Gut microbiota and chronic exercise in diabetic patients: not only bacteria

This is the author's manuscript

Original Citation:

Availability:
This version is available http://hdl.handle.net/2318/1706982 since 2020-11-22T10:02:09Z

Published version:
DOI:10.23736/S0026-4806.19.06090-7

Terms of use:
Open Access
Anyone can freely access the full text of works made available as "Open Access". Works made available under a Creative Commons license can be used according to the terms and conditions of said license. Use of all other works requires consent of the right holder (author or publisher) if not exempted from copyright protection by the applicable law.

(Article begins on next page)
Gut microbiota and chronic exercise in diabetic patients: not only bacteria

Journal: Minerva Medica
Paper code: Minerva Med-6090
Submission date: April 6, 2019
Article type: Letter to the Editor

Files:

1. Manuscript
   Version: 1
   Description: manoscritto
   File format: application/msword
Gut microbiota and chronic exercise in diabetic patients: not only bacteria

Davide Giuseppe Ribaldone,¹ Rinaldo Pellicano²

¹Department of Surgical Sciences, University of Turin, Turin, Italy;
²Unit of Gastroenterology, Molinette Hospital, Turin, Italy

Conflicts of interest: none to declare.

Corresponding author: Davide Giuseppe Ribaldone - Department of Surgical Sciences, University of Turin, Corso Bramante, n° 88, 10126 Turin, Italy; tel (0039)0116333918, fax (0039)0116333623, davrib_1998@yahoo.com

Key words: Fungal microbiota - Mycobione - Microbiome – Metabolic syndrome – Physical exercise
TO THE EDITOR: In a recent interesting paper Pasini et al. have shown that exercise controls diabetes also by modifying intestinal mycobiota composition and gut barrier function. In particular, while diabetes was associated with significant gut mycetes overgrowth, exercise improved glycemia and reduced gut mycetes overgrowth. The analysis of the gut microbiota included bacterial species, Candida Albicans and Mycetes spp. Only Candida albicans and Mycetes spp. were significantly reduced after exercise (P = 0.043 and P < 0.001, respectively).\(^1\)

We would like to highlight three crucial points regarding the results of this study.

First, each strategy aiming to obtain the homeostasis of the microbiota should consider the mycobiota. This is not always considered in a time of prevalent interest toward the bacteria.\(^2\)

Second, the study of the gut permeability, as indicator of gut barrier function, by the search for zonulin\(^3\) should be mandatory in this type of investigations.

Third, more and more data confirmed the potential involvement of gut microbiota in several extra-intestinal diseases.\(^4,5\)

References


