An up-to-date overview on the scientific rationale and clinical evidence

Intravenous Lipid Emulsions

Editor

**P.C. Calder
D.L. Waitzberg
B. Koletzko**

Lipids have been in clinical use as components of intravenous nutrition for over 50 years. Over the last 15 years, new and improved lipids that include olive oil and/or fish oil have replaced the more traditional ones. These new lipids offer the opportunity to deliver high amounts of fatty acids and possess different functional properties: in particular, they can influence inflammatory processes, immune responses and hepatic metabolism.

This book brings together articles written by leading international authorities in the area of intravenous lipids. Contributions discuss the latest findings in the field, ranging from pre-clinical research to the most recent clinical trials. Lipid functionality and utility in pediatric, adult surgical and critically ill patients are covered, as is the use of lipids in long-term home parenteral nutrition. Addressing a broad spectrum of topics, this publication provides a wealth of information for basic scientists, clinical researchers and clinical practitioners alike.

Fields of Interest: Nutrition; Infusion Therapy, Hospital Care, Intensive Care, Neonatology

www.karger.com/wrund

Contents

- Preface: **Calder, P.C.; Waitzberg, D.L.; Koletzko, B.**
Introduction to Fatty Acids and Lipids: **Burdge, G.C.; Calder, P.C.**
Fatty Acids, Lipid Emulsions and the Immune and Inflammatory Systems: **Miles, E.A.; Calder, P.C.**
Importance of Fatty Acids in the Perinatal Period: **Demmelmair, H.; Koletzko, B.**
Commercial Lipid Emulsions and All-in-One Mixtures for Intravenous Infusion – Composition and Physicochemical Properties: **Driscoll, D.F.**
In vivo Handling and Metabolism of Lipid Emulsions: **Carpentier, Y.A.; Deckelbaum, R.J.**
Parenteral Lipids: Safety Aspects and Toxicity: **Wanten, G.J.A.**
Intravenous Lipids in Preterm Infants: Impact on Laboratory and Clinical Outcomes and Long-Term Consequences: **Vlaardingerbroek, H.; van Goudoever, J.B.**
Intravenous Lipid Emulsions in Term Infants: Impact on Laboratory and Clinical Outcomes and Long-Term Consequences: **Hartman, C.; Shamir, R.**
Intestinal Failure-Associated Liver Disease and the Use of Fish Oil-Based Lipid Emulsions: **Goulet, O.J.**
Intravenous Lipids in Adult Surgical Patients: **Klek, S.; Waitzberg, D.L.**
Intravenous Lipids in Adult Intensive Care Unit Patients: **Hecker, M.; Mayer, K.**
Intravenous Fish Oil in Adult Intensive Care Unit Patients: **Heller, A.R.**
Intravenous Lipids in Home Parenteral Nutrition: **Pironi, L.; Agostini, F.; Guidetti, M.**
The Complexity of Prescribing Intravenous Lipid Emulsions: **Waitzberg, D.L.; Torrinhas, R.S.**
Use of Intravenous Lipids: What Do the Guidelines Say? **Singer, P.; Theilla, M.; Cohen, J.**

World Review of Nutrition and Dietetics, Vol. 112
Intravenous Lipid Emulsions
Editors: Calder, P.C. (Southampton); Waitzberg, D.L. (São Paulo); Koletzko, B. (Munich)
X + 176 p., 18 fig., 15 tab., 2015
CHF 148.00 / EUR 123.00 / USD 174.00 (hard cover)
CHF 178.00 / EUR 148.00 / USD 209.00 (online)
Online versions for institutional purchase
Prices subject to change
EUR price for Germany, USD price for USA and Latin America only
ISBN 978–3–318–02752–5 (hard cover)
e-ISBN 978–3–318–02753–2

KARGER 125 YEARS

World Review of Nutrition and Dietetics

Series Editor: Koletzko, B. (Munich)
ISSN 0084-2230 / e-ISSN 1662-3975

Also available:

