PROCEEDINGS OF THE CONGRESS OF THE SOUTH AFRICAN NUTRITION SOCIETY

held at Newlands, Cape, on
24 - 26 April 1969

HANDELINGE VAN DIE KONGRES VAN DIE SUID-AFRIKAANSE VOEDINGSVERENIGING

gehou te Nuweland, K.P.,
op 24 - 26 April 1969

Opening Address/Openingsrede

THE APPLICATION OF NUTRITIONAL KNOWLEDGE TO THE NUTRITIONAL HEALTH PROBLEMS OF SOUTH AFRICA

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In the last presidential address Dr A. M. Coetzee[1] emphasized the important role that this Society plays (and should continue to play) in bringing together a number of different disciplines that are concerned directly or indirectly with nutrition research and problems. For instance, at this conference today we have (*a*) physiologists, endocrinologists, biochemists and a botanist interested in fundamental research; (*b*) physicians and paediatricians interested in the clinical aspects; (*c*) public health officials and dietitians involved in the broader approach of preventive medicine; and (*d*) the research staff of the food industry which, after all, in this technical world bears the responsibility of producing and distributing the goods.

The main aim of the Society is to advance the scientific study of nutrition, and the wide backgrounds of those of us present today emphasize the interdependence of our various skills in the attainment of this aim. Dr Coetzee also hinted that perhaps the Society could do more in co-ordinating and disseminating scientific information for application specifically to the nutritional health problems of the Republic.

He touched here on an important principle. We are all busy in our laboratories pursuing one project after another, accumulating new facts and confirming or disproving the work of others. But what does it all mean when facts that are firmly established are published in scientific journals and filed away neatly in libraries or in reports? One knows from experience that they are seldom translated into action.

Prof. Max Rosenheim,[2] of the British Medical Research Council, pointed out in a recent address that if for the next 20 years there was a moratorium on further research and research were replaced by the application of what is already known, there would result a widespread improvement in world health. He went on to say, of course, that no such moratorium is conceivable and research must go on. Thus we see the current expenditure and effort on heart transplantation and the conquest of space. These are the facts of life with which we must live.

However, this does not mean that we must cease striving for better things in our own sphere. Since this Society was established in 1957 its members have contributed significantly to nutrition research. Among them is a vast amount of accumulated experience and sound judgement which in my opinion is not being utilized as fully as it might be. We live in a country where the problems of overnutrition and undernutrition are equally challenging and important. I believe that the Nutrition Society as a body has now reached a stage where it must actively explore ways and means of making an effective contribution to the application of nutrition research to practical nutrition problems of today. This is not an easy and straightforward assignment at the current time. We have to face the fact that this is a complex country where even the firm recommendations of government-appointed commissions cannot be implemented. A good recent example of this is what happened to the Fluoridation Commission proposals. Likewise, carefully drawn up memoranda and resolutions, such as were passed at the Annual General Meeting of this Society 4 years ago, are, in general, ineffective.

We have to look for a new approach. I recommend that the new Council specifically devote some of its energies to this end. There is not time to go into all the possibilities, but I should like to suggest that one proposal might be examined: i.e. that the Society should promote the establishment of working-parties on specific nutritional problems. These working-parties (I specifically do not want to use the word committee) should be made up of small panels of experts that investigate specific problems as they relate to conditions in the Republic. They can summarize the known facts and make an authoritative recommendation to be published in relevant journals. We would then have a reliable source of information for all those who are concerned with the practical aspects of nutrition. At present it is difficult for a doctor, nurse, public health worker or food manufacturer to find an authoritative unbiased South African source on a whole number of practical problems. For example, should milk be enriched with vitamin D, and, if so, does this apply equally to all population groups in all provinces or are certain groups particularly at risk? Some other subjects that different working-parties might look into and recommend on include:

1. The best natural protein supplements for mealie meal and cereal diets.
2. Diet and exercise in the prevention of coronary heart disease.
3. The most effective methods of nutrition education.
4. The specific indications for vitamin supplements.
5. Lactose-free diets.
6. Are humanized milks really necessary?

