

# Drivers of consumers' food choices

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## Why should we investigate food consumers' choices?

They play a crucial role in shaping:

1. farm systems & technologies
2. health
3. environment
4. local and global economies.

# Determinants of choice

Many (interacting) factors:

1. Sustainable production methods
2. Geographical origin
3. Food Safety
4. Ethical concerns
5. Psychological traits
6. Goals and motivations
7. ...

How can we measure the effect of different determinants on choices?



**Choice Models and Willingness to pay (premium price)**

# 1. Sustainable Production Methods

## 1) Organic farming

- ✓ organic apples in Denmark
- ✓ organic olive production in Spain
- ✓ organic beef in Australia

**Findings:** consumers are willing to pay a premium for organic food, but ... not everywhere (US)!

## 2) Comparing alternative farming methods (organic, IPM, biodynamic)

Apples & carrots in Italy.

**Findings:** is there a preferred one?

# 1. Sustainable Production Methods

WTP (\$/kg) premium for **beef cuts** in Australia

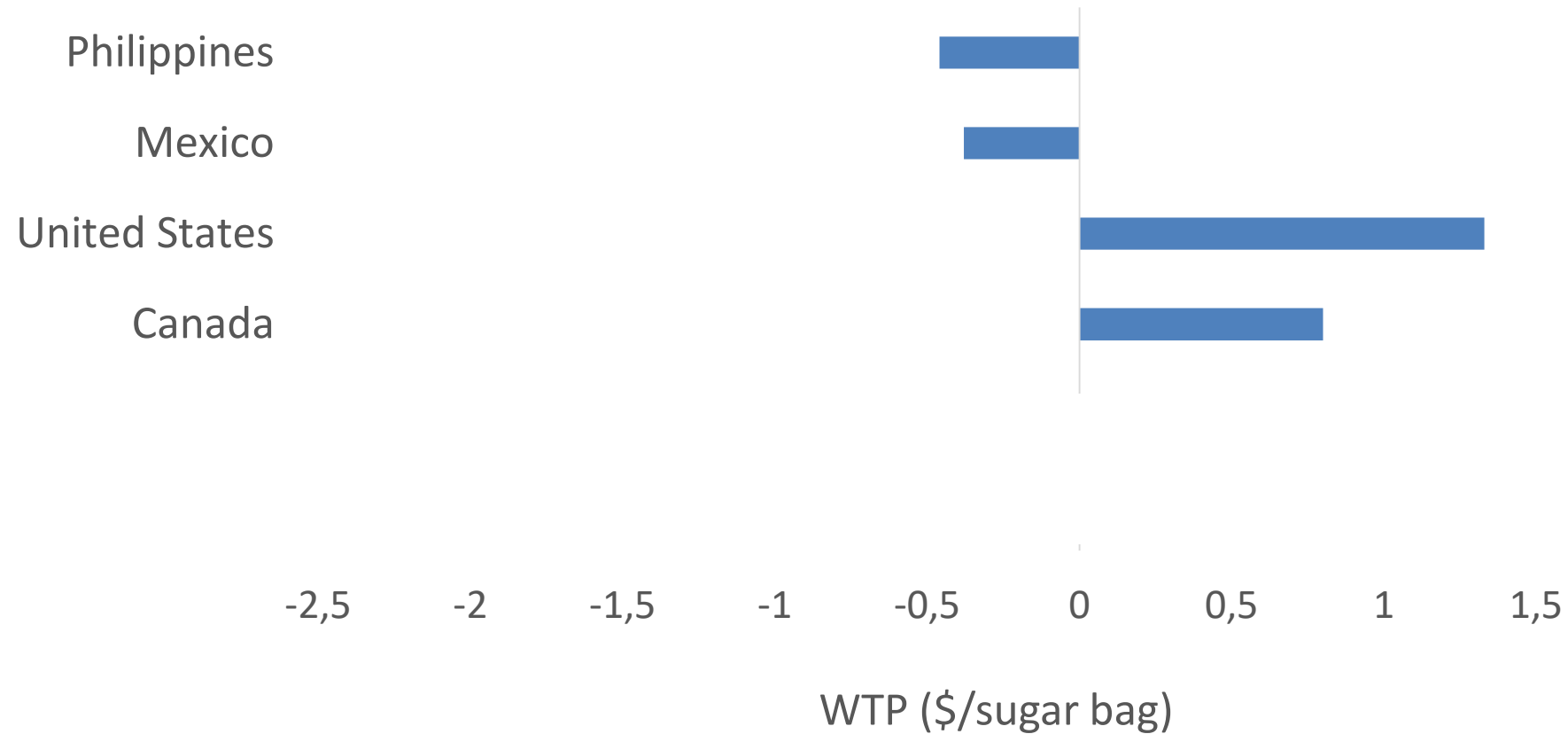
Production Met.	Minced	Diced	Roast	Rump	Porterhose	Scotch	Eye
Grass fed	0.39	1.15	0.82	0.81	0.87	1.52	1.42
Grain fed	0.45	1.36	0.96	0.96	1.03	1.79	1.67
<b>Antibiotics free</b>	0.30	0.89	0.63	0.62	0.67	1.17	1.09
<b>Organic</b>	0.21	0.64	0.45	0.45	0.48	0.84	0.79

## 2. Geographical origin

- Consumers are increasingly interested in the place of production of food: **local (certified) food** (CGDO, **Prosecco wine**).
- People prefer local food because it is perceived as:
  - fresher, tastier, safer
  - beneficial for local farmers and communities (collective brands: **Val di Gresta** Alpine Valley)
  - beneficial for the environment.

