Prenatal exposure to polyunsaturated fatty acids and child health

Propositions associated with the dissertation

Prenatal exposure to polyunsaturated fatty acids and child health: a population-based approach

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1. Higher EPA and DHA concentrations and a higher n-3:n-6 fatty acid ratio in cord blood, which reflect fetal exposure in late pregnancy, are associated with lower risk of child wheeze and asthma (this thesis).
2. Fetal PUFA exposure, especially in late pregnancy, is not associated with obesity development and cardiometabolic risk in childhood (this thesis).
3. Maternal fish consumption during pregnancy is not associated with offspring symptoms of wheeze, asthma and allergic rhinitis from infancy to mid-childhood (this thesis).
4. High maternal fish intake during pregnancy (>3 times/week) is associated with an increased risk of rapid growth in infancy and childhood obesity (this thesis).
5. Childhood asthma and obesity constitute major public health priorities.
6. According to the "Developmental Origins of Health and Disease" paradigm, a nutritional stressor or stimulus applied during fetal life can alter body physiology and metabolism, and, thus, affect child health and development.
7. PUFAs of the n-6 and n-3 families are readily transferred across the placenta, and have been suggested to exert pleiotropic effects, often in the opposite direction.
8. Fish is the main dietary source of n-3 long-chain PUFAs, but is also a common route of human exposure to toxic pollutants.
9. Preventive interventions targeting the prenatal period are considered to have a large and long-lasting impact across the life course, and thus, give substantial long-term social and economical returns on investment (valorization).
10. *If I have seen further, it is by standing on the shoulders of giants.* Isaac Newton, 1676.
11. *Σαν τη λογιάσεις μια δουλειά, όρτσα και μη φοβάσαι, αμόλα τη τη νιότη σου και μην τήνε λυπάσαι (If you choose a path, go ahead and do not fear, spend your youth to it without any tear).* Nikos Kazantzakis: Report to Greco.