



Foreword

VITAMIN RETENTION IN COOKING AND FOOD PROCESSING

On 24 November 1992 a one-day symposium on the above topic was held by the Food Chemistry Group of the Royal Society of Chemistry in the Scientific Societies' Lecture Theatre, Savile Row, London W1. The six invited lectures given, and reproduced in this issue, were supplemented at the meeting by the following six poster presentations:

- Rachael J. Pither and Darren F. Mullan
Campden Food & Drink Research Association,
Gloucestershire, UK
'The effect of domestic cooking on vitamin retention'
- Kiriaki Papadopoulou and J. Ames
University of Reading, Reading, UK
'Degradation of all-*trans* β -carotene on heating in the presence of phenylalanine'
- Sau Soon Chen and Michael Spiro
Imperial College, London, UK
'Equilibrium and kinetic study of the extraction of L-ascorbic acid from rose-hip tea'
- Nacera Rahmani and H. G. Muller
University of Leeds, Leeds, UK
'The destruction of thiamin and riboflavin during the preparation of couscous'
- Catherine G. A. Davies and Broniek L. Wedzicha
University of Leeds, Leeds, UK
'Ascorbic acid browning: composition of melanoidins'
- Hamid U. Shah, Janice Ryley and F. Olga Flint
University of Leeds, Leeds, UK
'The stability of microencapsulated vitamin A'

The aim of the symposium was to present reviews of current knowledge on the retention in food of the major vitamins, both water-soluble ones (the B group, C and folic acid) and fat-soluble ones (A, D and E). The contributions were structured around the different cooking and processing methods: those in the home using cooker and microwave, and those in industrial processing including canning, cook-chill preparation, extrusion cooking, irradiation and vitamin enrichment. In each case the available evidence concerning the extents and mechanisms of thermal, chemical and physical losses of vitamins has been examined in detail. Not only temperature and time, the obvious variables, but also water, oxygen, pH, shape, packaging and even light were seen to play crucially important roles in many of these processes.

In view of the importance of the subject, the Editor of *Food Chemistry*, Professor Gordon G. Birch, has kindly arranged for all six contributions to this symposium to be published in one issue together with the chairman's salutary introduction. In this way, the details, including all the relevant literature references, will now become available to a wider audience. Readers of this issue of *Food Chemistry* will therefore find in it much practical information on how best to retain and even enrich the vitamin contents of a wide variety of food products, so helping to ensure a healthier diet for consumers.

Michael Spiro
Organiser of the Symposium
Editor of the Reviews

*Department of Chemistry, Imperial College
of Science, Technology and Medicine,
London, UK, SW7 2AY*