

# Early Life Impacts of Thyroid Function and Human Chorionic Gonadotropin (hCG)

## Propositions

1. The association of high thyroid function with pregnancy complications is partially explained via effects on placentation. – *This thesis*
2. High thyroid function is associated with high homocysteine concentrations. The metabolic pathways underlying this association are different between adults and neonates. – *This thesis*
3. The two extremes of the hCG range contribute to pregnancy complications via different mechanisms. – *This thesis*
4. Although physiology of thyroid hormone and hCG is interrelated, these two hormones have different pathways in the regulation of pregnancy and fetal growth. – *This thesis*
5. Early childhood thyroid function influences cardiovascular health in adult age. – *This thesis*
6. Translation of data obtained from in vitro experiments and animal studies into human population setting is crucial for unravelling physiological pathways and identification of clinically relevant associations.
7. The role of genetics in endocrinology is becoming increasingly recognized, and the combination of genetic analyses and clinical tools may allow early diagnosis and subsequent improvement of clinical outcomes.
8. Paternal influences on offspring's health are undervalued. More investigation of the effects of paternal genetic material and lifestyle factors on fetal development is needed.
9. Comprehension of the patterns of childhood growth and development necessitates more efforts in the investigation of the processes that occur even before conception.
10. The value of observational studies lies in detection of modifiable pathophysiological factors and identification of high-risk groups.
11. "It is paradoxical, yet true, to say, that the more we know, the more ignorant we become in the absolute sense, for it is only through enlightenment that we become conscious of our limitations." – *Nikola Tesla*

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