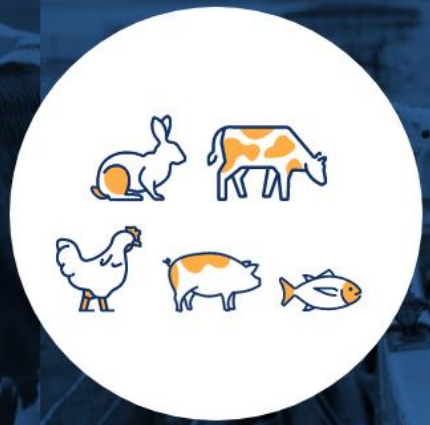


Use of processed former foodstuffs (circularity)



Last update: 2 June 2023

- **Type of challenge:** Environment.
- **Challenges:** Climate change (GHG emissions); resource management (food-feed competition).
- **Action:** Use of processed former foodstuffs.
- **Animal categories:** All farmed species.
- **Technique:** Using processed former foodstuffs as a nutrient-rich, alternative ingredient to cereal grains and vegetable oils in a compound feed diet.
- **Mode of action:** The use of former foodstuffs in feed for food-producing animals does not compete with direct food production and reinforces the circular economy, while it reduces the environmental impact of feed production through by requiring less natural resources (e.g. land, fertilisers and water) than crop-based feedstuffs.
- **Mode of implementation:** Legislative requirements apply to former foodstuff processors and food business operators as feed business operators, who ensure the safety of the feed chain, the preservation of the feed status and quality of the sourced and produced products; depending on the animal species, processed former foodstuffs are incorporated into compound feed formulations generally between 5 and 30%.
- **Requirements/limitations:** Former Foodstuffs can only be sourced from the manufacturing, distribution and retail sectors of the food & drink industry and not from catering establishments; the sourced former foodstuffs may not contain any prohibited animal by-products.
- **Economic consequences:** Processed former foodstuffs are readily available on most European feed markets at costs comparable to those of cooked cereals grains and oils content.
- **Other considerations:** The sourcing of former foodstuffs from food manufacturers and food retailers contributes to EU and global targets on global food waste prevention (e.g. SDG target 12.3).
- **References:**
 - Giromini *et al.* (2017). *Nutritional evaluation of former food products (exfood) intended for pig nutrition*. Epub 2017 Apr 11. Aug;34(8):1436-1445. <https://doi.org/10.1080/19440049.2017.1306884>
 - Grossi *et al.* (2022). *Feeding Bakery Former Foodstuffs and Wheat Distiller's as Partial Replacement for Corn and Soybean Enhances the Environmental Sustainability and Circularity of Beef Cattle Farming*. *Sustainability* 2022, 14(9), 4908. <https://doi.org/10.3390/su14094908>
 - GFLI Database (2017 – updated 2022). <https://globalfeedlca.org/gfli-database/>