

SEMINAR

October 15th, 2024 from 11.00 am to 12.00 pm



Pr Thorkild I.A. Sørensen

Dr Med Sci, Professor Emeritus in Metabolic Epidemiology,
University of Copenhagen and Strategic Advisor in the Center for Childhood Health

Reflections about causes of obesity, leading to a new theory integrating its basic features

Beyond the basic facts of the applicability of 1st thermodynamic law of energy conservation (energy balance = energy input – energy output) and requirement inside the body of the presence the chemical origins of the fat accumulated in obesity, we still have far too little knowledge about what causes obesity in some and not others and what has changed in the populations inducing obesity in more and more, now to the level of a pandemic of obesity. Although experimental manipulations of the energy input and output under controlled circumstances may change the size of the body fat, they have generally failed in stably controlling obesity. It appears from other observations that the development of obesity cannot be attributed simply to an increase in energy input relative to the energy output. Mechanisms that alters the internal partitioning of energy to either fat storage versus oxidation must be considered, which then may or may not lead to alterations in energy intake relative to output. Moreover, it may be necessary to distinguish, on one hand, the fluctuations of the energy balance and corresponding fluctuations in body composition, fairly well regulated by a complex homeostatic system, and, on the other hand, the progressive development of the reversibility-resistant obesity phenotype. A new theory, integrating the genetic and environmental influences on both processes, will be presented, but with particular focus on the needs to include the profound, dominating influence of social life, involving the psyche, the brain and its possible direct influences on the local process of fat accumulation.

Eg.i.d.

European
Genomic
Institute
for Diabetes



UFR3S - Pôle recherche - Amphi D
1 place de Verdun, 59 045 Lille CEDEX

