

BSG-BioBev



Innovative plant-based functional beverages from brewers' spent grain

Brewers' Spent Grain (BSG) constitute one of the major by-products of the global food and drink industries, which is estimated at 39 million tonnes per annum. Currently, BSG is used as low-value cattle feed and fertiliser or destined to landfill. However, BSG is rich in fibre, protein, vitamins, minerals and phenolic compounds. Biotransforming BSG to functional food ingredients would sustainably contribute to global food security, meet the growing demand for novel healthy foods and a plant-based diet. BSG-BioBev aims to re-introduce BSG into the food system through developing bioprocesses to obtain innovative beverages. Different starter cultures, enzymes, fortification with grains and advanced treatments/preservation techniques will be explored. BSG-BioBev will create the knowledge needed to transform BSG into an ingredient for plant-based fermented beverages with enhanced functional and sensory profile while aiming for a "clean label" status.

Project Duration: 36 months (18M University of Helsinki + 18M Teagasc)

Collaborating Institutions: Teagasc Food Research Centre Ashtown, Ireland
University of Helsinki, Finland
University College Dublin, Ireland

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