



Every nutrient is sacred: *Developing a nutrient retention paradigm to aid global food security*

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PREMIUM
FOOD AND WINE FROM OUR
CLEAN
ENVIRONMENT

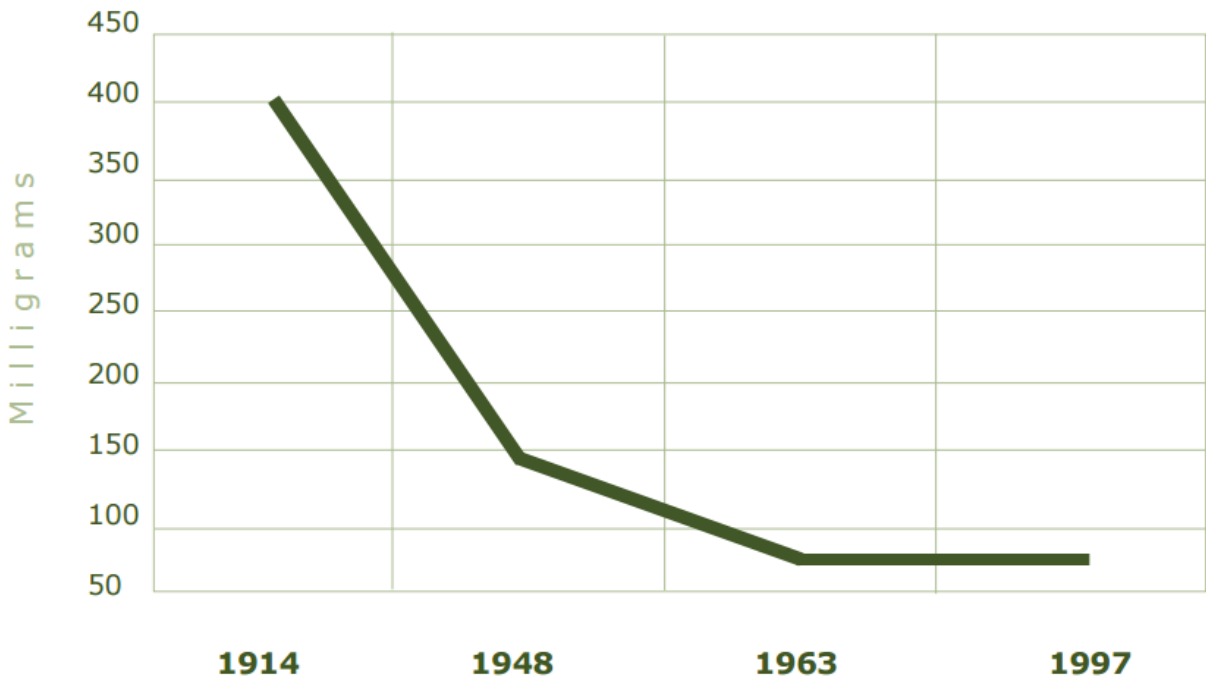


We are losing up to 90% of our nutrients between soil and sea

