

## **Packaging development to stop food waste**

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Well-designed packaging, crucial for a welfare state, support for food preservation and transport over time and long distances. However, its reputation has declined due to environmental concerns, especially plastic pollution in oceans. While packaging is criticized for its environmental impact, the real climate threat lies in food production, a major contributor to climate change, freshwater depletion, species extinction, and eutrophication. The future of packaging development should, to a much greater extent, ensure that food waste can be reduced.

In our research, we've explored the complex link between food packaging and waste reduction. Prevailing business models prioritize economics and sales, sometimes hindering the responsibility of ensuring food reaches consumers without waste. Balancing packaging's environmental impact with its role in limiting food waste and climate effects is a challenging task, complicated by differing food footprints, consumer behavior, and packaging recyclability uncertainties. Different functions of packaging can influence food waste and we know that food quantity in packaging greatly influences waste, driven by producers' sales focus and consumer price comparisons. Misunderstanding of "best before" labels also contributes to waste. Food producers should educate consumers to reduce this unnecessary waste.

## Biography Helén Williams 2023

Helén Williams is an Associate Professor in Environment and Energy systems at the Service Research Center, Karlstad University, Sweden. With a background in the packaging board industry, Helén transitioned into academia to embark on her research journey. Over the past 15 years, in collaboration with her colleague, she has lead the development of a pioneering research area in the domain of Packaging for reducing food waste

Recognizing the pressing need for ecological, social, and economic transformations to curb food waste, Helén emphasizes the essential role of packaging in this effort. She approaches this challenge from a service perspective, emphasizing that packaging is not only a material that should be recycled, more importantly, as a multifunctional service which protect, facilitate handling, and communicate about the food. When enhancing packaging functionality, she calculates the environmental trade-offs between increased packaging impact and the benefits of reducing food waste. Her findings and insights on consumer behavior and environmental considerations have been disseminated through numerous research articles.

Helén Williams frequently shares her expertise to inspire and educate various audiences. She has been invited to address governmental organizations, businesses, and research conferences, supporting the cause of sustainable packaging development and its crucial role in reducing food waste.