## Jens Juul Holst's short description of talk

The incretins: Does insulin, the 100-year jubilarian, really need assistants?

A role of the gut in the regulation of postprandial glucose was demonstrated already before the discovery of insulin. When it became possible to measure insulin, it was clear that hormones from the gut are responsible for up to 70 % of the insulin response to oral glucose, the so-called incretin effect. Today we know that the two hormones, GIP and GLP-1, are responsible for this, with GIP being the most effective; and blockade of both hormones leads to glucose intolerance. Is this useful information? It turns out that the incretin effect is lost in T2DM; in particular, a loss of the GIP effects is responsible for this. Luckily it is possible to restore some of the effect with agonists of the GLP-1 receptor, and most recently therapy with a GLP-1-GIP co-agonist resulted in normalization (<5,7% glycated hemoglobin) in half of patients with T2DM. In addition, therapy with both GLP-1 agonists and the co-agonist leads to major weight losses. Incretin research has never been more exciting.