

Energy balance and colorectal cancer risk

Citation for published version (APA):

Jenniskens, J. C. A. (2022). *Energy balance and colorectal cancer risk: A role for cancer cell metabolism?* [Doctoral Thesis, Maastricht University]. Maastricht University. <https://doi.org/10.26481/dis.20221104jj>

Document status and date:

Published: 01/01/2022

DOI:

[10.26481/dis.20221104jj](https://doi.org/10.26481/dis.20221104jj)

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

Take down policy

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

repository@maastrichtuniversity.nl

providing details and we will investigate your claim.

Propositions belonging to the thesis

**ENERGY BALANCE AND COLORECTAL CANCER RISK:
A ROLE FOR CANCER CELL METABOLISM?**

Josien Jenniskens

1. Non-pathologists can generate valid and reproducible immunohistochemistry scoring results. (*this thesis*)
2. The Warburg-effect plays a role in the etiological pathway between adiposity and colon cancer risk, but not rectal cancer. (*this thesis*)
3. The role of the Warburg-effect in the etiological pathway between energy balance and colorectal cancer risk differs according to sex. (*this thesis*)
4. The Warburg-subtypes that were used in the current thesis give a better representation of the Warburg-effect than the subgroups based on *KRAS*, *PIK3CA*, and *BRAF* mutation status and MMR status. (*this thesis*)
5. Colorectal cancer should not be considered a single disease.
6. Making compromises is unavoidable in molecular pathological epidemiology research.
7. Close collaboration, while acknowledging strengths and weaknesses of disciplines, is essential for multidisciplinary research, like molecular pathological epidemiology, to succeed.
8. Insights into mechanisms underlying the etiological pathway between energy balance-related factors and colorectal cancer risk will improve preventive strategies.
9. Every expert was once a beginner.
10. If you can't explain it simply, you don't understand it well enough. (*Albert Einstein*)
11. 't Leve is un feest, en op feeste moste danse. (*Beppie Kraft - 't leuke zeuke*)