

WARWICK
THE UNIVERSITY OF WARWICK

Closing the loop for healthier eating – with pulses

Professor Eric Holub

School of Life Sciences

Rosanne Maguire

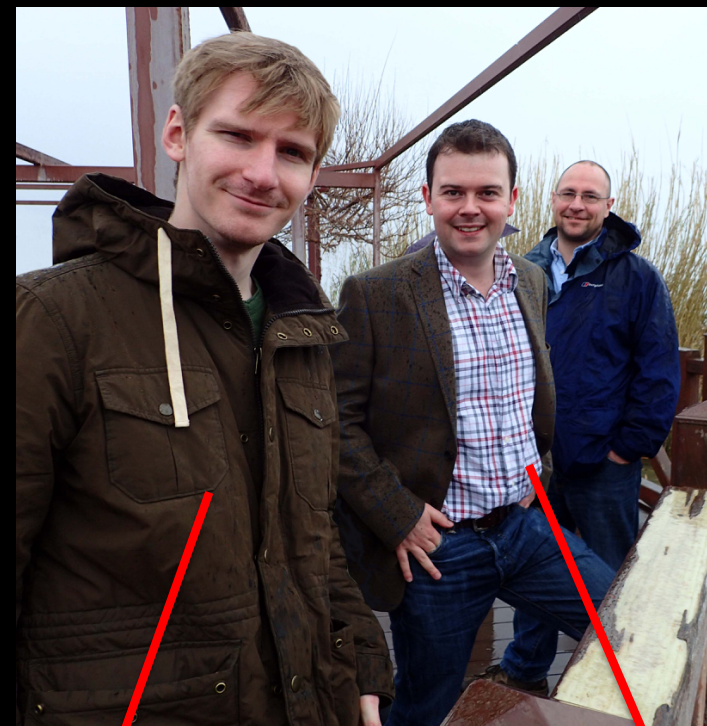
Co-supervisor:
Professor Susan Higgs
Birmingham-Psychology

