



Special Issue Reprint

Volume 1

Dietary Fructose and Glucose: The Multifaceted Aspects of their Metabolism and Implication for Human Health

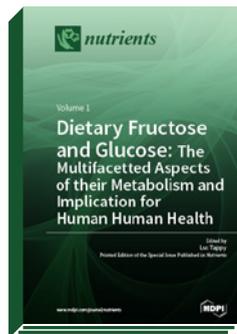
Edited by

Luc Tappy

mdpi.com/books/pdfview/book/703

ISBN 978-3-03897-053-8 (Pbk)

ISBN 978-3-03897-054-5 (PDF)



Fructose was identified by the French chemist, Augustin-Pierre Dubrunfaut, in 1847, and its stereochemical properties, together with those of its stereoisomers glucose and galactose, were elucidated in the 1990s by the German chemist, Emil Fisher (REF <https://www.acs.org/content/acs/en/molecule-of-the-week/archive/f/fructose.html>). This monosaccharide is a product of plant photosynthesis, and hence is a precursor of most dietary macronutrients. Fructose is naturally present in many fruits, vegetables, honey and natural syrups, either under its free, monosaccharide form, or as a constituent of sucrose, a disaccharide made of one molecule of glucose linked to one molecule of fructose. As such, it has always been present in the human diet, but its consumption increased tremendously during the 19th and 20th century due to the colonial trade of sugars and developments of industrial food products (REF Sweetness and power).

The articles in this book provide a nice overview of fructose science. They illustrate recent scientific knowledge which may link fructose intake to the pathogenesis of obesity and non-communicable diseases. However, they also illustrate that many of the present allegations often presented in the lay press as scientific facts, remain mere hypotheses at this stage, and that still much remains to be discovered about this sugar.



Order Your Print Copy

Print copies (170 x 244 mm, Pbk) can be ordered at:

► mdpi.com/books/library

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.



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), 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.