



Jan 15, 2021

Food4Gut multicenter randomized placebo-controlled trial.

Scientific Reports

Sophie Hiel¹, Marco A. Gianfrancesco², Julie Rodriguez¹, Daphnée Portheault³, Quentin Leyrolle¹, Laure B. Bindels¹, Carolina Gomes da Silveira Cauduro³, Maria D.G.H. Mulders³, Giorgia Zamariola¹, Anne-Sophie Azzi³, Gaetan Kalala², Barbara D. Pachikian¹, Camille Amadiou¹, Audrey M. Neyrinck¹, Audrey Loumaye¹, Patrice D. Cani¹, Nicolas Lanthier¹, Pierre Trefois¹, Olivier Klein³, Olivier Luminet¹, Jérôme Bindelle², Nicolas Paquot², Miriam Cnop³, Jean-Paul Thissen¹, Nathalie M. Delzenne¹

¹Université Catholique de Louvain; ²Université de Liège; ³Université Libre de Bruxelles

1 Works for me dx.doi.org/10.17504/protocols.io.baidica6

Julie Rodriguez

ABSTRACT

Objectives:We describe the methodology of a trial designed to highlight the interest of vegetables rich in ITF-prebiotics in obese adults.

DESIGN:150 obese subjects (BMI > 30 kg.m⁻²; 18–65 years) recruited in three different university hospitals in Belgium will be selected with at least one of the following criteria: (pre-)diabetes, hypertension, dyslipidemia, liver steatosis. They will be randomly assigned to receive either 16 g/day of inulin (Fibruline, Cosucra) with dietary advice to promote the consumption of vegetables rich in ITF or 16 g/day placebo (maltodextrin, Cargill) with dietary advice provided nutrients to promote the consumption of vegetables poor in ITF for 3 months. Review of literature, analysis of ITF content in vegetables and satisfaction and digestive tolerance tests (on healthy volunteers) will be performed to propose adequate receipts.

Results: The primary outcome is to evaluate the impact of a higher consumption of ITF-prebiotics on the gut microbiota composition. The secondary outcome of this trial was the effect of the prebiotic intervention on the BMI. Other secondary endpoints were anthropometric and clinical parameters.

Conclusions:The goal of this intervention study is to establish the proof of concept that nutrients which selectively stimulate the growth of beneficial bacteria in the human colon might offer protection against metabolic disorders associated to obesity on an adequate target population.

EXTERNAL LINK

<https://doi.org/10.1038/s41598-020-79718-9>

THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

Lanthier N, Rodriguez J, Nachit M, Hiel S, Trefois P, Neyrinck AM, Cani PD, Bindels LB, Thissen J, Delzenne NM, Microbiota analysis and transient elastography reveal new extra-hepatic components of liver steatosis and fibrosis in obese patients. Scientific Reports doi: [10.1038/s41598-020-79718-9](https://doi.org/10.1038/s41598-020-79718-9)

ATTACHMENTS

[Clinical trial protocol.docx](#)

DOI

dx.doi.org/10.17504/protocols.io.baidica6

EXTERNAL LINK

<https://doi.org/10.1038/s41598-020-79718-9>

PROTOCOL CITATION

Sophie Hiel, Marco A. Gianfrancesco, Julie Rodriguez, Daphnée Portheault, Quentin Leyrolle, Laure B. Bindels, Carolina Gomes da Silveira Cauduro, Maria D.G.H. Mulders, Giorgia Zamariola, Anne-Sophie Azzi, Gaetan Kalala, Barbara D. Pachikian, Camille Amadiou, Audrey M. Neyrinck, Audrey Loumaye, Patrice D. Cani, Nicolas Lanthier, Pierre Trefois, Olivier Klein, Olivier Luminet, Jérôme Bindelle, Nicolas Paquot, Miriam Cnop, Jean-Paul Thissen, Nathalie M. Delzenne 2021. Food4Gut multicenter randomized placebo-controlled trial.. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.baidica6>

MANUSCRIPT CITATION please remember to cite the following publication along with this protocol

Lanthier N, Rodriguez J, Nachit M, Hiel S, Trefois P, Neyrinck AM, Cani PD, Bindels LB, Thissen J, Delzenne NM, Microbiota analysis and transient elastography reveal new extra-hepatic components of liver steatosis and fibrosis in obese patients. Scientific Reports doi: [10.1038/s41598-020-79718-9](https://doi.org/10.1038/s41598-020-79718-9)

EXTERNAL LINK

<https://doi.org/10.1038/s41598-020-79718-9>

KEYWORDS

microbiota, prebiotics, obesity, inulin

LICENSE

————— This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

CREATED

Dec 16, 2019

LAST MODIFIED

Jan 15, 2021

PROTOCOL INTEGER ID

31013

ATTACHMENTS

[Clinical trial protocol.docx](#)