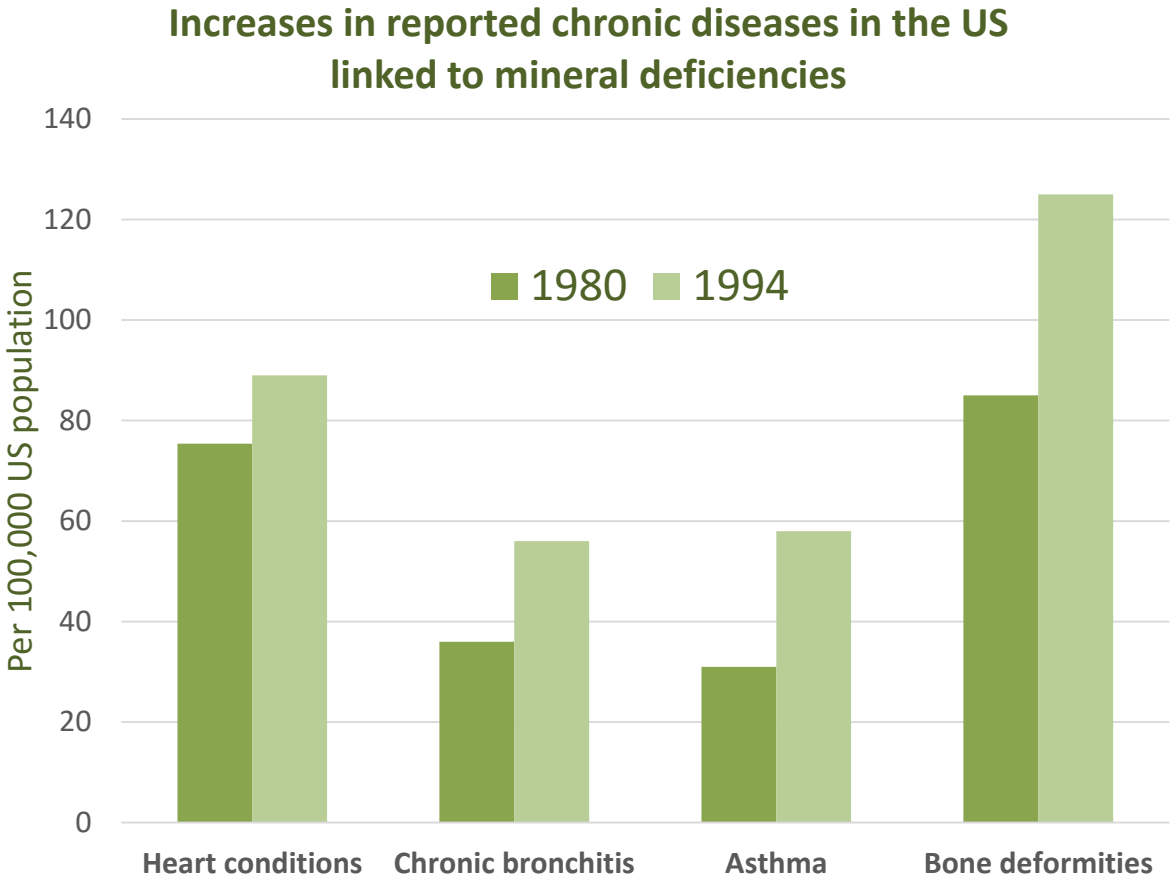


Our food is becoming less nutritious and chronic disease is on the rise

Average Mineral Content in Selected Vegetables, 1914 -1997
Sums of averages of calcium, magnesium and iron in cabbage, lettuce, tomatoes and spinach

