



Chefs for Change is a project that was created out of concern for the future of us all. Scientists from all over the world are talking out about the fact that a plant-based diet is healthier and more environmentally-friendly than the one based on animal products.

Below we present a set of the most important data presenting the environmental impact of factory farming as well as the effects overconsumption of animal products has on human health.

Feel free the use of this information in press releases regarding our project.

- a. Meat, egg and dairy production is responsible for 83% of greenhouse gas emissions in an average European diet. Only 17% comes from plant-based foods.¹
- b. 1375 litres of water are needed to produce 100g of beef protein. Pork needs 1110 and poultry - 381. In comparison, 100 g of tofu protein needs only 93 litres of water.
- c. Production of one kilogram of beef emits 60 kg of greenhouse gases (CO2 equivalents). Whereas a kilogram of peas is responsible for only 1 kg of greenhouse gases.
- d. While farm animals occupy the majority of the world's agricultural land (77%), they provide only 18% of all calories and 37% of total protein.
- e. 78% of global eutrophication of the oceans and freshwater bodies (i.e. water becoming overly enriched with minerals and nutrients) is caused by agriculture.²
- f. Farm animals constitute 94% of mammalian biomass (excluding humans). This means, that there are 15 times more of them than wild mammals.³

¹ Sandström, V., Valin, H., Krisztin, T., Havlík, P., Herrero, M., & Kastner, T. (2018). The Role of Trade in the Greenhouse Gas Footprints of EU Diets. *Global Food Security*, 19, 48-55. <https://doi.org/10.1016/j.gfs.2018.08.007>

² Points b-e: Poore, J., & Nemecek, T. (2018). Reducing Food's Environmental Impacts Through Producers and Consumers. *Science*, 360(6392), 987-992. <http://doi.org/10.1126/science.aag0216>

³ Bar-On, Y. M., Phillips, R., & Milo, R. (2018). The Biomass Distribution on Earth. *Proceedings of the National Academy of Sciences*, 115(25), 6506-6511. <https://doi.org/10.1073/pnas.1711842115>

- g. According to IUCN Red List of Threatened Species, 28,000 species are threatened with extinction. Agriculture and aquaculture are listed as a threat to 24,000 of them.⁴
- h. The report of one of the most prestigious medical journals - The Lancet⁵ - shows that:
- ensuring a healthy and balanced diet for 10 billion people by 2050 (according to the population forecast) will not be possible without transforming eating habits, improving food production systems and reducing food waste;
 - a switch from the current dietary to the one proposed in the report can make a significant contribution to improving human health, preventing around 10.8-11.6 million deaths per year! (19.0-23.6% reduction);
 - the report recommends a dietary model based primarily on plant-based products, with small, occasional additions of meat, dairy and sugar;
 - this transformation will require a reduction in the consumption of unhealthy products such as red meat and sugar greater than 50% and an increase in the consumption of healthy products - nuts, fruit, vegetables or pulses - by more than 100%;
 - even a slight increase in the consumption of red meat or dairy products may make it difficult or impossible to achieve the objective of the report (point 1).

⁴ [The ICUN Red List of Threatened Species](#)

⁵ Willett, W., Rockström, et. al. (2019). Food In the Anthropocene: the EAT–Lancet Commission on Healthy Diets from Sustainable Food Systems. The Lancet, 393(10170), 447-492. [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4)