## **Contents**

- IX Conference Organization
- xı Preface
- XVII Declaration of Olympia on Nutrition and Fitness

Ancient Olympia, Greece, May 28–29, 1996

Opening Address

1 The Hippocratic Concept of Positive Health in the 5th Century BC and in the New Millennium

Simopoulos, A.P. (Washington, D.C.)

Part 1: Genetic Variation and Nutrition

5 Genetic Variation and Dietary Response

Murray, R.F., Jr. (Washington, D.C.)

12 Dietary and Genetic Effects on LDL Heterogeneity

Krauss, R.M. (Berkeley, Calif.)

23 Nutrients and Gene Expression

De Caterina, R.; Madonna, R. (Pisa); Hassan, J. (Rome); Procopio, A.D. (Chieti)

53 Effect of Genetic Variation on the Postprandial Response. Results from the European Atherosclerosis Research Study II

Talmud, P.J.; Waterworth, D.M.; Humphries, S.E. (London)

61 Predisposing Genes, High-Risk Environments and Coronary Artery Disease: LPL and Fibrinogen as Examples

Humphries, S.E.; Montgomery, H.E.; Talmud, P.J. (London)

# 68 Role of Genetic Variation in Establishing Nutritional Requirements: Folate, a Case in Point

Molloy, A.M. (Dublin)

## 76 Genetic Influences on Serum LDL Levels and on Type I Diabetes Incidence in Sardinia

Muntoni, S.: Muntoni, S. (Cagliari)

# 83 Osteoporosis, Vitamin D Receptor Gene Polymorphisms and Response to Diet

Ferrari, S.L. (Geneva)

93 Interactions between the Genome and the Environment, with Special Reference to Nutrient Variation. New Concepts, Emerging Methodologies and Challenges

Velázquez, A. (Mexico City)

Part 2: Genes and Physical Activity Interactions

## 108 Aerobic Exercise, Gene Expression and Chronic Diseases

Chen, J. (Beijing)

#### 118 Genetic Variation and the Response to Exercise

Montgomery, H.E. (London)

Part 3: The Role of Omega-3 Fatty Acids in Health and Disease

### 134 Essential Fatty Acids in Somatic Growth and Brain Development

Uauy, R. (Santiago/Dallas, Tex.); Calderon, F.; Mena, P. (Santiago)

### 161 Omega-3 Fatty Acids and Cardiovascular Disease

Leaf, A.; Kang, J.X. (Charlestown, Mass.)

### 173 Omega-3 Fatty Acids in Major Depression

Locke, C.A.; Stoll, A.L. (Belmont, Mass./Boston, Mass.)

- 186 Author Index
- 187 Subject Index