

Episode 127 – Interview with Dr. Badewy: Periodontal Disease, Human Milk Composition, and Infant Gut Microbiome

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Dr. Rana Badewy, BDS, PhD, FRCDC
Dr. Badewy is a dentist and specialist in dental public health. She received her PhD in Dental Public Health from the Faculty of Dentistry, University of Toronto, and is a Fellow of the Royal College of Dentists of Canada. Currently, Dr. Badewy serves as a program analyst at the Oral Health Branch, Health Canada. Her PhD research centred on oral health promotion and disease prevention, with a particular focus on maternal and fetal health.

Research
The unrevealed links: Periodontal health, human milk composition, and infant gut microbiome dynamics

Background
Maternal health conditions can influence the composition of human milk. However, it is not known whether maternal periodontal diseases deleteriously affect human milk composition. Badewy et al. (2024) conducted a comprehensive review to identify the potential relationships between periodontal diseases, changes in human milk composition, and infants' gut microbiome composition and function.[1] [1]

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[1] Refer to Episode 74 for the discussion with Dr. Badewy on the impact of oral inflammation on the immune and nutritional composition in human milk, and Episode 111 for insights on the oral health-related quality of life in early postpartum.

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References

[1] R. Badewy, M. Glogauer, K. Connor and etal., "The unrevealed links: Periodontal health, human milk composition, and infant gut microbiome dynamics," *Primary Health Care,* vol. 25, pp. 1-12, 14 November 2024.

Additional Resources

The unrevealed links: Periodontal health, human milk composition, and infant gut microbiome dynamics, Badewy, R; Glogauer, M; Connor, K; et al. *Primary Health Care Research & Development,* Volume 25, November 14, 2024, p 1-12 https://www.cambridge.org/core/journals/primary-health-care-research-and-development/article/unrevealed-links-periodontal-health-human-milk-composition-and-infant-gut-microbiome-dynamics/A927DBB028098CC7A29B5729817BEE77

Oral health-related quality of life among women early postpartum: A cross-sectional study, Badewy, R; Cardoso, E; Glogauer, M; et al. *Journal of Periodontology*, Volume 94, Issue 12, June 16, 2023, p 1475-1484 https://aap.onlinelibrary.wiley.com/doi/full/10.1002/JPER.23-0236

The association between maternal oral inflammation and neutrophil phenotypes and poly-unsaturated fatty acids composition in human milk: A prospective cohort study, Badewy, R; Azarpazhooh, A; Tenenbaum; et al. *Cells*, Volume 11, Issue 24, December 17, 2022, p 1-22 https://www.mdpi.com/2073-4409/11/24/4110

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