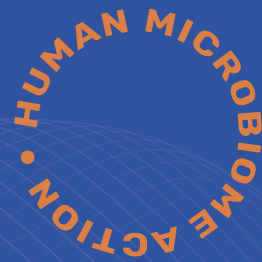




# The Evolution of Microbiome Analysis Methods



Microbiome analysis is an evolving field with diverse approaches and implementations. However, the lack of standard operating procedures (SOPs) poses challenges, leading to biases in data generation and analysis. The Human Microbiome Action project addresses these issues by searching for consensus on essential microbiome data analysis methods, identifying robust statistical and machine learning methods and recommending unified repositories for consistently derived summary data.

## CHALLENGE:

- ⊖ Pushing novel discoveries while navigating methodological complexities.

## ACTION:

- ⊖ Publication of a white paper to reinforce the importance of standardisation within the microbiome research community.
- ⊖ Outreach to & adoption by large public entities to ensure widespread implementation.

## CONTACT:

[info@humanmicrobiomeaction.eu](mailto:info@humanmicrobiomeaction.eu)





## IMPACT:

- ⦿ Providing a minimal set of analyses and guidance to avoid pitfalls and common mistakes.
- ⦿ Enhancing reproducibility through checklists, versioning, and detailed method descriptions.
- ⦿ Facilitating application by public resources providing processed microbiome data.
- ⦿ Building a strong analysis community to foster collaboration and knowledge exchange.

## CONCLUSION

The Human Microbiome Action project is committed to propelling microbiome analysis methods forward, ensuring reproducibility and reliability in research outcomes. By moving towards standardised approaches, we lay the foundation for more robust and impactful microbiome studies. Only through our collective efforts for greater collaboration and innovation in the exploration of microbial communities, we can drive transformative advancements in public health.

Interested in driving the evolution of microbiome analysis methods and promoting standardisation efforts?

Join our Stakeholder Advisory Board to provide strategic advice or engage with the ***European Microbiome Centres Consortium*** to foster interdisciplinary collaboration.

For further information, please visit our website [humanmicrobiomeaction.eu](https://humanmicrobiomeaction.eu). Follow the @SciFoodHealth [Twitter/X](#) and [LinkedIn](#) accounts or connect through the [Sustainable Food Systems Network Microbiome Subgroup](#).

Visit our [zenodo.org](https://zenodo.org) community for all published and upcoming scientific publications.

## CONTACT:

[info@humanmicrobiomeaction.eu](mailto:info@humanmicrobiomeaction.eu)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 964590