Propositions accompanying the thesis

The Role of Nutrition and Gut Microbiome in Type 2 Diabetes Risk

1. Food sources of dietary protein are critical for associations between protein intake and type 2 diabetes. (This thesis)

2. A shift away from animal-based food intake towards more plant-based food intake may lower type 2 diabetes risk. (This thesis)

3. Higher gut microbiome diversity, along with higher abundance of butyrate-producing bacteria, is associated with lower risk of type 2 diabetes. (This thesis)

4. A healthy diet rich in fruits, vegetables, whole grains, and fish may help improve gut microbiome composition. (This thesis)

5. The gut microbiota could be biomarkers of dietary intake. (This thesis)

6. One important challenge in gut microbiome research is the high variabilities in gut microbiome composition, not just from person to person, but also within any given individual over time.

7. To truly understand the relationships between nutrition, gut microbiome, and diabetes, future research should move forward exploring causality and ultimately translational science.

8. Understanding the interplay between nutrition, lifestyle, and gut microbiome will provide insights into precision medicine for the management of chronic diseases.

9. $P < 0.05$ might not mean what we think. (Beatrice Grabowski)

10. Alone, we see little; together, we see more – research is a collaborative exercise.

11. The important thing is not to stop questioning. Curiosity has its own reason for existing. (Albert Einstein)

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