BioMed Research International

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Special Issue on

Early Life Exposure to Fat Soluble Vitamins and LCPUFAs and Their Impact on Health

CALL FOR PAPERS

Historical perspectives on the role of the fat-soluble vitamins A, D, E, and K as well as Long Chain Polyunsaturated Fatty Acids (LCPUFAs) during pregnancy, infancy, and early childhood are rapidly evolving. New information is elucidated on a regular basis regarding isomers, function, receptors, dose response, and tissue sensitivity among other factors. Evidence is mounting that growth and development of multiple systems are modified by prenatal or perinatal exposures to differing levels of these compounds. The perinatal time period is of particular importance as a prime time not only for growth and development, but also for epigenetic modifications.

This special issue encourages work that will continue to help move forward the rapidly expanding knowledge of how these compound impact overall health outcomes. We are particularly interested in novel observations that will advance the field in unique directions.

We invite authors to submit original research and review articles on the perinatal and pediatric impact of these compounds. Please submit for consideration papers that address the impact of these compounds on prenatal, perinatal, and early childhood outcomes in human subjects, as well as in animal and translational models. Special consideration will be given to papers that address the impact of these substances on the developmental origins of health and adult disease (DOHaD).

Potential topics include but are not limited to the following:

- New findings in the "omics" fields pertaining to these molecules and outcomes
- Influences on and interaction with these molecules and the microbiota
- New breakthroughs in the regulation of epigenetics (i.e., methylation) attributed to these molecules
- Impact of these molecules on pregnancy outcomes and fetal development
- Impact of these molecules on neonatal inflammation and disease state
- Impact of these molecules on infant growth and development
- Elucidating the role of these molecules at the tissue or cellular level
- Evaluation of the roles of these molecules' receptors on methylation, on histone deacetylases, and at a variety of tissues or at a cellular level
- Novel methods of assessment of concentration or function at the tissue or cellular level with particular interest in the placenta
- Animal models showing impact of these molecules on inflammation, immune function, or development
- Influence on methylation or other epigenetic modulation associated with these compounds

Authors can submit their manuscripts through the Manuscript Tracking System at https://mts.hindawi.com/submit/journals/bmri/pediatrics/eefv/.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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