The aim of this PhD thesis is to investigate the effect of bariatric surgery on food preferences, and the underlying mechanisms for a potential effect. The research reported in this thesis was part of an extensive longitudinal prospective study, The GO Bypass Study, carried out at the Department of Nutrition, Exercise and Sports, Faculty of Science, University of Copenhagen and Hvidovre University Hospital from March 2014 to April 2017. The statistical analysis of functional MRI data was carried out by Oliver Hulme and Tobias Morville at Danish Research Centre for Magnetic Resonance, Hvidovre University Hospital.

The GO Bypass study was carried out as a part of the research programme ‘Governing Obesity’ funded by the University of Copenhagen Excellence Programme for Interdisciplinary Research (www.go.ku.dk). Furthermore, the study was funded by the Lundbeck Foundation and the Aase and Ejnar Danielsens Foundation. My PhD was funded by the Lundbeck Foundation (2 years) and the Danish Diabetes Academy supported by the Novo Nordisk Foundation (1 year).

The following four papers are included in the present PhD thesis.


**Paper II:** Mette S. Nielsen, Simone Rasmussen, Bodil J. Christensen, Christian Ritz, Carel W. le Roux, Julie B. Schmidt, Anders Sjödin. *Bariatric surgery does not affect food preferences; however, individual changes in food preferences may predict weight loss.* Accepted for publication in *Obesity*.


**Paper IV:** Mette Søndergaard Nielsen, Oliver James Hulme, Julie Berg Schmidt, Tobias Morville, Jens Juul Holst, Carel le Roux, Hartwig R. Siebner, Anders Sjödin. *Bypassing appetite: Investigating the effect of bariatric surgery on appetitive brain systems.* *Contributed equally
In addition to the papers listed above, I contributed to the following published papers during my PhD. Sections from paper 1 are included in the chapter *Methodology*. The remaining papers are not included in this thesis.


