral component of PHC, and the fact that dietitians are the only professionals who have specialised academic training in the science of human nutrition that enables them to interpret the principles of nutrition for individuals, groups and communities. The main functions of the dietitian in PHC are
Assisting with nutrition policy formulation; planning and implementation of nutrition programmes, nutrition education; dietary counselling; consulting in group feeding; training of other professional health workers and supportive personnel; direct care for clients and patients in various settings; and research to provide new knowledge and to evaluate and monitor services. The dietitian also facilitates cooperation among all health services and nutrition programmes to ensure continuity and follow-up.

The participants of the ADSA workshop for dietetic training discussed the document proposed for minimum standards for professional training of dietitians. Regarding continuing education for dietitians, the group identified the 12 most important needs. A discussion on the need for dietetic support personnel revealed that this matter is premature at this stage since enough help is being provided by, for example, food service managers and nutrition advisers. Two subcommittees were appointed to monitor and research the situation.

Complex carbohydrates

One of the most informative presentations was that of Dr. John Cummings (Cambridge) who spoke on the health implications of dietary complex carbohydrates (starch and non-starch polysaccharides (NSP)). He presented recent results on the digestibility of different starch fractions, including starch that resists digestion, resistant starch (RS). During normal digestion a considerable amount of starch escapes breakdown and absorption in the small intestine and will reach the large bowel where, along with NSPs, also known as dietary fibre, it forms the principal substrate for fermentation. RS and NSP are broken down by bacteria in the large intestine with the production of short-chain fatty acids (acetate, butyrate and propionate), H2 and CO2. Short-chain fatty acids are absorbed from the colon and affect carbohydrate, lipid and nucleic metabolism very favourably. Starch that escapes digestion in the small intestine may well in its own right be an important food component in the diet of diabetic as well as non-diabetic persons.

Micronutrients

The recent developments in the area of micronutrients, especially those with anti-oxidant properties, are cause for excitement and expectation. Results now becoming available, apart from being promising, put an entirely different perspective on their function and role in the pathogenesis of the degenerative diseases of aetiology and, in the case of vitamin A, in childhood morbidity and mortality of infectious diseases. These developments not only represent another opportunity for selective and cost-effective intervention but also depict the great care that must be exercised in deciding on the type of interventions and the targeting of the appropriate populations for such schemes.

Nutrition support is often cited as the most important stimulus to the growth of the science of nutrition. The introduction of total parenteral and total enteral nutrition, the development of techniques for venous and enteral access, the availability of specialised products and the demonstration of its life-saving potential in the right setting have enabled nutrition to permeate practically through all disciplines of medicine.

Some of the developments highlighted at the congress underscore the major shift in the definition of the aims of nutrition support. In the past its aims were to prevent starvation and the development of specific nutrient deficiencies. While these aims remain operative, we are beginning to realise that specific nutrients can also support and modulate the acute-phase response, have organ-specific functions, can enhance immune function, can preserve gastro-intestinal function, but can also do harm in inexperienced hands. A new area of nutritional pharmacology is clearly emerging and the question therefore arises as to whether one should talk of nutrition or metabolic support — the debate has only just begun! The training implications of these developments are self-evident.

New phase in the science of nutrition

All-in-all, we are entering a new growth phase of the science of nutrition, a phase 'beyond nutrient deficiencies', a phase in which nutrients, as outlined at the congress, have functions other than the prevention of deficiency symptoms, functions that appear important in the maintenance of optimal health. In harvesting the benefits of this new area of growth, proactivity rather than the reactivity of the past is going to prove of fundamental importance. The socio-economic changes currently under way in the country present us with an opportunity that we can harvest to the benefit of the science of nutrition and all the populations of the country. We have the opportunity and know-how to practise nutrition by applying First World knowledge to First World conditions; but we also have an equal opportunity to apply First World nutrition knowledge and practice to Third World conditions. The latter is not at all a contradiction of terms. The Keneba experience from Cambridge is but one example of applying sophisticated nutritional methodology in Africa to help intervene nutritionally and better understand nutrient requirements.

The harvesting of this opportunity can only be achieved by promoting and encouraging the practice of nutrition, a science on its own merit as the congress has shown. In this regard, the universities are going to have to play a pivotal role in meeting not only the training but also the research requirements for the immediate and future nutrition needs of the country. South Africa is changing for the better; nutrition should not fall behind; in fact, it should proactively keep ahead of these changes and developments as well as the projected requirements of the country. We must adapt, because, simply, we cannot afford to fail.

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