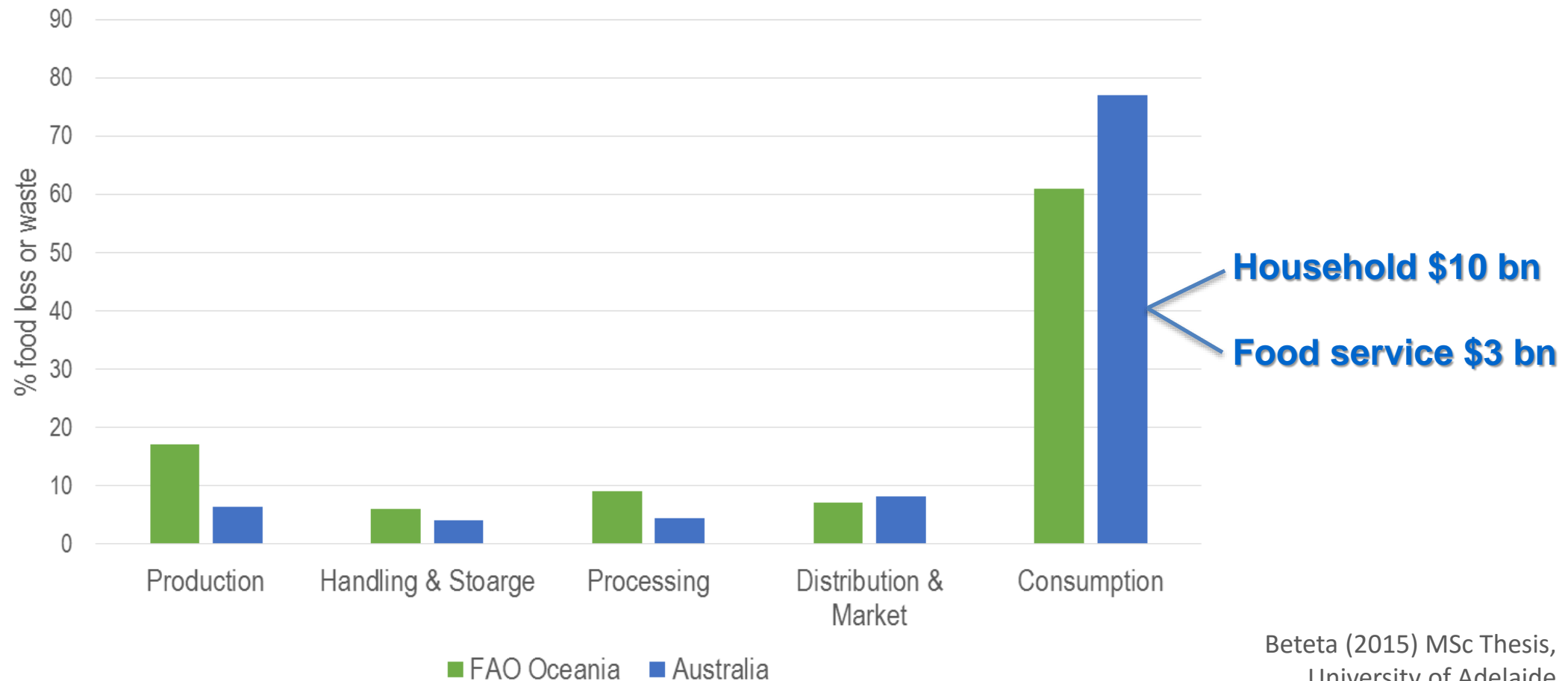


Source: Lindlahr, 1914; Hamaker, 1982; U.S. Department of Agriculture, 1963 and 1997

