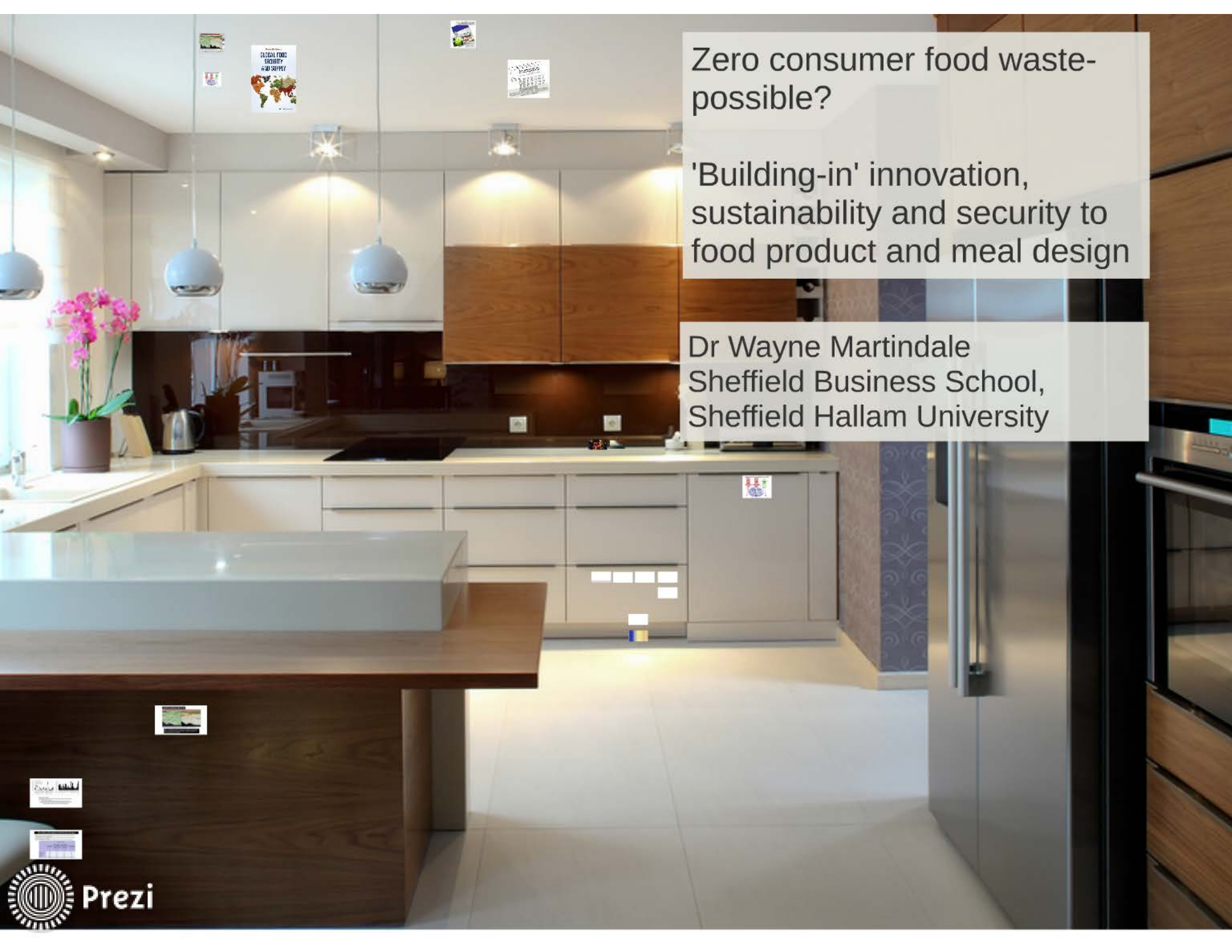


Zero consumer food waste-possible?

'Building-in' innovation, sustainability and security to food product and meal design

