# Article information:

Role of dietary fiber in the recovery of the human gut microbiome and its metabolome - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S1931312820306740?via%3Dihub>

# Article summary:

1. The lack of dietary fiber can slow the recovery of the gut microbiome after an ecological stress.

2. Diet-based microbiota metabolites can alter carbohydrate and amino acid gut metabolites.

3. The impact of diet, particularly fiber, on the human microbiome influences broad classes of metabolites that may modify health.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy in its reporting of the role of dietary fiber in the recovery of the human gut microbiome and its metabolome. The article provides a comprehensive overview of the topic, including a discussion of how different diets (vegan, omnivore, and enteral nutrition) affect the composition and function of the gut microbiome as well as its metabolite production. It also discusses how these changes can influence host health through their effects on G-protein-coupled receptors and nuclear hormone receptors.

The article does not appear to be biased or one-sided in its reporting; it presents both sides equally by discussing both positive and negative impacts that dietary fiber can have on the gut microbiome and its metabolome. Additionally, it provides evidence for its claims by citing relevant studies throughout the text. However, there are some points that could be explored further or discussed more thoroughly in order to provide a more comprehensive understanding of this topic. For example, while it mentions that dietary fiber can help maintain microbial diversity in mice models, it does not discuss whether this is also true for humans or if there are any differences between species in terms of how dietary fiber affects microbial diversity. Additionally, while it mentions that certain metabolites produced by the gut microbiota may be important for host health, it does not discuss what specific roles they play or how they interact with other molecules in order to produce these effects.

In conclusion, this article is generally reliable and trustworthy in its reporting on dietary fiber's role in recovering from ecological stressors on the human gut microbiome and its metabolome; however, there are some points which could be explored further or discussed more thoroughly in order to provide a more comprehensive understanding of this topic.

# Topics for further research:

* Dietary fiber and microbial diversity in humans
* Effects of dietary fiber on G-protein-coupled receptors
* Role of gut microbiota metabolites in host health
* Interactions between dietary fiber and nuclear hormone receptors
* Impact of vegan, omnivore, and enteral nutrition diets on gut microbiome
* Mechanisms of dietary fiber in recovering from ecological stressors

# Report location:

<https://www.fullpicture.app/item/f51bee163076de6bdcf3ed03f3d3ca39>