**Phaseolus
dry bean**

William Crowther

Co-supervisor:
Dr Charlotte Allender

**Oilseed mustard
(Indian and English)**



Andy Tock

Co-supervisor:
Dr Guy Barker

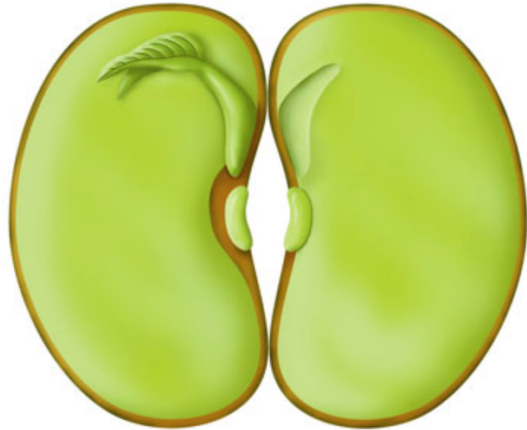
**Phaseolus
dry bean**

Sebastian Fairhead

Co-supervisor:
Dr Graham Teakle

**Oilseed mustard
(Indian and English)**

LEGUMES



Environment

**Perennial
forages**

Human health

Pulses



1850 100 acre
Farm established

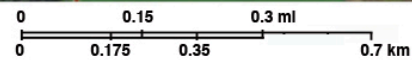
1930
Mixed farming
10 pastured cows

1980 240 acre
Dairy farm
250 milking cows
Registered herd



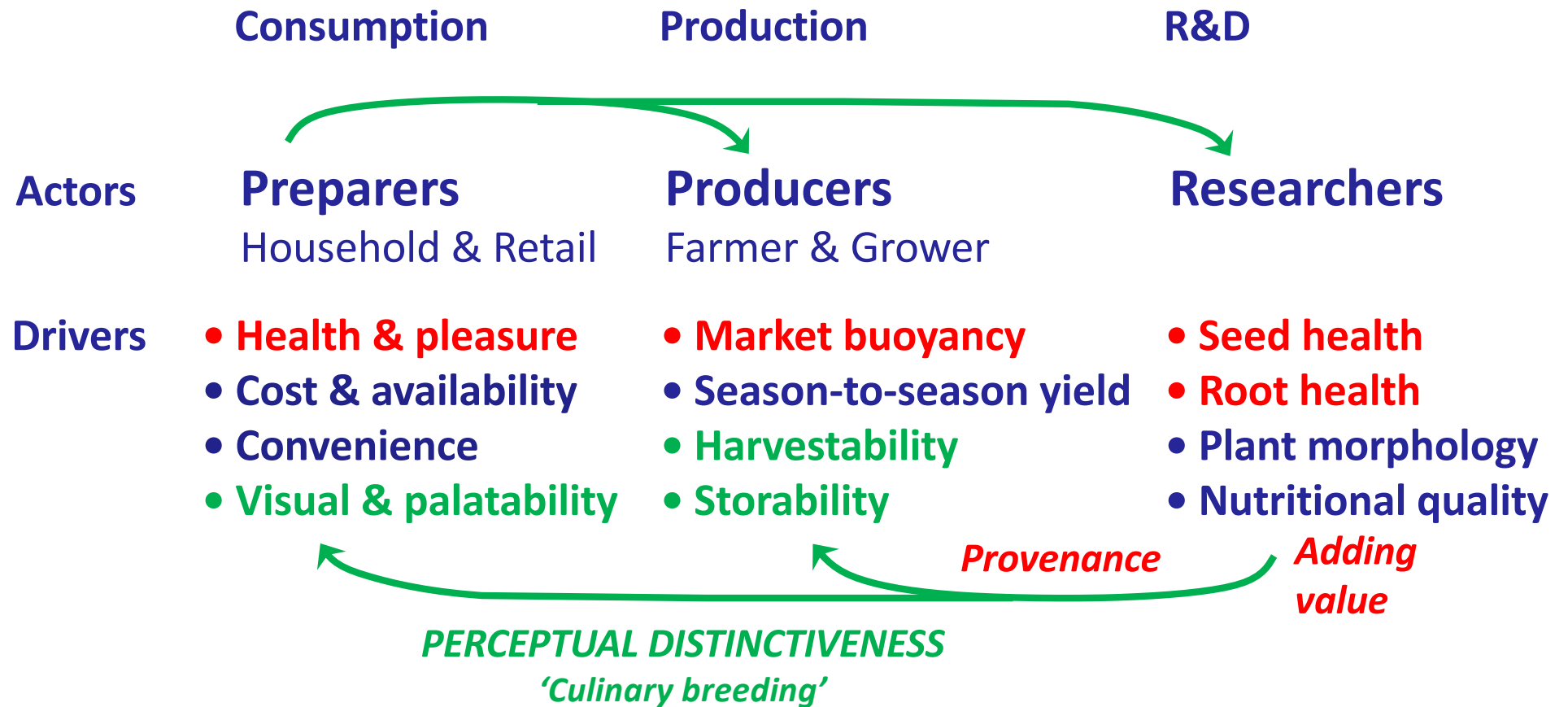
David Elton Mary Ralph (dad) Barbara Basil Selma (mom) Ruth John Wade 1960

December 6, 2017



Source: Earl, DigitalGlobe, GeoEye, Earthstar, Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN and the GIS User Community

