

## Satiety & Satisfaction: why-what-how

Dr Charon Zondervan  
Fresh Food and Chains




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## Introduction to the programme

**Fibres in food and feed - Biological mechanisms of energy intake**

**Why – what – how**

31 October 2013, Charon Zondervan




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## WHY Satiety & Satisfaction



Shutterstock, Sheryl Casey

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## Setting up the programme

- Part of strategy plan 2007-2010 of our board:
  - Science for impact
  - New scientific avenues
  - Impact for society & industry
  - Self funded
- With prof. Pieter van 't Veer co-inventor and coordinator of the program



2007 | 2010



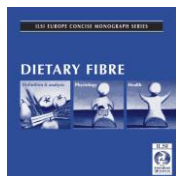
## Setting up the programme

- Food intake – energy regulation – satiety & reward mechanisms
- Chain of science involved:
  - Consumer science – product design – food chemistry – food physics – human & animal nutrition
  - Combining “gut expertise” on humans and production animals
  - Combining curiosity driven research (8 PhD students, 4 post docs) and application oriented research (~5 fte DLO capacity)
- Focus on fibres



## Fibres

- Gaps in fibre research:
  - either physicochemical properties or physiological properties
  - either feed or food
  - many assays, many fibre sources






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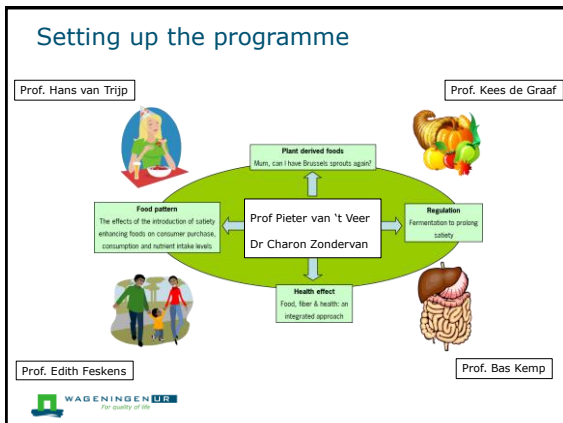
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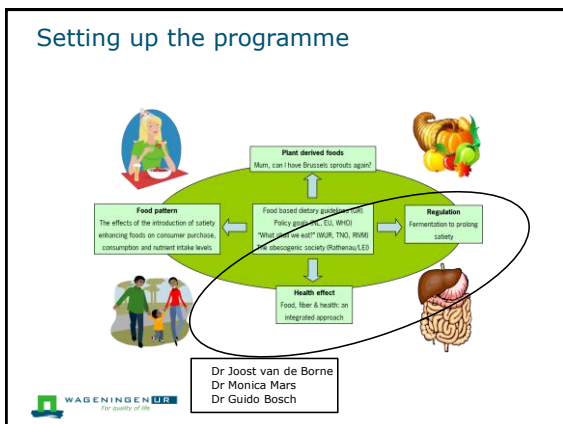
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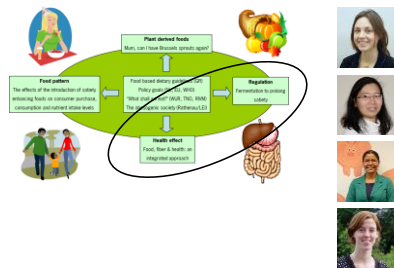
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## Setting up the programme

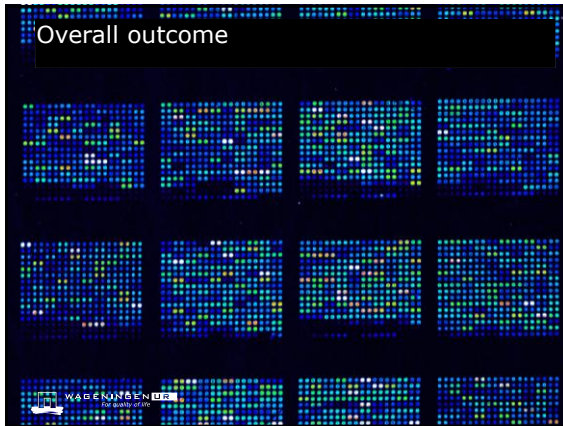


## Goals of the programme

Science driven research		
Publications	✓	18 peer reviewed (IF 3.6), many books/contributions, lectures, popular media
New food & nutrition initiatives	✓	TIFN, FoodKIC, Topsector, EU (Full4Health, EuroDish, Fibebiotics), FND, Marie Curie, VENI, FCB
Symposia	✓	Yearly (internal) symposium
External Mid term review	✓	Excellent score
Contract research		
Commercial satiety strategy	✓	
Additional turnover	+/-	Ca. 3 M€

## Goals of the programme

Education		
New master courses	✓	Sensory science & eating behaviour
Molecular gastronomy	✓	prof. Erik van der Linden
European PhD program	-	
Organisation		
Setting up cooperation with medical faculty	✓	Alliantie Gelderse Vallei (prof. Frans Kok)
Chair Health and Society	✓	October 2010 (prof. Maria Koelen)
Chair Health promoting bioactives	-	
PR & Communication	✓	2 brochures, >20 press releases, periodic newsletter, website




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## Overall outcome

### ■ 15:00 – 15:40: short presentations

Contribution to (on-going) debate on physiological mode of action in relation to physicochemical properties of fibres

### ■ 2/4 other PhD students graduated this summer

Relying on satiety cues in food consumption : studies on the role of social context, appearance focus, and mindfulness (Thesis Evelien van de Veer)

Consumer understanding, interpretation and perceived levels of personal responsibility in relation to satiety-related claims, (Els Bilman et al. Appetite 2012)




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Thank you

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