Metabolic memories

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Propositions

to the thesis

Metabolic memories:

Discerning the relationship between early life environment

and adult cardiometabolic health

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1. The possibility to influence the expression levels of NPC1L1 with interventions as early as the lactation stage offers an attractive option for improving adult cardiovascular risk. (This thesis)

2. While human studies have implicated cholesterol-free infant formulas with negative effect on adult cardio-metabolic health, our rodent data points at the possibility that the epigenetic suppression of Npc1l1 would trigger a compensatory reaction manifesting in increased endogenous cholesterol synthesis in adults. (This thesis)

3. The robustness of milk cholesterol concentration under varying maternal dietary conditions and genetic make ups is suggestive for an important physiological role for milk cholesterol. (This thesis)

4. Cholesterol as a dietary component per se does not explain the impact of Western diet on gut microbiota. (This thesis)

5. Increased intrauterine exposure to reactive oxygen species conditions the metabolic network towards an increased defense against the negative metabolic impact of a Western diet later in life in male mice. (This thesis)

6. The question of *why* is more a philosophical than a scientific question. Science has been better in giving answers on *how*. (This author)

7. “Let food be thy medicine and medicine be thy food” (Hippocrates)