Annex 4: References

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Banach, J.L., Hoek-van den Hil, E.F., van der Fels-Klerx, H.J. 2020. Food safety hazards in the European seaweed chain, Comprehensive Reviews in Food Science and Food Safety 19, 332-364.

Business, Energy and Industrial Strategy (BEIS). 2021. Net Zero Strategy: Build Back Greener. HM Government, London. October 2021.

Cairo, J., Gherman, I., Day, A. and Cook, P.E. 2022. *Bacillus cytotoxicus* – a potentially virulent food-associated microbe. Journal of Applied Microbiology, 132, 31-40.

Chiaranunt, P. and White, J.F. 2023. Plant beneficial bacteria and their potential applications in vertical farming systems. Plants, 12, 400.

Committee on Toxicology (COT). 2021. Annual report for 2020. FSA, London.

Cunningham, V., Binks, S.P. and Olson, M.J. 2009. Human health risk assessment from the presence of human pharmaceuticals in the aquatic environment, Regulatory Toxicology and Pharmacology 53, 39-45.

Department for Environment Food and Rural Affairs (Defra). 2022. Government Food Strategy. HM Government, London. June 2022.

European Food Safety Authority (EFSA). 2011. Scientific Colloquium on Emerging Risks in Food: from Identification to Communication, EFSA Scientific Colloquium. Summary Report 15.

European Food Safety Authority (EFSA). 2019. Scientific report on analysis of the European baseline survey of norovirus in oysters. EFSA Journal 17(7):5762, 86 pp. https://doi.org/ 10.2903/j.efsa.2019.5762

European Food Safety Authority (EFSA). 2020. Climate change as a driver of emerging risks for food and feed safety, plant, animal health and nutritional quality. EFSA supporting publication 2020:EN-1881.

Fiorella, K.J., Okronipa, H., Baker, K. and Heilpern, S. 2021. Contemporary aquaculture: implications for human nutrition. Current Opinion in Biotechnology, 70, 83-90.

Food and Agriculture Organisation of the United Nations (FAO). 2022. Climate change: implications for food safety. FAO, Rome.

Food, Farming and Countryside Commission (FFCC). 2019. Our Future in the Land. Royal Society for the Arts, London.

Food Standards Agency (FSA). 2009. Managing farm manures for food safety. London, FSA.

Food Standards Agency (FSA). 2019. Review of bio-based food contact materials. London, FSA. June 2019.

Food Standards Agency (FSA). 2020. Market and safety analysis of alternatives to plastic food packaging. London, FSA. October 2020.

Food Standards Agency (FSA). 2021. Rapid Evidence Review. Emerging technologies that will impact on the UK food system. London, FSA.

Food Standards Agency (FSA). 2022a. Alternative proteins for human consumption. London, FSA.

Food Standards Agency (FSA). 2022b. FSA Advisory Committee for Social Science. Impact of climate change on consumer food behaviours. London, FSA.

Food Standards Agency (FSA). 2022c. FSA Science Council Working Group 6. Food safety and net zero carbon. Interim Report. London, FSA. July 2022.

Galecki, R. and Sokól, R. 2019. A parasitological evaluation of edible insects and their role in the transmission of parasitic diseases to humans and animals. PLoS ONE, 14, e0219303.

Häfner F, Monzon Diaz OR, Tietjen S, Schröder C and Krause A. 2023. Recycling fertilizers from human excreta exhibit high nitrogen fertilizer value and result in low uptake of pharmaceutical compounds, Frontiers of Environmental Science, 10, 1038175.

doi: 10.3389/fenvs.2022.1038175

Intergovernmental Panel on Climate Change (IPCC). 2022. Working Group II Report. Impacts, adaptation and vulnerability. Technical Summary. IPCC, Geneva.

Lubna, F.A., Lewus, D.C., Shelford, T.J. and Both, A-J. 2022. What you may not realize about vertical farming, Horticulture 8, 322.

Mahon, A.M., O'Connell, B., Healy, M.G., O'Connor, I. Officer, R., Nash, R. and Morrison, L. 2023. Microplastics in Sewage Sludge: Effects of Treatment, Environmental Science and Technology, 51, 810-818.

Medina, A., Akbar, A., Baazeem, A., Rodriguez, A. and Magan, N. 2017. Climate change, food security and mycotoxins: do we know enough? Fungal Biology Review, 31, 143-154.

Mudadu, A.G., Spanu, C., Pantoja, J.C.F., Dos Santos, M.C., De Oliveira, C.D., Salza, S., Piras, G., Uda, M.T., Virgilio, S., Giagnoni, L., Pereira, J.G. and Tedde, T. 2022. Association between *Escherichia coli* and *Salmonella* spp. food safety criteria in live bivalve molluscs from wholesale and retail markets. Food Control, 137, 108942.

National Farmers' Union (NFU). 2019. Achieving Net Zero: Farming's 2040 Goal. London, NFU.

Office for Environmental Protection (OEP). 2023. Progress in improving the natural environment in England, 2021/2022. London, OEP.

Organisation for Economic Development and Cooperation (OECD). 2019. Enhancing the mitigation of climate change through agriculture. OECD, Paris.

Rossi, L., Bibbiani, C., Fierro-Sañudo, J.F., Maibam, C., Incrocci, L., Pardossi, A. and Fronte B. 2021. Selection of fish for integrated multi-trophic aquaponic production in the Mediterranean area using DEXi multi-criteria analysis. Aquaculture, 535, 736402.

Skiftesvik, A.B., Blom, G., Agnalt, A.-L., Durif, C.M.F., Brownan, H.I., Bjelland, R.M., Harkestad, L.S., Farestveit, E., Paulsen, O.I., Fauske, M., Havelin, T., Johnson, K and Mortensen, S. 2014. Wrasse (Labridae) as a cleaner fish in salmonid aquaculture – The Hardangerfjord as a case study. Marine Biology Research, 10, 289-300.

Smink, C.K. and Huulgaard, R.D. 2022. Waste not, want not: the regulatory barriers of upcycling frass. Pp. 271-279 In *Circular Economy Supply Chains: From Chains to Systems* (eds Bals, L., Tate, W.L. and Ellram, L.M.). Emerald Publishing Ltd, Bingley.

Sridhar, K., Bouhallab, S., Croguennec, T., Renard, D. and Lechevalier, V. 2022. Recent trends in design of healthier plant-based alternatives: nutritional profile, gastrointestinal digestion, and consumer perception, Critical Reviews in Food Science and Nutrition, DOI: 10.1080/10408398.2022.2081666.

UK Climate Change Committee (UKCCC). 2020. Land Use: Policies for a Net Zero UK. London, Climate Change Committee.

UK Climate Change Committee (UKCCC). 2022. Trade Policies and Emissions Reduction: Establishing and Assessing Options. Agriculture and deforestation. Progress Report.

van Gerrewey, T., Boon, N. and Geelan, D. 2022. Vertical farming: the only way is up. Agronomy, 12, 2.

Ward, N. 2023. Net Zero, Food and Farming – Climate Change and the UK Agri-Food System. Earthscan, Routledge, Abingdon, UK.

Wilkinson, J.M. and Young, R.H. 2020. Strategies to reduce reliance on soya bean and palm kernel meal in livestock nutrition. Journal of Applied Animal Nutrition, 8, 75-82.