Closed-loop and healthier eating



PASSIVE consumers



crunchy

PEA & PINTO BEAN STICKS



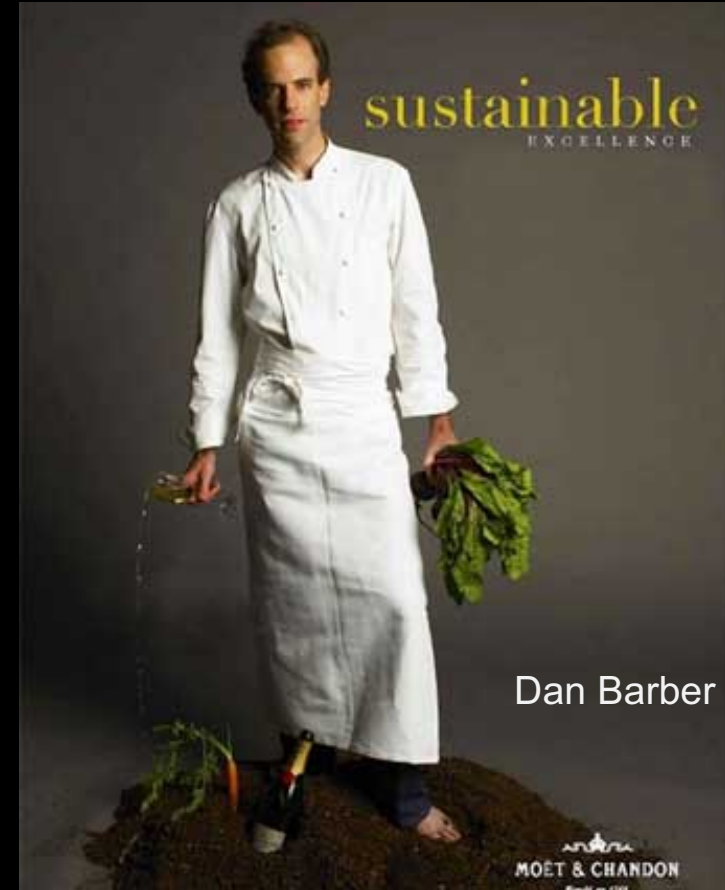
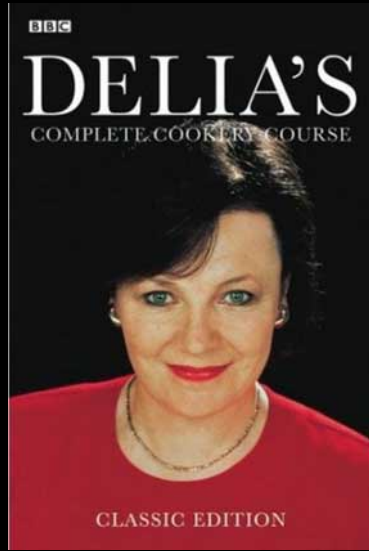
CARAMELISED ONION &
BALSAMIC VINEGAR

FLAVOUR

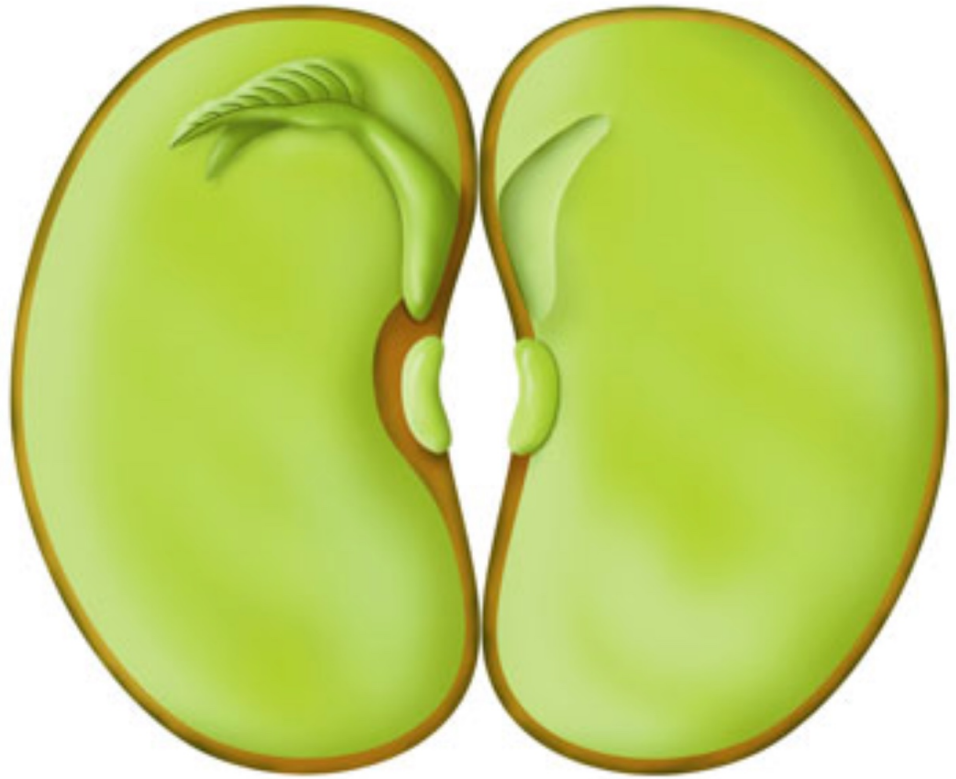
EACH 30g SERVING CONTAINS:

