

Special Issue

Explore the Nutritional Composition of Human Milk and Its Impact on Infant Formula Development and Human Health

Message from the Guest Editor

Breast milk is a complex biological fluid that provides essential nutrients, immune protection, and bioactive compounds that crucial for infant development. Milk can provide signals and activities beyond classical nutrition. For example, milk contains proteins and peptides that can influence blood pressure and some diseases, as well as influence the gut health and immune system.

This Special Issue delves into the intricate composition of breast milk, focusing on its immune components (e.g., antibodies, lactoferrin, lysozyme), bioactive proteins, human milk oligosaccharides (HMOs), and hormonal regulators (e.g., leptin, adiponectin). It also explores innovative strategies to replicate these components in infant formula. Topics include fatty acid profiles, the prebiotic functions of HMOs, sex-specific formulations, and advancements in feeding technology. This Special Issue aims to advance nutritional solutions that support infant health and development worldwide. This Special Issue warmly welcomes full papers, short communications, and review articles on human milk composition, infant formula innovation, and human health.

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Message from the Editorial Board

Nutrients is an on-line open access journal that was first published in 2009. *Nutrients* adheres to rigorous peer-review and editorial processes and publishes only high quality manuscripts that address important issues related to the impacts of nutrients on human health. The Impact Factor of *Nutrients* has risen rapidly since its establishment and it is now ranked in the first quartile of journals publishing in the field of nutrition and dietetics research.

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