



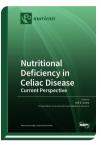
Special Issue Reprint

Nutritional Deficiency in Celiac Disease

www.mdpi.com/books/reprint/6034

Edited by Anil K. Verma

ISBN 978-3-0365-4885-2 (Hardback) ISBN 978-3-0365-4886-9 (PDF)



Celiac disease is a T-cell mediated chronic inflammation of the small intestine that ultimately results in villous atrophy. A lifelong strict gluten-free diet, the only accepted treatment of celiac disease so far, gradually neutralizes immune responses and regenerates damaged villi. Naturally gluten-free (rice, maize, fruits, vegetables, etc.) and processed gluten-free products (commercial products) are advised as substitutes for gluten-containing food. However, in comparison to gluten-containing food, such alternatives are inadequately nutritious and cannot compensate for the necessary nutritional requirements. A complete removal of gluten from celiac patients' diet progressively alters the level of essential nutrients that eventually lead to nutrition imbalances. It has been reported that gluten-free products contain a low amount of essential micronutrients (iron, folate, and vitamin B), fiber, and a higher amount of carbohydrates and lipids compared to gluten-containing products. In recent years, nutritional complications are being reported in celiac disease patients, especially in growing children affected with celiac disease, which has become a serious health issue and requires immediate action. This book focuses on nutritional deficiencies related to celiac disease and provides updated knowledge and new prospects for nutritional deficiencies in celiac disease.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/6034

MDPINBOOKS Publishing Open Access Books & Series

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



ᆔ

High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).

Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

