

# Intracellular glycation and endothelial dysfunction : role of methylglyoxal

## Citation for published version (APA):

Brouwers, O. (2011). *Intracellular glycation and endothelial dysfunction : role of methylglyoxal*. Maastricht University. <https://doi.org/10.26481/dis.20110518ob>

## Document status and date:

Published: 01/01/2011

## DOI:

[10.26481/dis.20110518ob](https://doi.org/10.26481/dis.20110518ob)

## Document Version:

Publisher's PDF, also known as Version of record

## Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

## General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

[www.umlib.nl/taverne-license](http://www.umlib.nl/taverne-license)

## Take down policy

If you believe that this document breaches copyright please contact us at:

[repository@maastrichtuniversity.nl](mailto:repository@maastrichtuniversity.nl)

providing details and we will investigate your claim.

**Stellingen**  
behorende bij het proefschrift

**Intracellular glycation and endothelial dysfunction;  
role of methylglyoxal**

- 1) Door methylglyoxaal geïnduceerde oxidatieve stress is verantwoordelijk voor een verminderde stikstofoxide-gemedieerde vasculaire relaxatie tijdens hyperglykemie. *(Dit proefschrift)*
- 2) Overexpressie van glyoxalase-I in ratten met diabetes vermindert de accumulatie van glyoxaal en methylglyoxaal, en daardoor de vorming van vergevorderde glyceringsproducten. *(Dit proefschrift)*
- 3) Het glyoxalase-I / methylglyoxaal systeem beïnvloedt de ontwikkeling van nefropathie in ratten met type 1-diabetes. *(Dit proefschrift)*
- 4) Ratten met type 1-diabetes worden gekarakteriseerd door een verlaagde bloeddruk die gedeeltelijk kan worden voorkomen door glyoxalase-I overexpressie. *(Dit proefschrift)*
- 5) Naast de ontdekkers van glyoxalase, waren Dakin & Dudley ook onbewust pioniers op het gebied van intracellulaire glycering.  
"It is interesting to note that phenyl glyoxal readily combines with histidine, arginine, ornithine and lysine to give sparingly soluble yellow substances. These compounds are under investigation." *(Dakin & Dudley, J Biol Chem 1913, 14:155-157)*
- 6) De beste buitenlandervaring voor een promovendus is minimaal vier weken per jaar op vakantie gaan.
- 7) De experimenten die je bedenkt krijgen pas waarde door de uitvoering.
- 8) Een significante interactie tussen "lab AIO's" en "computer AIO's" is positief geassocieerd met kwalitatief betere publicaties.
- 9) "Sticking feathers up your butt does not make you a chicken." *(Tyler Durden, Fight Club)*
- 10) "Am I part of the cure, or am I part of the disease?" *(Coldplay, Clocks)*

Olaf Brouwers  
Maastricht, 18 mei 2011