Dr Wayne Martindale
Sheffield Business School,
Sheffield Hallam University





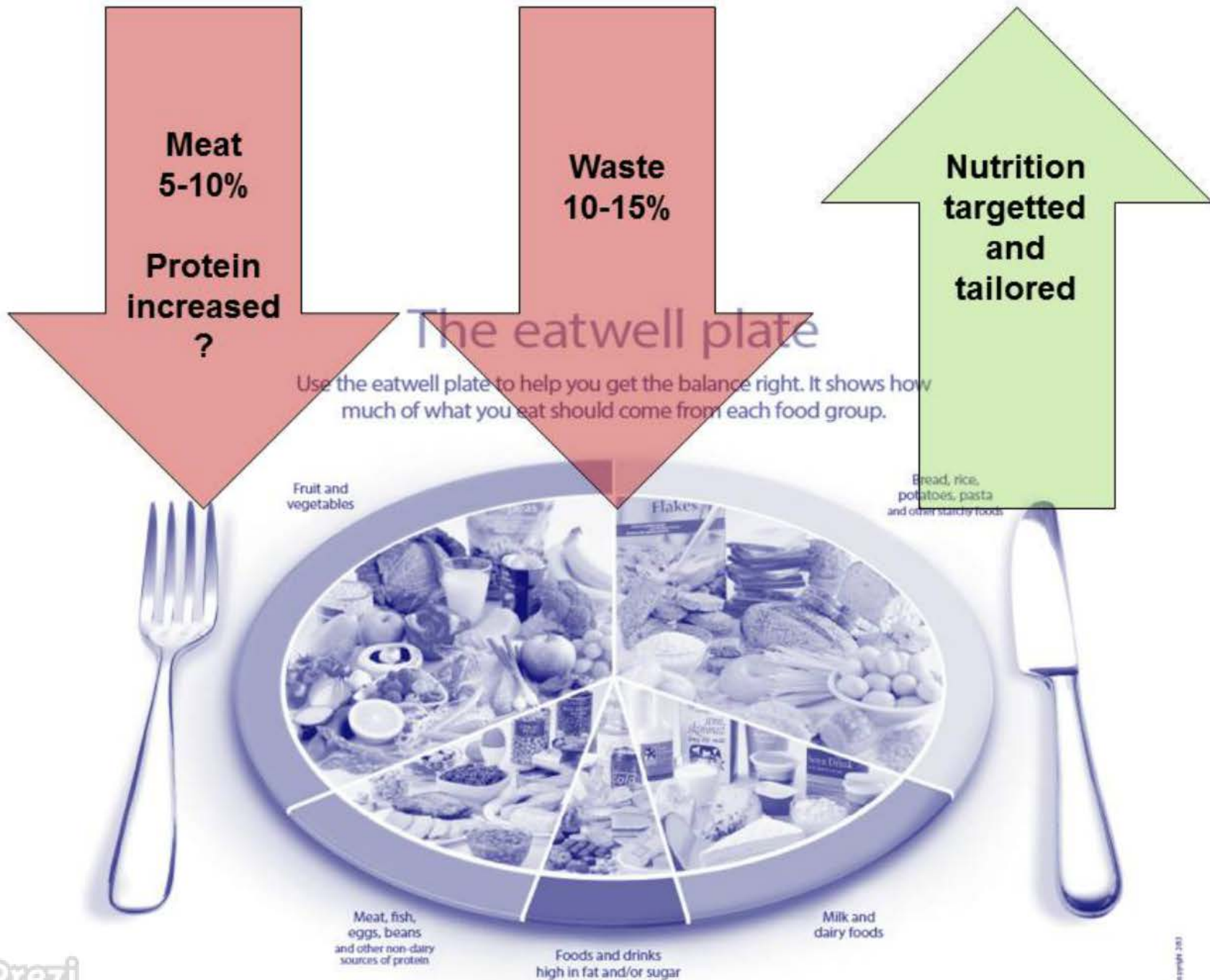
Zero consumer food waste-possible?

