

## **Drivers of Innovation in Pediatric Nutrition**

**Nestlé Nutrition Institute Workshop Series  
Pediatric Program, Vol. 66**

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# **Drivers of Innovation in Pediatric Nutrition**

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Printed in Switzerland on acid-free and non-aging paper (ISO 9706) by Reinhardt Druck, Basel  
ISBN 978-3-8055-9454-7  
e-ISBN 978-3-8055-9455-4  
ISSN 1661-6677

**Library of Congress Cataloging-in-Publication Data**

Nestlé Nutrition Workshop (66th : 2009 : Sanya Shi, China)

Drivers of innovation in pediatric nutrition / editors, Berthold Koletzko, Sibylle Koletzko, Frank Ruetteme.

p. ; cm. -- (Nestlé Nutrition Institute workshop series, pediatric program, ISSN 1661-6677 ; v. 66)

Includes bibliographical references and index.

ISBN 978-3-8055-9454-7 (hard cover : alk. paper) -- ISBN 978-3-8055-9455-4 (e-ISBN)

I. Children--Nutrition--Research--Congresses. I. Koletzko, B. (Berthold)

II. Koletzko, Sibylle. III. Ruetteme, Frank. IV. Nestlé Nutrition Institute.

V. Title. VI. Series: Nestlé Nutrition workshop series. Paediatric program

; v. 66. 1661-6677.

[DNLM: 1. Infant Nutritional Physiological Phenomena--Congresses. 2.

Child Nutritional Physiological Phenomena--Congresses. 3. Diffusion of

Innovation--Congresses. 4. Economic Development--Congresses. 5. Feeding

Methods--Congresses. 6. Research--Congresses. W1 NE228D v.66 2010 / WS 120

N468d 2010]

RJ206.N388 2009

362.198'92--dc22

2010018983

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Basel · Freiburg · Paris · London · New York · Bangalore ·  
Bangkok · Shanghai · Singapore · Tokyo · Sydney

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# Preface

The 66th Nestlé Nutrition Institute Workshop was dedicated to an important but rather abstract topic analyzing potential drivers of innovation in pediatric nutrition. This topic clearly goes beyond the usual scope of academic pediatricians. The themes of other recent Nestlé Nutrition Institute Workshops such as nutritional challenges in emerging societies, personalized nutrition in pediatrics, or nutrition from before pregnancy to the age of 2 years relate closely to pediatric research, clinical practice, and public health. In contrast, this workshop aimed to address and to identify forces that potentially drive innovation in pediatric nutrition, a vision which surpasses research, clinical and academic thinking. While preparing this workshop, we came to appreciate that even if research comes up with the best innovative concepts, the likelihood of translational application of this knowledge will very much depend on a variety of other factors. Often, challenging preclinical and clinical studies must be performed to evaluate potential effects, effect sizes, suitability and safety. The commercial introduction of new or modified dietetic products for infants and children into markets depends on the regulatory standards and environments which differ considerably in various geographical regions and countries. In addition, policy and politics on child health and nutrition may be of considerable importance. The forces of marketing have become very influential, and these forces may not always agree with science and research. Economic considerations, intellectual property protection, adequate availability of safe and suitable raw materials, the state of food technology, as well as feasibility of production and distribution of a conceived new product are determinants of whether and how a product can be brought to the market. Expectations and response of both consumers and health care professionals, and many other factors also are of very high importance. As one might imagine, it was not easy for us to put a balanced program together on the variety and complexity of questions that are of relevance here, but it has been a truly enjoyable and informative experience. Given that this topic has more technological and commercial implications than other topics that are usually addressed by the Nestlé Nutrition Institute Workshops, we involved a slightly

## Preface

higher proportion of expert speakers who are in one way or another related to the company, which we trust readers will understand.

It was a great pleasure and privilege to organize and co-chair this workshop. We wish to thank Dr. *Petra Klassen-Wigger*, Prof. *Ferdinand Haschke* and their colleagues at the Nestlé Nutrition Institute in Switzerland for the dedicated work and support, as well as *Lois Lin*, Dr. *Lawrence Li* and their colleagues at Nestlé Nutrition China who realized the symposium in China with cordial affection, meticulous attention to detail, and enormous enthusiasm. We also thank the speakers and discussants at the workshop who contributed to the intellectual content of this book.

*Berthold Koletzko*  
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*Frank Ruetteme*

## Foreword

'Drivers of Innovation in Pediatric Nutrition' was the topic of a unique workshop held in Sanya, China, on 1–5 November 2009. Innovation is defined in the dictionary as: 'the introduction of something new' or 'a new idea, method, or device: novelty'. When applying 'innovation' to pediatric nutrition, a large variety of different expertise needs to be taken into consideration in order to successfully develop new products from the idea to the shelf. These include: innovative ideas in research and development that are technically feasible, accepted by health care professionals and regulatory authorities and, last but not least, by the consumer.

In this context, the topics discussed in this workshop ranged from the history of infant feeding practices, novel insights into human lactation as a driver of infant formula development, to new approaches through modern analytical tools such as molecular biological assays, and finally the regulatory settings and consumer behavior. Altogether, the workshop was a rich source of information to paint the future of innovation in pediatric nutrition.

We would like to warmly thank the three chairpersons, Prof. Bert Koletzko and Prof. Sibylle Koletzko from Germany and Prof. Frank Rueemmele from France, who are very well-known experts in the area of pediatric nutrition and drivers of innovation themselves, for assembling the outstanding scientific program.

Our special thanks go to Mr. Lawrence Li and Ms. Lois Lin and their team for the superb logistical support of the workshop and the warm hospitality.

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66th Nestlé Nutrition Institute Workshop  
Pediatric Program  
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