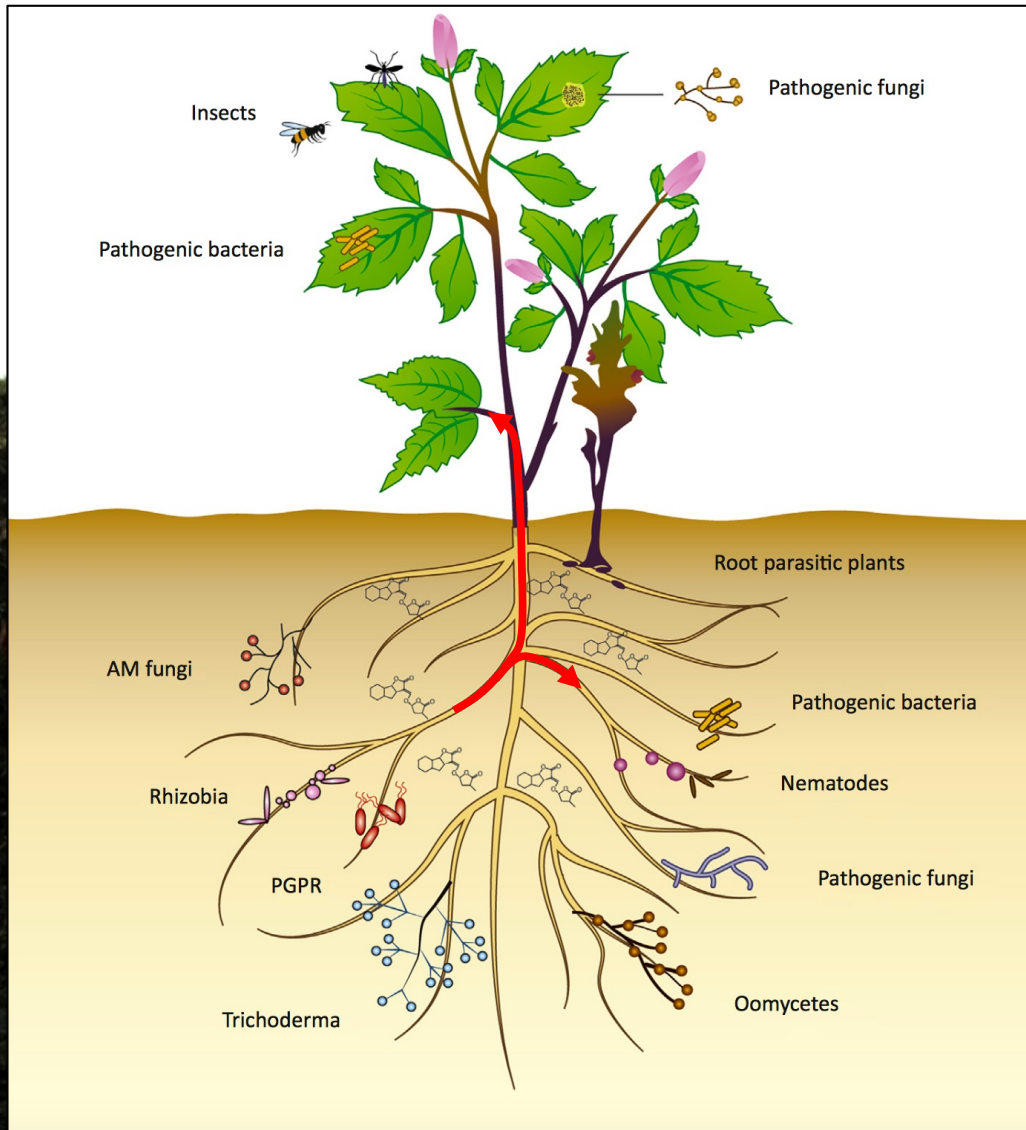
ENERGY (KJ/KCAL)	FAT	SATURATED	SUGARS	SALT
	5.7g	0.5g	1.5g	0.60g