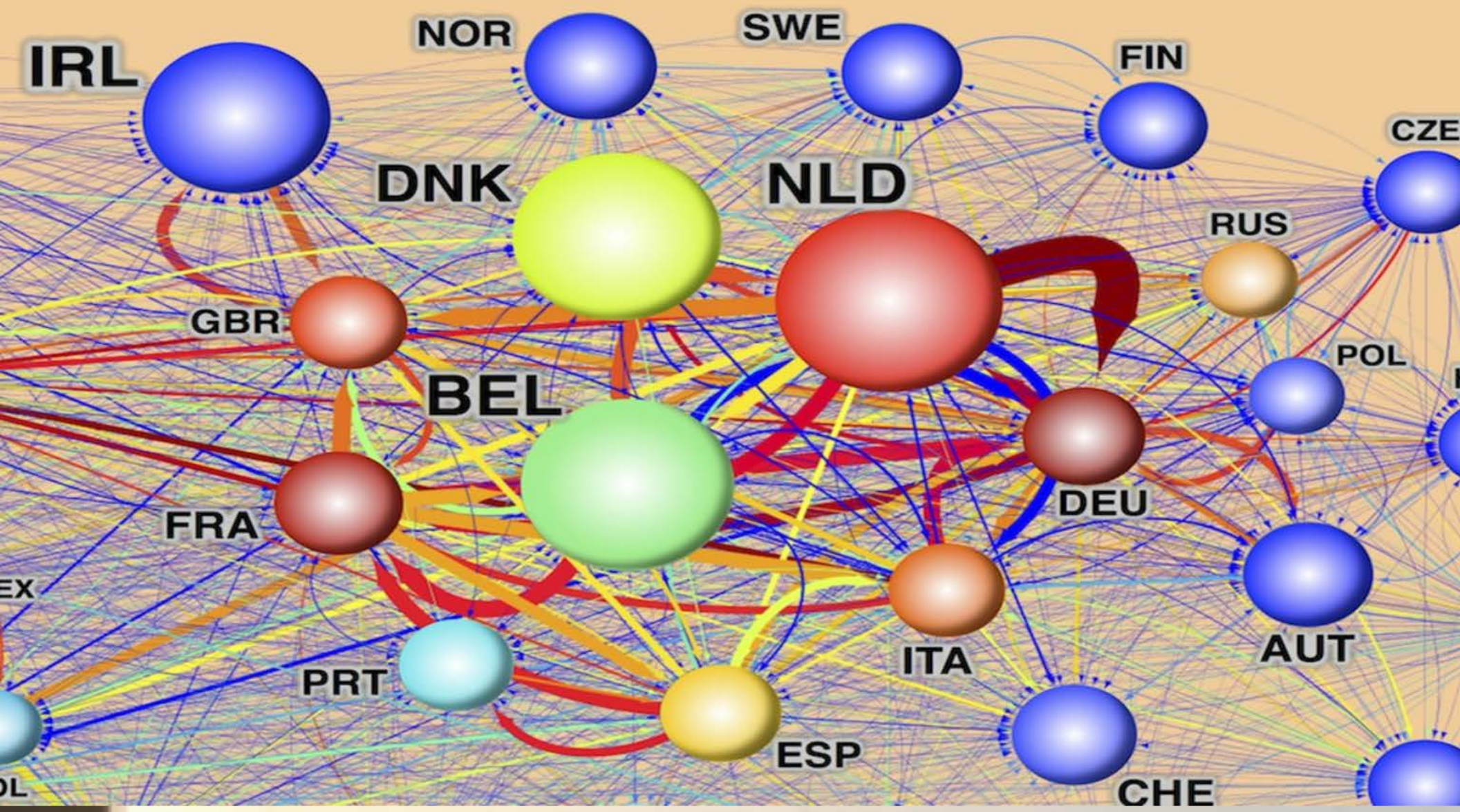
'Building-in' innovation, sustainability and security to food product and meal design

