

One-carbon Metabolism, Early-life growth and Childhood Cardiovascular Health

Propositions

1. Vitamin B12, folate and homocysteine concentrations during pregnancy are associated with a range of cardio-metabolic health outcomes at school-age in their offspring. (*This thesis*)
2. Vitamin B12 concentrations during pregnancy are associated with differential methylation measured at an epigenome-wide level in cord blood. (*This thesis*)
3. Higher maternal homocysteine concentrations during pregnancy are associated with epigenetic gestational age acceleration at birth in their offspring. (*This thesis*)
4. Infant weight growth patterns and childhood body mass index are associated with carotid intima-media thickness and carotid artery distensibility at school-age. (*This thesis*)
5. Lean and fat mass seem to be differentially related to carotid artery intima-media thickness but not carotid artery distensibility at school-age. (*This thesis*)
6. Investing in a good start is the smartest investment we can make. Roseboom T. *Gelijk goed beginnen*. 1^e editie. Amsterdam: Tijdstroom; 2022.
7. Assumptions about the “causal primacy” of maternal pregnancy effects set the agenda for DOHaD research and are reinforced by a looping effect at all stages – from study design, to the results obtained, to the ways findings are interpreted and translated to guide public health policy and clinical practice (Sharp et al. *Soc Sci Med*, 2018)
8. It is not only a moral imperative but also a human rights obligation to protect children from the harmful impacts of food marketing (Food and Agriculture Organization United Nations, 2021).
9. To address the global syndemic of undernutrition, obesity, and climate change, the international community needs to put in place food systems that provide healthy and nutritious food that is accessible and affordable for everyone (Da Silva et al. *Lancet*, 2019).
10. We need to be cautious not to use evidence from DoHaD research as an excuse to blame parents for failing their children rather than recognizing the contribution of impoverished environments (T. Moore. DOHaD Conference, 2018).
11. It always seems impossible until it's done. (N. Mandela, Nobel prize winner).