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September 19-20, 2024

► University of Milan, Italy

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Polyphenols  
APPLICATIONS

# 17<sup>th</sup> World Congress on Polyphenols Applications

September 19 – 20, 2024

Milan & Online

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## **Abstract Book DOI**

10.60738/03ak-mn82



# Welcome to Polyphenols Applications 2024

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Dear Colleagues,

It is a great pleasure to welcome all of you to our 17th World Congress on Polyphenols Applications, which will be held on September 19-20, 2024, at Università degli Studi di Milano Statale, Milan, Italy.

Polyphenols Applications 2024 aims to bring together experts from academia and industry to discuss the latest scientific advancements in fundamental and applied research on polyphenols. This year the conference will feature a balanced mix of invited talks and short talks, based on suggestions from the audience at the previous year's conference.

The conference will cover various topics, including the latest advancements in polyphenol research, focusing on their health benefits, interactions with microbiota, and applications in food processing. Sessions will cover diverse topics, including the potential of anthocyanin-rich extracts in chemotherapy, the antiviral activity of polyphenols, and their impact on obesity and diabetes.

We would like to thank all the speakers and scientific committee members of Polyphenols Applications for their excellent contributions.

We also wish to thank the Local Organizing Committee: Sabrina Dallavalle, Andrea Pinto, Cristian Del Bo', and Daniela Martini from the University of Milan.

Finally, we are grateful for the support of our sponsor HealthTech Bioactives (HTBA).

We hope that you will enjoy the Polyphenols Applications 2024 Congress and that your interactions with colleagues from many countries will stimulate a creative exchange of ideas and challenges.



**Prof. Jan Frederik Stevens**  
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# BENEFICIAL IMPACTS OF CHOKEBERRY AND TART CHERRY BASED DIETARY SUPPLEMENTS CONSUMPTION ON CELLULITE REDUCTION

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**Introduction:** Cellulite is an aesthetically distressing skin condition occurring in 80% to 90% of females. Our aim was to investigate the effects oral consumption of dietary supplements based on chokeberry and tart cherry juices.

**Material & Methods:** Twenty women with a cellulite grade of 1–2 (Nurnberger–Muller scale) were participating in the study. Ultrasonography was applied to analyze the skin structure in addition to biochemical and anthropometric parameters, which were measured before starting the treatment and after 32 days.

**Results:** A reduction in the thickness of the dermis with subcutaneous fat tissue and epidermis, while the length of the fascicles was reduced by 35.93%. In 11 subjects edema of the dermis noticed at the beginning of the study was not recorded at the end. Moreover, a statistically significant increase in the tissue doppler signals was recorded indicating a better blood supply. Changes in anthropometric and biochemical parameters were not recorded. Creatinine, urea, ALT, and AST values, as indicators of kidney and liver function, remained at normal reference levels, pointing out the product's safety.

**Conclusion:** Our results showed the marked potential of tested dietary supplements in improving the morphology of skin in the regions that are affected by cellulite.

*Supported by the HORIZON 2020-MSCA-RISE-2017 project EthnoHerbs and Ministry of Education, Science and Technological Development of the Republic of Serbia (grant number 451-03-66/2024-03/200003).*

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