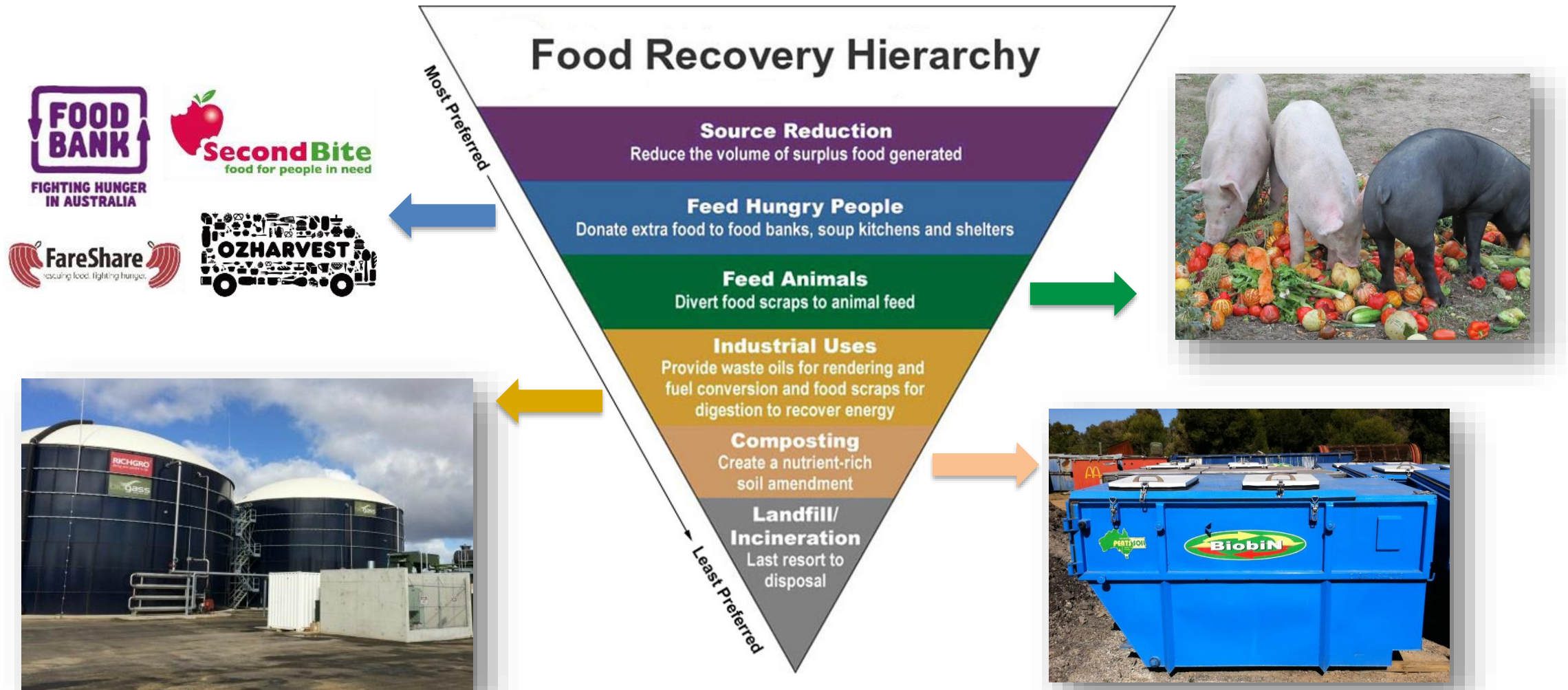


Yet we lose or waste 30-40% of the food we produce in Australia

- Beteta (2015) estimated \$18-20 billion p.a. from farm to fork



We need to promote a nutrient retention paradigm to aid food security



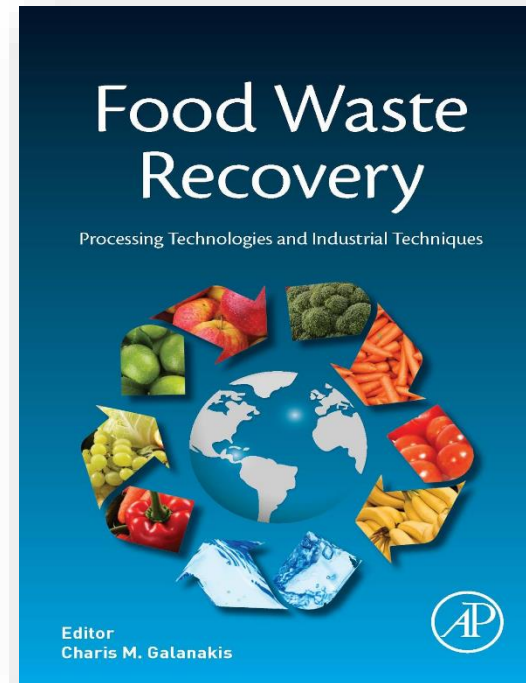
Which must include new innovative solutions to direct, retain or recover nutrients