Dr Wayne Martindale
Sheffield Business School,
Sheffield Hallam University

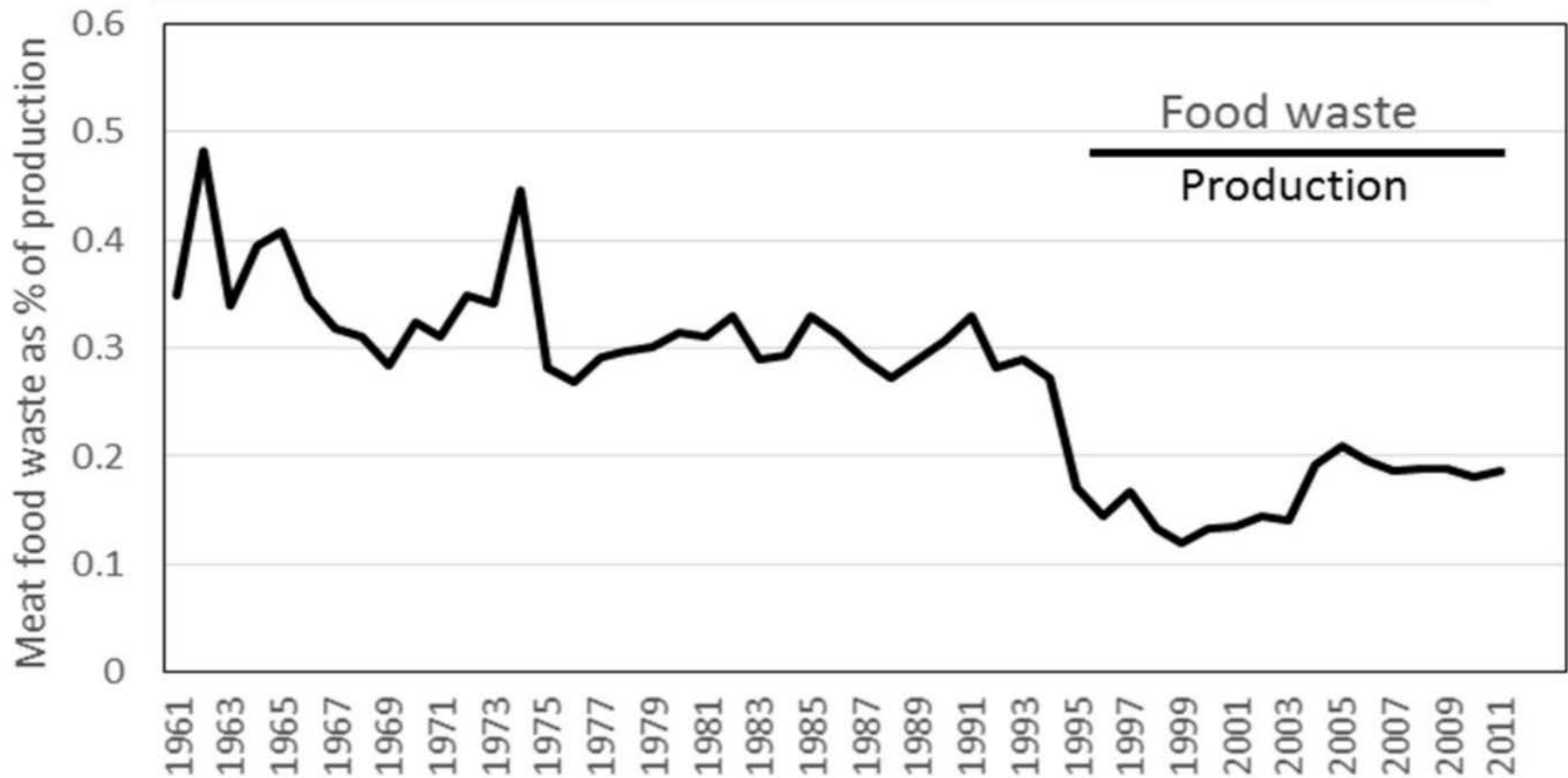


We know what we are going to eat in 2050?





European Union, meat waste



UNDERSTANDING IMPACTS

BBC NEWS

In pictures: Changing environment

1974



2000



The Almeria province of southern Spain has undergone massive and rapid agricultural change. In 1974 the landscape is one of traditional farmland but by 2000 a huge area has been covered by greenhouses for the mass production of market produce for export.

THERE IS A REQUIREMENT TO 'BUILD-IN' SECURITY AND SUSTAINABILITY INTO THESE MODELS NOW. THIS CANNOT BE DONE WITHOUT CONSIDERING THE DELIVERY OF PRESERVATION OR SHELF LIFE AND THE IMPACT OF CONSUMER EXPERIENCE. UNSEASONAL NUTRITION AND TASTES ARE REQUIRED BY US CONSUMERS.

The beginning of a disruptive idea: where it all ended up



British Frozen Food Federation (2010)

We demonstrated GHG balances and LCA-methods

Forever Food Together (2014)

CSR research into practice for 2.5 Bn company

THE ZERO FOOD WASTE OPTION FOR THE EC?

- We have assessed how consumers use fresh and frozen food in the household so that we can develop food waste reduction scenarios.
- If frozen foods were not available EU food waste would increase by 5.5 million tonnes per year across the categories shown below.
- This is a 15% of the 37 million tonnes of household food waste produced annually in EU27

	Million tonnes per annum			
	Food supplied to EU27 consumers in 2011 (FAOSTAT) (A)	Amount of fresh and frozen food wasted using Iglo-Hallam study where 17% household purchases were wasted (B = A x 0.17)	Amount of frozen food wasted using Iglo-Hallam study where 6% household purchases were wasted (C = A X 0.06)	Amount of food waste increase if there were no frozen food (D = C X 0.45)
Meat	41.88	7.12	2.51	1.13
Fish and seafood	11.60	1.97	0.70	0.31
Potato products	36.55	6.21	2.19	0.99
Peas*	0.65	0.11	0.04	0.11
Vegetables	58.74	9.99	3.52	1.59
Fruits	50.77	8.63	3.05	1.37
Total	200.19	34.03	12.01	5.50

Wayne Martindale

GLOBAL FOOD SECURITY AND SUPPLY



WILEY Blackwell