

Special Issue

Metabolic Dependencies of the Influence of Intestinal Microbiota During Pregnancy, Childbirth and Infancy

Message from the Guest Editors

The development of the fetal digestive tract microbiota begins during intrauterine life. Disturbed microbiological balance in the mother's digestive tract may cause dysbiosis in herself and her child. Perinatal factors related to intestinal permeability are most important in the first 3 months of the infant's life.

The occurrence of atopic dermatitis in infants is correlated with the method of feeding and antibiotic therapy, which suggests the occurrence of dependencies with the intestinal microbiome. Disturbed colonization of the digestive tract resulting from the amount and diversity of microbiota stimulates an inflammatory response, which is associated with inflammatory and autoimmune diseases in later life. Disturbances of the intestinal bacterial flora lead to the production of undesirable bacterial metabolites, which are also responsible for the symptoms of leaky gut. Lipopolysaccharide (LPS) endotoxin is used to assess these changes. The implications of direct and indirect biomarkers of intestinal permeability and bacterial metabolites on metabolic programming during pregnancy and early childhood are of interest to this Special Issue.

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Deadline for manuscript submissions

25 September 2025



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/237348

*International Journal of
Molecular Sciences*
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