**Better
target
fertilisers**



**Reduce
processing
losses**



**Recover
nutrients from
lost food**



**Extract
nutrients
from sewage**

To develop the nutritionally enhanced foods of the future



Functional food

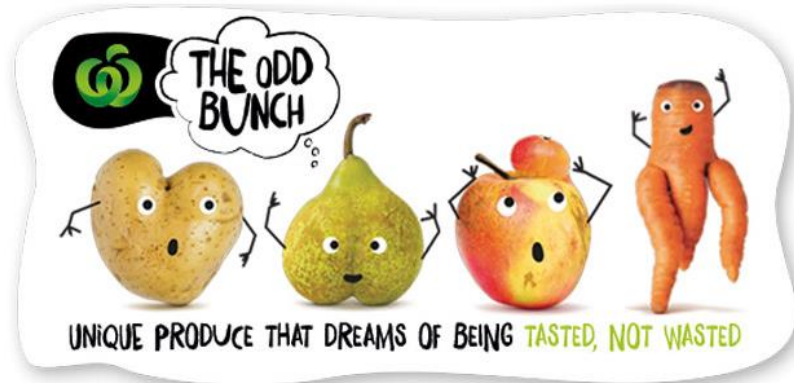


Nutraceuticals

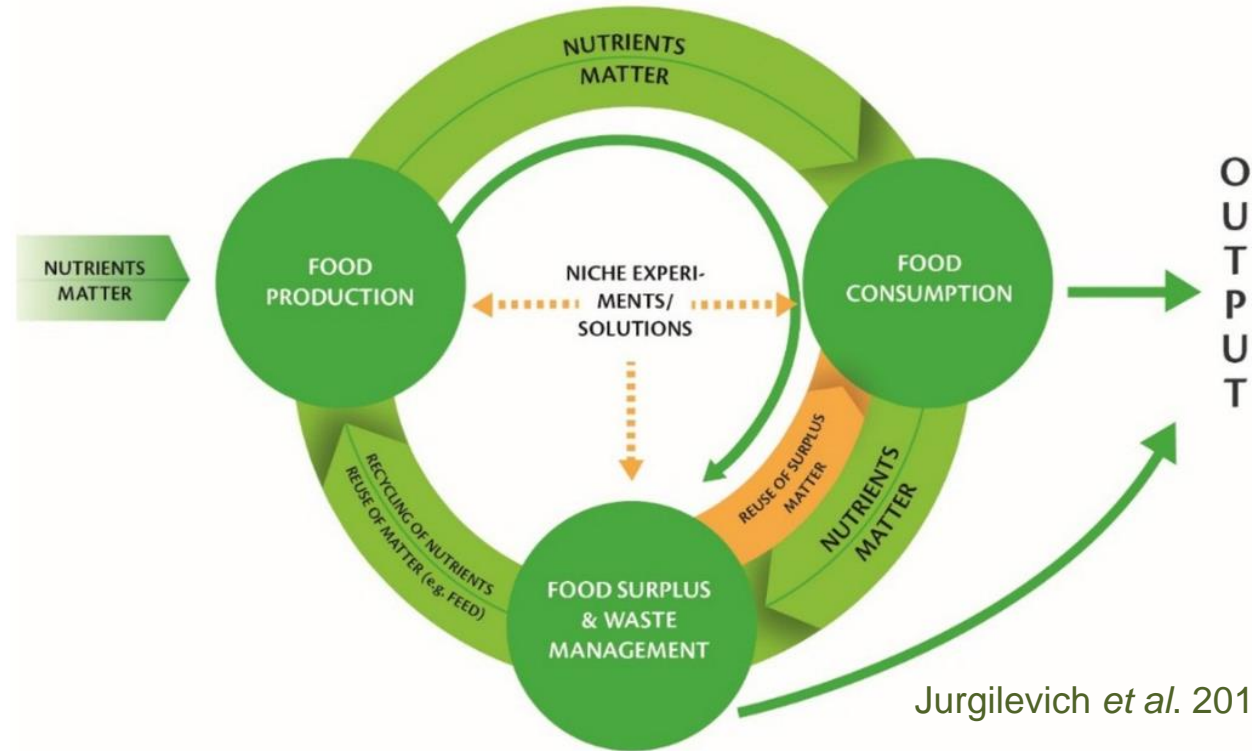


**Printed food including
tailored nutrition**

Everyone has a role to play, starting in the home



Nutritional security for all, not just food security, must be the aim



And developing the circular food economy will be integral to this.