

# Contents

## VII Preface

## IX Foreword

## XI Contributors

### 1 Introduction

Ferdinand Haschke (Vevey)

### 3 The Mini Nutritional Assessment (MNA) for Grading the Nutritional State of Elderly Patients: Presentation of the MNA, History and Validation

Yves Guigoz (Lausanne) and Bruno Vellas (Toulouse)

### 13 The Mini Nutritional Assessment and Body Composition in Healthy Adults

Wm. Cameron Chumlea, Gwendolyn Hall, Flavius Lilly, R.M. Siervogel and Shumei S. Guo (Dayton, Ohio)

### 23 MNA and Immunity: Nutritional Status and Immunological Markers in the Elderly

E.J. Schiffrin, Yves Guigoz, Geneviève Perruisseau, Stéphanie Blum, Yves Delneste, Robert Mansourian (Lausanne), B. Vellas and A. Blancher (Toulouse)

### 35 Comparative Nutrition Evaluation with the Mini Nutritional Assessment and the Nutritional Risk Assessment Scale

P. Oster, B.M. Rost, U. Velte and G. Schlierf (Heidelberg)

### 41 MNA and Odor Perception

Martijn I. Griep, Tony F. Mets, Kris Collys, Dominique Verté, Gino Verleye, Ingrid Ponjaert-Kristoffersen and Desire L. Massart (Ghent)

### 61 The MNA Score in People Who Have Aged Successfully

K. Scheirlinckx (Yvoir), B. Vellas (Toulouse) and P.J. Garry (Albuquerque, N. Mex.)

- 67 Anorexia of Aging, Leptin, and the Mini Nutritional Assessment**  
J.E. Morley, D.K. Miller, H.M. Perry III, P. Patrick (St. Louis, Mo.), Y. Guigoz (Lausanne) and B. Vellas (Toulouse.)
- 79 Associations among the Mini Nutritional Assessment Instrument, Dehydration, and Functional Status among Older African Americans in St. Louis, Mo., USA**  
Douglas K. Miller, Horace M. Perry III and John E. Morley (St. Louis, Mo.)
- 87 Mini Nutritional Assessment and Alzheimer Patients**  
F. Nourhashemi, S. Guyonnet, P.J. Ousset (Toulouse), V. Kostek, S. Lauque, W.C. Chumlea (Dayton, Ohio), B. Vellas (Toulouse) and J.L. Albarède (Dayton, Ohio)
- 93 Mini Nutritional Assessment and Cancer**  
Gilbert B. Zulian, Gabriel Gold, François Herrmann and Jean-Pierre Michel (Thônex)
- 101 Comprehensive Geriatric Assessment (CGA) and the MNA: An Overview of CGA, Nutritional Assessment, and Development of a Shortened Version of the MNA**  
Laurence Z. Rubenstein, Judith Harker (Los Angeles, Calif.), Yves Guigoz (Lausanne) and Bruno Vellas (Toulouse)
- 117 The Mini Nutritional Assessment for Preoperative Nutritional Evaluation: A Study on 419 Elderly Surgical Patients**  
Robert Cohendy (Nîmes)
- 123 The Mini Nutritional Assessment in Clinical Practice**  
Antoni Salvá, M. José Bleda and Ignasi Bolibar (Barcelona)
- 131 MNA and Nutritional Intervention**  
F. Arnaud-Battandier (Sèvres), S. Lauque (Toulouse), M. Paintin, R. Mansourian (Lausanne), B. Vellas (Toulouse) and Y. Guigoz (Lausanne)
- 141 MNA and Cost of Care**  
P. Quadri, C. Fragiaco, W. Pertoldi (Mendrisio), Y. Guigoz (Lausanne), F. Herrmann and Ch.H. Rapin (Geneva)
- 149 Animal Model: Metabolic and Thermic Responses to Diet and Environment (4 °C) in Obesity during Aging in the LA/Ntvl/-cp Rat**  
Orien L. Tulp and Susan P. DeBolt (Philadelphia, Pa.)
- 157 Appendix**
- 159 Posters**
- 177 Discussions of Poster Presentations**
- 187 Conclusion**
- 191 Subject Index**