



University of Groningen

Understanding the biological role of the carnosine-carnosinase system in diabetes & beyond

Rodriguez Niño, Maria

DOI: 10.33612/diss.195316947

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version Publisher's PDF, also known as Version of record

Publication date: 2022

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA): Rodriguez Niño, M. (2022). Understanding the biological role of the carnosine-carnosinase system in diabetes & beyond. University of Groningen. https://doi.org/10.33612/diss.195316947

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: https://www.rug.nl/library/open-access/self-archiving-pure/taverneamendment.

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Propositions belonging to the PhD thesis

Understanding the biological role of the carnosine – carnosinase system in diabetes & beyond

by María Angélica Rodríguez-Niño

- 1. Urinary Carnosinase-1 concentrations in healthy individuals reflect local renal Carnosinase-1 synthesis. Under circumstances of an impaired glomerular filtration barrier, Carnosinase-1 can be filtered and reach the urinary compartment. (*This thesis*)
- **2.** Reduced serum Carnosinase-1 levels are a common denominator in advanced stages of disease, in which catabolism prevails, *e.g.*, in advanced stages of chronic kidney disease. (*This thesis*)
- **3.** High urinary Carnosinase-1 is independently associated with risk of late graft failure in kidney transplant recipients. (*This thesis*)
- **4.** High urinary carnosine and anserine are associated with positive outcomes after kidney transplantation. (*This thesis*)
- **5.** Glucose-lowering effects are the primary mechanisms by which carnosine affects the resistance of the afferent glomerular arteriole. (*This thesis*)
- 6. The scavenging activity of carnosine towards Methylglyoxal is limited. (*This thesis*)
- **7.** Current pharmacological strategies interfering with Carnosinase-1 activity represent a new therapeutic target for counteracting the negative effects of Carnosinase-1 on histidine-containing dipeptides (*This thesis*).
- 8. "Der Kopf ist rund, damit das Denken die Richtung ändern kann" (Francis Picabia)
- **9.** "What can life be worth if the first rehearsal for life is life itself?" (*Milan Kundera, The unbearable lightness of being*).
- **10.** "That's the thing about human life--there is no control group, no way to ever know how any of us would have turned out if any variables had been changed." (*Daniel Keyes, Flowers For Algernon*).