



TRENDS IN FOOD SCIENCE & TECHNOLOGY

Volume 57

Part B

SPECIAL ISSUE: UNRAVELLING THE ROLE OF THE GUT MICROBIOME IN ENERGY BALANCE AND BRAIN DEVELOPMENT AND FUNCTION: THE EUROPEAN PROJECT MYNEWGUT

EDITORIAL

Preface by Patrizia Brigidi and Yolanda Sanz 199

PAPERS

Impact of dietary fiber and fat on gut microbiota re-modeling and metabolic health by Alfonso Benítez-Páez, Eva M. Gómez Del Pulgar, Louise Kjølbaek, Lena Kirchner Brahe, Arne Astrup, LesliHingstrup Larsen and Yolanda Sanz 201

Gut microbiota role in dietary protein metabolism and health-related outcomes: The two sides of the coin by Kevin J. Portune, Martin Beaumont, Anne-Marie Davila, Daniel Tomé, François Blachier and Yolanda Sanz 213

Interplay between gut microbiota, its metabolites and human metabolism: Dissecting cause from consequence by A.V. Hartstra, M. Nieuwdorp and H. Herrema 233

Metabolomics of fecal samples: A practical consideration by Silke Matysik, Caroline Ivanne Le Roy, Gerhard Liebisch and Sandrine Paule Claus 244

(Contents continued overleaf)

(contents continued)

Microbiome and metabolic disorders related to obesity: Which lessons to learn from experimental models? by Audrey M. Neyrinck, Valentina L. Schüppel, Trevor Lockett, Dirk Haller and Nathalie M. Delzenne	256
Microbiota and lifestyle interactions through the lifespan by Simone Rampelli, Marco Candela, Silvia Turroni, Elena Biagi, Maren Pflueger, Maike Wolters, Wolfgang Ahrens and Patrizia Brigidi	265
Role of microbiota function during early life on child's neurodevelopment by Tomás Cerdó, Luz García-Valdés, Signe Altmäe, Alicia Ruíz, Antonio Suárez and Cristina Campoy	273
Microbiome in brain function and mental health by Paul J. Kennedy, Amy B. Murphy, John F. Cryan, Paul R. Ross, Timothy G. Dinan and Catherine Stanton	289
The human gut microbiome, diet, and health: “<i>Post hoc non ergo propter hoc</i>” by Guus Roeselers, Jildau Bouwman and Evgeni Levin	302
Insulin resistance as key factor for linking modulation of gut microbiome to health claims and dietary recommendations to tackle obesity by Stoffer Loman and Jan Willem van der Kamp	306
Communication and impact through targeted channels and media by Adrian Giordani, Christina Sadler and Laura Fernández Celemín	311