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References

Committee on Toxicity Statement on interactions between xenobiotics and the human microbiota and their potential toxicological implications: [Statement on interactions between xenobiotics and the human microbiota and their potential toxicological implications.pdf](#)

BBSRC Microbiome Capability Workshop Report (2020): [BBSRC microbiome capability workshop 2020 report - UKRI](#)

Government Office for Science: [Rapid Project - Microbiome manipulation.pdf](#)

Branchu, P., Bawn, M. and Kingsley, R.A., 2018. Genome variation and molecular epidemiology of *Salmonella enterica* serovar Typhimurium pathovariants. *Infection and immunity*, 86(8), pp.10-1128.

EFSA Roadmap for the integration of gastro-intestinal (GI) tract microbiomes (human and domestic animal) in risk assessments under EFSA's remit: [Roadmap for the integration of gastro-intestinal \(GI\) tract microbiomes \(human and domestic animal\) in risk assessments under EFSA's remit | EFSA](#)

FDA Guidance Document- CVM GFI #159 (VICH GL36) Studies to Evaluate the Safety of Residues of Veterinary Drugs in Human Food: General Approach to Establish a Microbiological ADI: [CVM GFI #159 \(VICH GL36\) Studies to Evaluate the Safety of Residues of Veterinary Drugs in Human Food: General Approach to Establish a Microbiological ADI | FDA](#)

UKRI KTN Innovate Microbiome Strategic Roadmap: [Microbiome Strategic Roadmap FINAL.pdf](#)

KTN Microbiome Special Interest Group (part of Innovate UK): [Microbiome - Innovate UK Business Connect](#)

UKRI Innovate Human Intestinal Microbiome Therapies and Diagnostics – The Science, Opportunities and Challenges Report: [0489 KTN HIMDD Final2 AW Updated-230228.pdf](#)

UK Food Safety Research Network: [Home - Food Safety Research Network](#)

Garrido-Romero, M., Pazos, F., Sánchez-Martínez, E., Benito, C., Gómez-Ruiz, J.Á., Borrego-Yaniz, G., Bowes, C., Broll, H., Caminero, A., Caro, E. and Chagoyen, M., 2024. Relevance of gut microbiome research in food safety assessment. *Gut microbes*, 16(1), p.2410476.

James, D., Poveda, C., Walton, G.E., Elmore, J.S., Linden, B., Gibson, J., Griffin, B.A., Robertson, M.D. and Lewis, M.C., 2024. Do high-protein diets have the potential to reduce gut barrier function in a sex-dependent manner?. *European Journal of Nutrition*, pp.1-20.

Leeming, E.R., Johnson, A.J., Spector, T.D. and Le Roy, C.I., 2019. Effect of diet on the gut microbiota: rethinking intervention duration. *Nutrients*, 11(12), p.2862.

Maier, L., Pruteanu, M., Kuhn, M., Zeller, G., Telzerow, A., Anderson, E.E., Brochado, A.R., Fernandez, K.C., Dose, H., Mori, H. and Patil, K.R., 2018. Extensive impact of non-antibiotic drugs on human gut bacteria. *Nature*, 555(7698), pp.623-628.

Métris, A., Barrett, P., Price, L., Klamert, S. and Fernandez-Piquer, J., 2022. A tiered approach to risk assess microbiome perturbations induced by application of beauty and personal care products. *Microbial Risk Analysis*, 20, p.100188.

Mesnage, R., Calatayud, M., Duysburgh, C., Marzorati, M. and Antoniou, M.N., 2022. Alterations in infant gut microbiome composition and metabolism after exposure to glyphosate and Roundup and/or a spore-based formulation using the SHIME technology. *Gut Microbiome*, 3, p.e6.

Mesnage, R. and Antoniou, M.N., 2020. Computational modelling provides insight into the effects of glyphosate on the shikimate pathway in the human gut microbiome. *Current research in toxicology*, 1, pp.25-33.

Mesnage, R., Teixeira, M., Mandrioli, D., Falcioni, L., Ibragim, M., Ducarmon, Q.R., Zitting, R.D., Amiel, C., Panoff, J.M., Bourne, E. and Savage, E., 2021. Multi-omics phenotyping of the gut-liver axis reveals metabolic perturbations from a low-dose pesticide mixture in rats. *Communications Biology*, 4(1), p.471.

National Vision for Engineering Biology: [National vision for engineering biology - GOV.UK](#)

Nagata, N., Nishijima, S., Miyoshi-Akiyama, T., Kojima, Y., Kimura, M., Aoki, R., Ohsugi, M., Ueki, K., Miki, K., Iwata, E. and Hayakawa, K., 2022. Population-level metagenomics uncovers distinct effects of multiple medications on the human gut microbiome. *Gastroenterology*, 163(4), pp.1038-1052.

Oliveira, P.G.D., Sousa, J.M.D., Assunção, D.G.F., Araujo, E.K.S.D., Bezerra, D.S., Dametto, J.F.D.S. and Ribeiro, K.D.D.S., 2022. Impacts of consumption of ultra-processed foods on the maternal-child health: a systematic review. *Frontiers in nutrition*, 9, p.821657.

Piñeiro, S.A. and Cerniglia, C.E., 2021. Antimicrobial drug residues in animal-derived foods: Potential impact on the human intestinal microbiome. *Journal of Veterinary Pharmacology and Therapeutics*, 44(2), pp.215-222.

Rivera-Chávez, F., Lopez, C.A. and Bäumler, A.J., 2017. Oxygen as a driver of gut dysbiosis. *Free Radical Biology and Medicine*, 105, pp.93-101.

Rogers, A.W., Tsois, R.M. and Bäumler, A.J., 2021. Salmonella versus the Microbiome. *Microbiology and Molecular Biology Reviews*, 85(1), pp.10-1128.

Sender, R., Fuchs, S. and Milo, R., 2016. Revised estimates for the number of human and bacteria cells in the body. *PLoS biology*, 14(8), p.e1002533.

Securing the future of microbiome research and innovation: the need for biobanking infrastructure in the UK Report:
cabidigitallibrary.org/doi/full/10.5555/20240382445

Shivakoti, R., Biggs, M.L., Djoussé, L., Durda, P.J., Kizer, J.R., Psaty, B., Reiner, A.P., Tracy, R.P., Siscovick, D. and Mukamal, K.J., 2022. Intake and sources of dietary fiber, inflammation, and cardiovascular disease in older US adults. *JAMA network open*, 5(3), pp.e225012-e225012.

The UK Science and Technology Framework: [The UK Science and Technology Framework: taking a systems approach to UK science and technology](#)

Valdes, A.M., Walter, J., Segal, E. and Spector, T.D., 2018. Role of the gut microbiota in nutrition and health. *BMJ*, 361.