

# Microvascular dysfunction, physical activity, and cardiometabolic diseases

## Citation for published version (APA):

Li, W. (2020). *Microvascular dysfunction, physical activity, and cardiometabolic diseases*. Maastricht University. <https://doi.org/10.26481/dis.20201022wl>

## Document status and date:

Published: 01/01/2020

## DOI:

[10.26481/dis.20201022wl](https://doi.org/10.26481/dis.20201022wl)

## 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.

## **Propositions**

accompanying the dissertation

### **Microvascular dysfunction, physical activity, and cardiometabolic diseases**

1. Microvascular dysfunction is an early phenomenon in impaired glucose metabolism; it can be both cause and consequence of type 2 diabetes (this dissertation).
2. Islet microvascular dysfunction is associated with higher insulin secretion in the fasting state and glucose-stimulated insulin secretion in the late phase in individuals without a history of diabetes (this dissertation).
3. A higher composite score of microvascular dysfunction is independently associated with an increased risk of cardiovascular disease regardless of large artery region; systemic microvascular dysfunction can contribute to the development of cardiovascular diseases (this dissertation).
4. There is a significant sex difference in the dose-relationship of physical behavior with incident cardiovascular disease; more moderate-to-vigorous-intensity physical activity is associated with a reduced cardiovascular risk in women, whereas more light-intensity physical activity is associated with a higher cardiovascular risk in men (this dissertation).
5. Further investigations are needed to focus on the role of microvascular dysfunction and physical activity as risk prediction biomarkers as well as prevention and therapeutic targets of cardiometabolic diseases.
6. People often change their minds, so does science; the knowledge can be overturned.
7. Don't forget the necessity for alternative hypotheses and disproof (John R Platt, Science, 1964).
8. If we want to reduce the fear of uncertainty, we need to face it, accept it, and control its impact to the minimum.
9. 不积跬步，无以至千里；不积小流，无以成江海（荀子，战国）。 A journey of a thousand miles cannot be achieved without accumulation of each single step, just as the enormous ocean cannot be formed without gathering every brook or stream (Xunzi, Warring States period).

Wenjie Li 李雯婕, 22 October 2020