We must not forget that the nutrition problems in our neighbouring states are also immense. A visit to Botswana and Malawi last year made me realize how much we can assist them with good advice, and also how much we can learn from them. A clinic that I was fortu-

nate enough to see in Malawi had some good ideas that might well be incorporated into clinic services in some parts of the Republic. In essence this clinic was built by the community and provided, in addition to curative and preventive services, an antenatal service, a labour ward, and a 'feed-up' section for malnourished children. In other words, all services were in the same place. In South Africa the fragmentation of medical services between 3 bodies, the State, the Provinces and the local authorities, makes this type of clinic difficult to establish. At present, I believe, there is a move to amend the Public Health Act to get better co-ordination of medical services. Perhaps the South African Nutrition Society should at this meeting lend its support to this idea. The application of nutritional knowledge to nutrition health problems in South Africa could be much facilitated by an administratively combined health service.

These are just some thoughts for further consideration and discussion. It is stimulating and rewarding to meet at a congress like this to compare notes and thoughts and to communicate the results of our research. It is important, though, constantly to ask ourselves the questions: What are we trying to do? What does it all mean? Even if we cannot answer these questions clearly and unequivocally, if we keep them in mind it will keep us down to earth.

REFERENCES
1. Coetzee, A. M. (1967): S. Afr. Med. J., **41**, 1229.
2. Rosenheim, M. (1968): Lancet, **2**, 821.

SUMMARIES OF PAPERS : OPSOMMINGS VAN REFERATE

PROGRESS REPORT ON PRODUCTION AND UTILIZATION OF NNRI FOOD FORMULAE (PVM)

J. J. DREYER, *National Nutrition Research Institute, Pretoria*

The fundamental aspects regarding the PVM food formulae for supplementation of predominantly cereal diets will be described briefly. Information will be given on the general interest in the formulae and on what has been achieved in respect of the production and the making available of the formulae since disclosure of the results of the Institute's investigations at the Bloemfontein Symposium in 1968.

HEALTHY AMINO-ACID PATTERNS

W. A. ODENDAAL, *Nutrition Advisor, Dry Bean Board, Pretoria*

It is generally accepted that the most difficult and expensive nutrient to acquire is the protein as regards quality and quantity. World agriculture will not be in a position to produce sufficient proteins of animal origin at reasonable cost to prevent protein malnutrition.

Proteins of animal and vegetable sources contain deficiencies or surpluses of some amino acids. In practical nutrition, therefore, more attention should be paid to the appropriate combination of foods such as meat, milk, fish, legumes (beans) and cheese on the one side and eggs and cereals on the other side, in order to obtain a daily balanced intake of amino acids.

More research is needed also in the Republic to establish practical dietary scales.

THE POTENTIAL ROLE OF PEARL MILLET AS A FOOD IN SOUTH AFRICA

J. P. DE WIT, *National Nutrition Research Institute, Pretoria*

Until it was supplanted by other grains, particularly maize, pearl millet was a major source of cereal food to the indigenous population of Southern Africa. Even today it is still grown in some parts of the Republic for home consumption, while in Ovamboland and the Okavango it is the major agricultural crop and staple food. Because of its present minor economic importance, millet has been greatly neglected and no research is being done in the Republic to improve cultural practices or to develop improved varieties. No commercial milling of millet is undertaken and millet meal is not available as a commercial commodity.

To assist the South West African Administration to obtain millet meal for use in hospitals and school hostels in these northern territories, a method for small-scale milling of millet was developed in the National Nutrition Research Institute.

Nutritionally millet meal is superior to mealie meal, particularly due to its higher protein content. Samples of pearl millet grown in the Okavango and Ovamboland ranged in protein content from 11 to 16%.

Attention should be given to the development of improved varieties, particularly high-protein varieties, for cultivation in Ovamboland, the Okavango and other areas unsuitable for the cultivation of maize.