ACTIVE Civic-minded consumers. . . who can cook



**Educators &
Trend-setters**





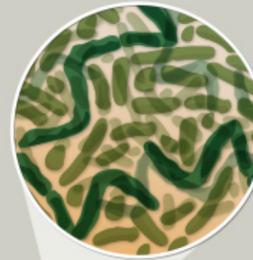


Food and Agriculture
Organization of the
United Nations

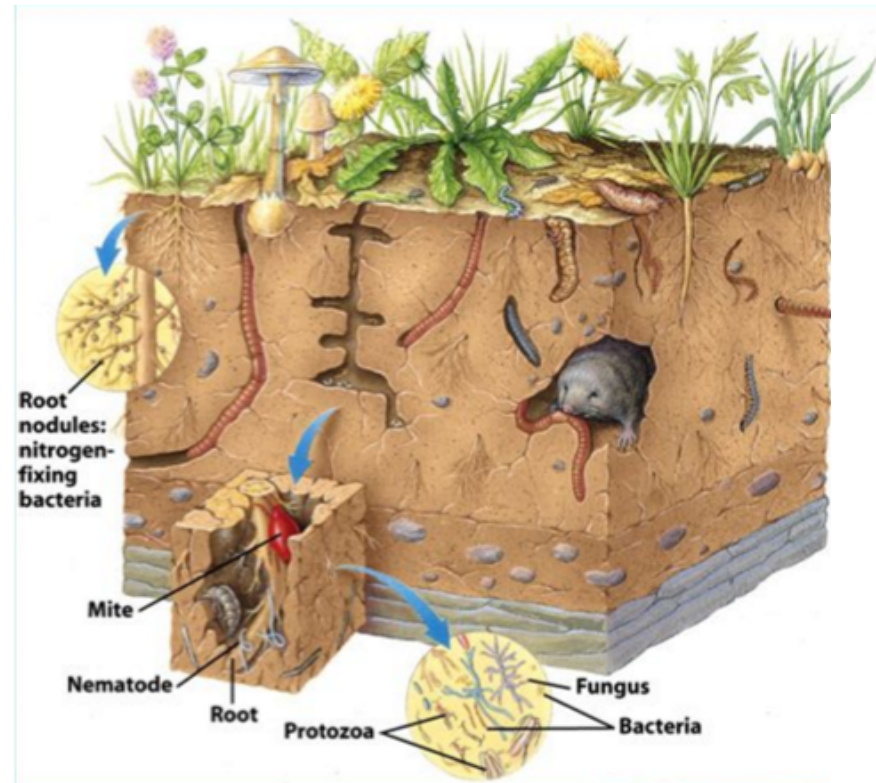
World Soil Day
5 December



THERE ARE MORE
ORGANISMS IN ONE
TABLESPOON OF
HEALTHY SOIL...



