B

Experientia Supplementum
Vol. 44

Springer Basel AG

Nutritional Adequacy, Nutrient Availability and Needs

**Nestlé Nutrition Research Symposium,
Vevey, September 14–15, 1982**

**Edited by
J. Mauron**

1983

Springer Basel AG

The symposium was organized and sponsored by the
Research Department of Nestlé Products Technical Assistance Co. Ltd.,
CH-1814 La Tour-de-Peilz (Switzerland)

Volume Editor
Prof. J. Mauron
Research Department
Nestlé Products Technical Assistance Co. Ltd.
P. O. Box 88
CH-1814 La Tour-de-Peilz (Switzerland)

Editorial Board
K. Anantharaman
P. A. Finot
M. Horisberger
Y. Ingenbleek
H. P. Würzner

CIP-Kurztitelaufnahme der Deutschen Bibliothek

Nutritional adequacy, nutrient availability and needs :
Nestlé Nutrition research symposium, Vevey, September
14—15, 1982 / ed. by J. Mauron. [The symposium was
organized and sponsored by the Research Dep. of Nestlé
Products Techn. Assistance Co. Ltd., La Tour-de-Peilz
(Switzerland). Ed. board K. Anantharaman ...]. –
Basel ; Boston ; Stuttgart : Birkhäuser. – 1983.
(Experientia : Suppl. ; Vol. 44)

NE: Mauron, Jean [Hrsg.]; Nestlé Nutrition SA «Vevey» ;
Experientia / Supplementum

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system,
or transmitted in any form or by any means, electronic, mechanical, photocopying,
recording or otherwise, without the prior permission of the copyright owner.

© 1983 Springer Basel AG
Originally published by Birkhäuser Verlag Basel in 1983.
Softcover reprint of the hardcover 1st edition 1983
ISBN 978-3-0348-6542-5 ISBN 978-3-0348-6540-1 (eBook)
DOI 10.1007/978-3-0348-6540-1

C O N T E N T S

Introduction	
J. Mauron	7
How much food does man require ? An evaluation of human energy needs	
E.M. Widdowson	11
Thermogenic responses induced by nutrients in man : Their importance in energy balance regulation	
E. Jéquier	26
Energy expenditure and whole body protein synthesis in very low birth weight (VLBW) infants	
Y. Schutz, C. Catzeflis, F. Gudinchet, J. Micheli, C. Welsch, M.J. Arnaud and E. Jéquier	45
Energy fuel and hormonal profile in experimental obesities	
B. Jeanrenaud	57
Nutrient intake and energy regulation in physical exercise	
H. Howald and J. Décombaz	77
Protein turnover, nitrogen balance and rehabilitation	
E.B. Fern and J.C. Waterlow	89
Amino acid signals and food intake and preference : Relation to body protein metabolism	
A.E. Harper and J.C. Peters	107
Food processing and storage as a determinant of protein and amino acid availability	
R.F. Hurrell and P.A. Finot	135

Energy/protein interrelation in experimental food restriction K. Anantharaman	157
Behavioural strategies in the regulation of food choice P.D. Leathwood and D.V.M. Ashley	171
The relationship of pellagra to corn and the low availability of niacin in cereals K.J. Carpenter	197
Iron requirements and bioavailability of dietary iron L. Hallberg	223
Vitamin deficiencies in rice-eating populations. Effects of B-vitamin supplements M.S. Bamji	245
Vitamin A-deficiency impairs the normal mannosylation, conformation and iodination of thyroglobulin : A new etiologial approach to endemic goitre Y. Ingenbleek	264
Is the adult protein-energy malnutrition syndrome the same as that described in the infant ? J. Mauron and I. Antener	298
Public health/clinical significance of inorganic chemical elements M. Abdulla	339
Food consumption, neurotransmitter synthesis, and human behaviour R.J. Wurtman	356
General remarks - Some personal reflections A.E. Bender	370