

THE GUT-BRAIN AXIS AND THE REGULATION OF FOOD INTAKE

*The role of GLP-1,
from physiology
to pharmacotherapy*

Jennifer Sylvia ten Kulve

The gut-brain axis and the regulation of food intake
The role of GLP-1, from physiology to pharmacotherapy

ISBN: 978-94-6182-661-9

Author: Jennifer Sylvia ten Kulve

Cover design: Allard Noë and Jennifer ten Kulve

Layout and printing: Off Page, Amsterdam

Copyright © J.S. ten Kulve, Amsterdam, The Netherlands, 2016

No part of this thesis may be reproduced, stored or transmitted in any form or by any means, without prior permission of the author.

Financial support by Novo Nordisk for the work within this thesis is gratefully acknowledged

The printing of the thesis was additionally kindly supported by: ChipSoft B.V., Vrije Universiteit Amsterdam, Goodlife Pharma, Van Vliet medical supply, Nutricia Advanced Medical Nutrition, and Nederlandse Obesitas Kliniek.

VRIJE UNIVERSITEIT

**The gut-brain axis and the regulation of food intake
The role of GLP-1, from physiology to pharmacotherapy**

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad Doctor aan
de Vrije Universiteit Amsterdam,
op gezag van de rector magnificus
prof.dr. V. Subramaniam,
in het openbaar te verdedigen
ten overstaan van de promotiecommissie
van de Faculteit der Geneeskunde
op dinsdag 19 april 2016 om 11.45 uur
in de aula van de universiteit,
De Boelelaan 1105

door
Jennifer Sylvia ten Kulve
geboren te Amsterdam

promotor:
copromotoren:

prof.dr. M.L. Drent
dr. R.G. IJzerman
prof.dr. D.J. Veltman

leescommissie:

prof.dr. R.J. Heine
dr. C.F. Deacon
prof.dr. E.J.A. Scherder
prof.dr. E.J. de Geus
dr. M.J. Serlie
dr. V.E.A. Gerdes
prof.dr. M.H.H. Kramer