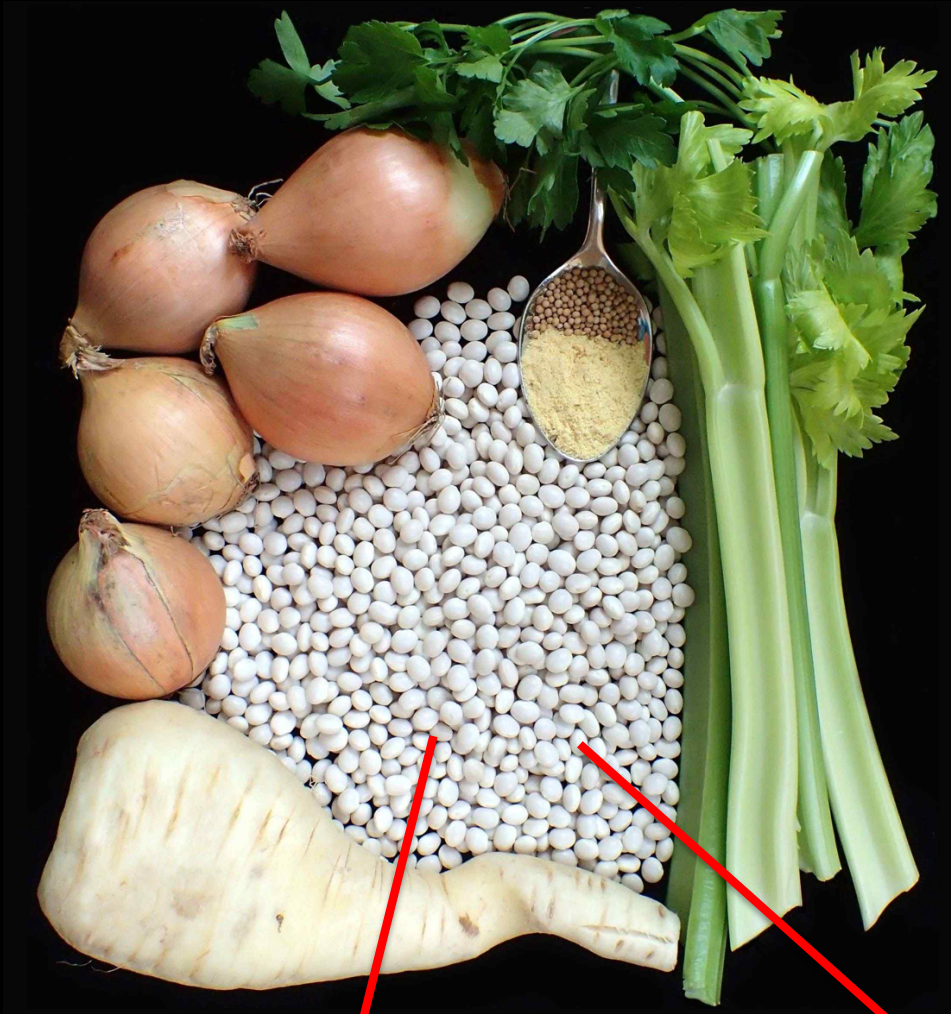
...THAN THERE ARE
PEOPLE ON EARTH





Fresh food - homegrown

Contact: Eric Holub
University of Warwick



FOR STARTERS



*Baby Butter Bean & Wonky Veg soup
with English mustard & Herb garnish*

A **missing link** in UK
vegetable production

A **missing ingredient** in our cuisine

A Tale of Two Beans

**1) Wide breeding potential
for market types**

F₅ families



2) Both fast-cooking



3) Both short growing season



4) Disease resistance

- Halo blight (Races 1-6)
- BCMV (I-gene)
- Anthracnose

5) A resilient root system

- cold tolerant
- root rot tolerant
- drought tolerant
- low nutrient tolerant

To BE, or not to BE?

ANSWER: **Yes**, to BE ... A healthy consumer

A civil society

A resilient economy

A sustainable environment

For closed-loop thinking about our food system

Yes, **TO** Peas and **BEans**