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*Special Issue Reprint*

## **Cocoa, Chocolate and Human Health**

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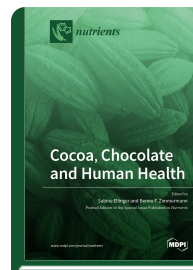
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ISBN 978-3-03928-588-4 (Softback)

ISBN 978-3-03928-589-1 (PDF)



This book entitled “Cocoa, Chocolate, and Human Health” presents the most recent findings about cocoa and health in 14 peer-reviewed chapters including nine original contributions and five reviews from cocoa experts around the world. Bioavailability and metabolism of the main cocoa polyphenols, i.e., the flavanols like epicatechin, are presented including metabolites like valerolactones that are formed by the gut microbiome. Many studies, including intervention studies or epidemiological observations, do not focus on single compounds, but on cocoa as a whole. This proves the effectiveness of cocoa as a functional food. A positive influence of cocoa on hearing problems, exercise performance, and metabolic syndrome is discussed with mixed results; the results about exercise performance are contradictory. Evidence shows that cocoa flavanols may modulate some risk factors related to metabolic syndrome such as hypertension and disorders in glucose and lipid metabolism. However, several cardiometabolic parameters in type 2 diabetics were not affected by a flavanol-rich cocoa powder as simultaneous treatment with pharmaceuticals might have negated the effect of cocoa. The putative health-promoting components of cocoa are altered during processing like fermentation, drying, and roasting of cocoa beans. Chocolate, the most popular cocoa product, shows remarkable losses in polyphenols and vitamin E during 18 months of storage.



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