Vol. 111

Nutrition for the Primary Care Provider

Editor: Bier, D.M. (Houston, Tex.)
Co-Editors: Mann, J. (Dunedin); Alpers, D.H. (St. Louis, Mo.); Vorster, H.H.E. (Potchefstroom); Gibney, M.J. (Dublin)
XII + 210 p., 20 fig., 8 in color, 50 tab., 2015
CHF 89.00 / EUR 74.00 / USD 105.00 (hard cover)
CHF 107.00 / EUR 89.00 / USD 126.00 (online)
ISBN 978-3-318-02666-5 (hard cover)
e-ISSN 978-3-318-02667-2

Vol. 110

Nutritional Care of Preterm Infants

Scientific Basis and Practical Guidelines
Editors: Koletzko, B. (Munich); Poindexter, N. (Indianapolis, Ind.); Uauy, R. (Santiago)
XII + 314 p., 35 fig., 10 in color, 37 tab., 2014
CHF 148.00 / EUR 123.00 / USD 174.00 (hard cover)
CHF 178.00 / EUR 148.00 / USD 209.00 (online)
ISBN 978-3-318-02640-5 (hard cover)
e-ISSN 978-3-318-02641-2

Vol. 109

Nutrition and Growth

Yearbook 2014
Editors: Koletzko, B. (Munich); Shamir, R. (Petach-Tikva/Tel Aviv); Turck, D. (Lille); Phillip, M. (Petach-Tikva/Tel Aviv)
X + 120 p., 2014
CHF 148.00 / EUR 123.00 / USD 174.00 (hard cover)
CHF 178.00 / EUR 148.00 / USD 209.00 (online)
ISBN 978-3-318-02565-1 (hard cover)
e-ISSN 978-3-318-02566-8

Vol. 108

Evidence-Based Research in Pediatric Nutrition

Editors: Szajewska, H. (Warsaw); Shamir, R. (Petach-Tikva)
X + 112 p., 4 fig., 8 tab., 2013
CHF 148.00 / EUR 123.00 / USD 174.00 (hard cover)
CHF 178.00 / EUR 148.00 / USD 209.00 (online)
ISBN 978-3-318-02456-2 (hard cover)
e-ISSN 978-3-318-02457-9

Vol. 1-107 available, please ask for details

Online versions for institutional purchase
Prices subject to change
EUR price for Germany, USD price for USA and Latin America only

Order Form

Please send:

— copy/ies: Vol. 112: **Intravenous Lipid Emulsions**
CHF 148.00 / EUR 123.00 / USD 174.00
ISBN 978-3-318-02752-5

— copy/ies: _____
ISBN 978-3-318-_____

☐ the book series **World Review of Nutrition and Dietetics**
on continuation beginning with vol. _____

All Karger series are available on continuation.
Each volume will be sent upon publication until order is countermanded.

For easy ordering or further information
about the series log on to: www.karger.com/wrund

Postage and handling free with prepayment

Payment

Please charge this order to my credit card

☐ American Express ☐ Diners
☐ Visa ☐ MasterCard

Card No.: _____

Exp. date: _____

CVV/CVC: _____

☐ Check enclosed ☐ Please bill me

Name/Address (please print):

Date: _____

Signature: _____

Orders can be placed at agencies, bookstores, directly with the publisher, or with any Karger distributor.

S. Karger AG, P.O. Box, 4009 Basel (Switzerland)

f: +41 61 306 12 34, e: orders@karger.com

USA: S. Karger Publishers, Inc., 26 West Avon Road,
P.O. Box 529, Unionville, CT 06085

Toll free: +1-800-828-5479

Germany: S. Karger GmbH, 79095 Freiburg

France: Enter & Read, Albertine Luginbuhl, 75014 Paris

Japan: Karger Japan, Inc., Tokyo 105-0012

South East Asia, China and Taiwan: Karger China,
Beijing 100020

For details and further representatives and agencies see
www.karger.com/worldwide

To be ordered through:

KARGER 125 YEARS

www.karger.com/wrund