

# PROCEEDINGS OF THE NUTRITION SOCIETY

ONE HUNDRED AND THIRTY-FIRST SCIENTIFIC MEETING  
THE MEDICAL COLLEGE OF ST BARTHOLOMEW'S HOSPITAL,  
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## NUTRITION AND THE ELDERLY

*Morning Session*

*Chairman* : PROFESSOR R. C. GARRY, D.Sc., M.B., Ch.B., F.R.S.E.,  
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### **Nutrition and the elderly: Chairman's opening remarks**

By R. C. GARRY, *Institute of Physiology, University of Glasgow*

'Nutrition and the elderly' not 'Nutrition of the elderly', how significant a preposition can be! The geneticist regards the nature of the inheritance from our forebears as of prime importance: the nutritionist tends to emphasize the importance of the nurture of the individual. Nature and nurture, that old controversy once again! About nature we can do little, with nurture surely we can strive to create an environment where the individual may attain to the full potentialities of the inherited constitution.

In the recent past, with our grim experience of malnutrition in the young, we have tended to emphasize the importance of ample nutrition for growth. Our outlook, too, has been somewhat coloured by the attitude of the farmer, of the breeder of animals, who regards weight increase as a desirable end in itself. We certainly have done something, the continued secular increase in the rate of growth of our children is a fact. But we have not followed through with our observations; we do not know, we have not had time to learn, what the final upshot is to be. In experimental animals, it is true, we are beginning to follow the effect of more-than-ample nutrition to the end of the entire life span: and the findings are not wholly reassuring. There is a Scots proverb 'Reese (praise) the fine day at e'en (evening)'.

We have no right to congratulate ourselves on our practice until we are sure that the effect is beneficial throughout life. Nutrition of the elderly may start in infancy.

This may be no mere paradoxical statement of the obvious. Rightly or wrongly there is a growing feeling of unease about the wisdom of our expansive attitude to nutrition in the earlier years. Specific items in our civilized, sophisticated, restored and fortified foods may have undesired effects on the tissues of our bodies. These effects may not appear until late adult life.

We must face the fact, too, that civilized existence is not physiologically normal existence. Nature has given us bodies, in particular alimentary canals, adjusted by generations of experience to an intake of energy which we now rarely expend. The increasing number of elderly people in our society is itself a new phenomenon. This

imbalance between intake and expenditure is appearing even in childhood. The schoolboy no longer creeps 'like snail unwillingly to school', he is whisked from home in public transport, he finds sedentary recreation gazing at the television screen. The adult at his desk or at the wheel of his car finds difficulty in disposing of the energy in the food for which his alimentary canal clamours. The elderly, deprived of their occupations, with growing physical disabilities, are increasingly faced with this very problem. Intake of energy has to be adjusted to a new level of expenditure. Inactivity itself has grave metabolic repercussions. Voluntary simple reduction of intake only too often throws the machinery of the gut out of gear. The fear of constipation is a very real phobia and we do not know what are the effects of the almost universal recourse to the frequent, even daily, use of purgatives.

In the elderly, too, there may be more subtle disturbances, changes, for example, in endocrine activity with effects on metabolism.

There is much active day-to-day empirical therapy of the elderly, but little hard fact to justify our practice. Inevitably the energies and resources of the National Health Service are for the moment fully occupied with the daily care of elderly patients. But we lack a real understanding of the physiology, biochemistry and pathology of senescence. Without such knowledge we have little hope of preventing, or treating successfully, the disabilities of the elderly. We must have intensive clinical observation in the wards and biochemical metabolic studies in attached laboratories.

Initially at least the need is for the old-fashioned type of balance study, so that we may know what goes into the patient, how he deals with the nutrients and through what channels and in what quantities he loses materials of essential nature.

Above all, we must see the elderly in continuity with youth and middle age. We accept that the child is father of the man. We could equally well say the elderly person is the child of his youth and years of maturity. The elderly do not form a special isolated section of the community: we must continually hark back to the earlier years. When studying the disabilities of those who are growing old we must probe the past history. Can the present state be explained by past practices especially in nutrition? Above all, an unusually fit elderly person ought to arouse our inquisitiveness to the maximum. Can the fitness be all ascribed to a wise choice of parents?

### **The physiological changes which occur in a man as he grows older**

By K. J. FRANKLIN (EMERITUS PROFESSOR OF PHYSIOLOGY,  
UNIVERSITY OF LONDON), *Broomfield, Yarnton, Oxon*

The Hon. Programmes Secretary of The Nutrition Society graciously invited me some time ago to contribute to this symposium an article on 'The physiological changes which occur in a man as he grows older'. I accepted partly because I had written about the formation of the Society in my biography of the late Sir Joseph Barcroft, and was glad to have the opportunity of a personal meeting with the present members. At a Ciba Colloquium on the General Aspects of Ageing which I attended