The Role of the Human Microbiome in the Aging Process?

The Human Microbiome Project was launched in 2008 to characterize how changes in the microbial species that colonize the human body are associated with human health and disease. Recently, the gut microbiota of older people was shown to differ from that of younger adults and was also shown to play a crucial role in the aging process and contribute to age-related comorbidities such as frailty. More specifically, intestinal microbiota was discovered to cause the development of Parkinson's disease in a mouse model and a number of studies have also suggested links between Alzheimer's disease and the presence of viral and bacterial infections.

Such research suggests that the normalization of the microbiome, such as with the use of probiotics or fecal microbiota transplantation, could be a novel therapeutic approach for the prevention and/or treatment of neurodegenerative diseases. This opens up interesting possibilities for dietary interventions to help promote healthy aging.

Healthy Aging Research invites submissions of original research and review articles that provide insights on this exciting new area of research. Topics of interest for this special issue about how changes in the human microbiome can contribute to neurodegeneration and aging include, but are not limited to, the following:

- Dietary interventions, including probiotics, to promote healthy aging
- Viral and bacterial infection causes of neurodegenerative diseases
- How the gut microbiota changes during the human aging process
- Intra- and inter-species interactions and their effects on health outcomes
- The effectiveness and safety of novel therapeutic application such as fecal microbiota transplantation
- Mechanisms of microbiota-targeted interventions, such as suppression of chronic inflammation, regulation of immune response, antioxidant activity, regulation of metabolism and/or production of metabolites, etc.

Instructions for Authors

The Editorial Office is pleased to answer any questions you may have about preparing your manuscript in accordance with our guidelines. A full version of Instructions for Authors can be found on the journal's website, https://www.longdom.org/healthy-aging-research.html. Click on the "**For Authors**" tab.

ONLINE SUBMISSION

All manuscripts must be submitted online at: https://www.editorialmanager.com/longdomjournals/

First-time users

Please click the Register button at https://www.editorialmanager.com/longdomjournals/. Upon successful registration, you will be sent an email providing your username and password. Save this information for future reference. Note: If you have received an email from us with an assigned username and password, or if you are a repeat user, do not register again. Once you have an assigned username and password, you do not have to re-register.

Authors

Please click the Login button from the menu at the top of the page and login to the system as an author. Submit your manuscript according to the author instructions. You will be able to track the process of your manuscript.