# Local and GM food

## WTP for sugar origin and use of GM in farming (US consumers)



# 3. Food Safety

Novel techniques developed to improve foods in the supply chain.

Advantages:

- more effective production techniques (increased yield)
- produce new tastes, textures, and flavors
- ensure improved safety during shelf life of foods.

**Are consumers WTP for new technologies?**



# Consumers attitudes towards new technologies

Consumers are more likely to accept new technologies if:

- food packaging rather food processing
- no health risks involved
- environmental benefits associated.

## Consumers' preferences for nanotechnology in food packaging - Raw chicken

**Nano sensors** in smart packages allow to detect contamination/pathogen.

Conventional vs welfare raised chicken (0.30-0.60£)

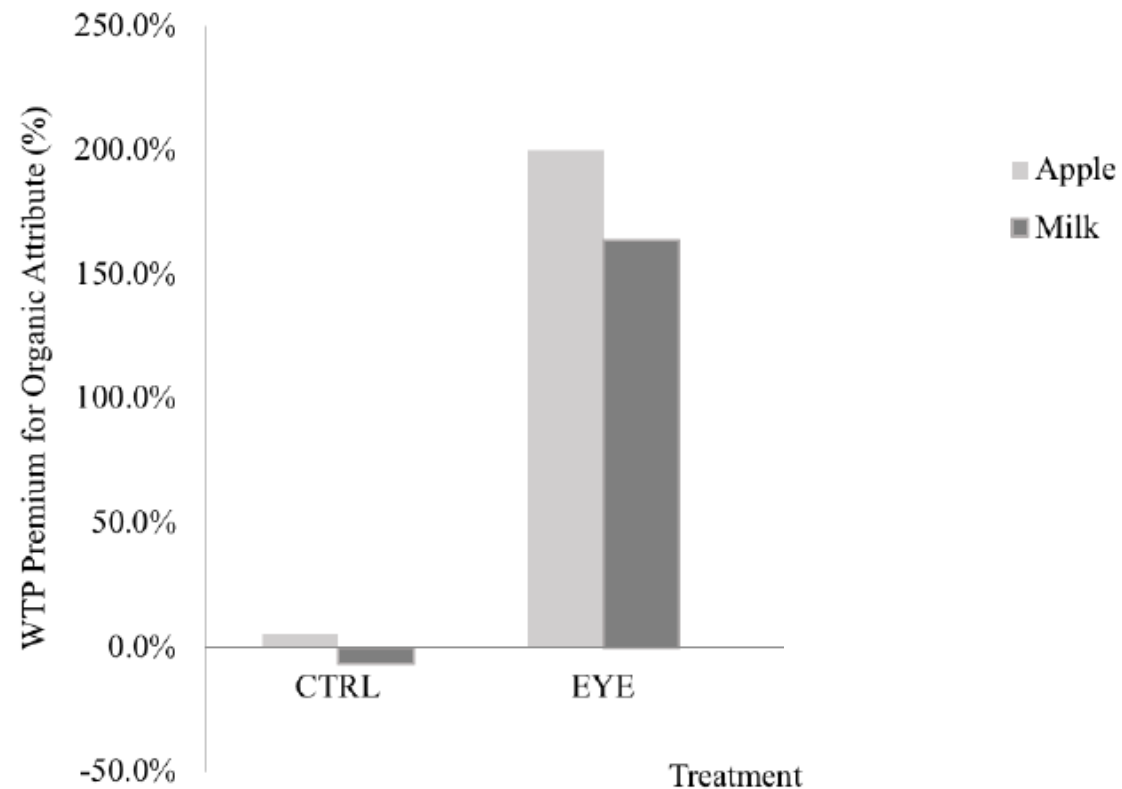
## 4. Ethical concerns

- Increasing calls worldwide for **poor working conditions** in the agri-food sector.
- Food products certified with **fair labour labels** have emerged in the market.
- Are consumers willing to pay a premium for products with such labels?
- Greek consumers are willing to pay an average premium of 0.53€/500g for **strawberries with fair labour certification**.

## 4. Psychological Aspects

- Researchers have noticed that **emotions, mood, personality traits affect food choices** and can interact with each other.
- People eat in order to distract themselves/compensate/cope with negative effects such as stress, anxiety, boredom and depression.
- **Social norms/pressure** can also influence consumers' preferences for foods features, such us local origin and organic

# Organic products and social pressure



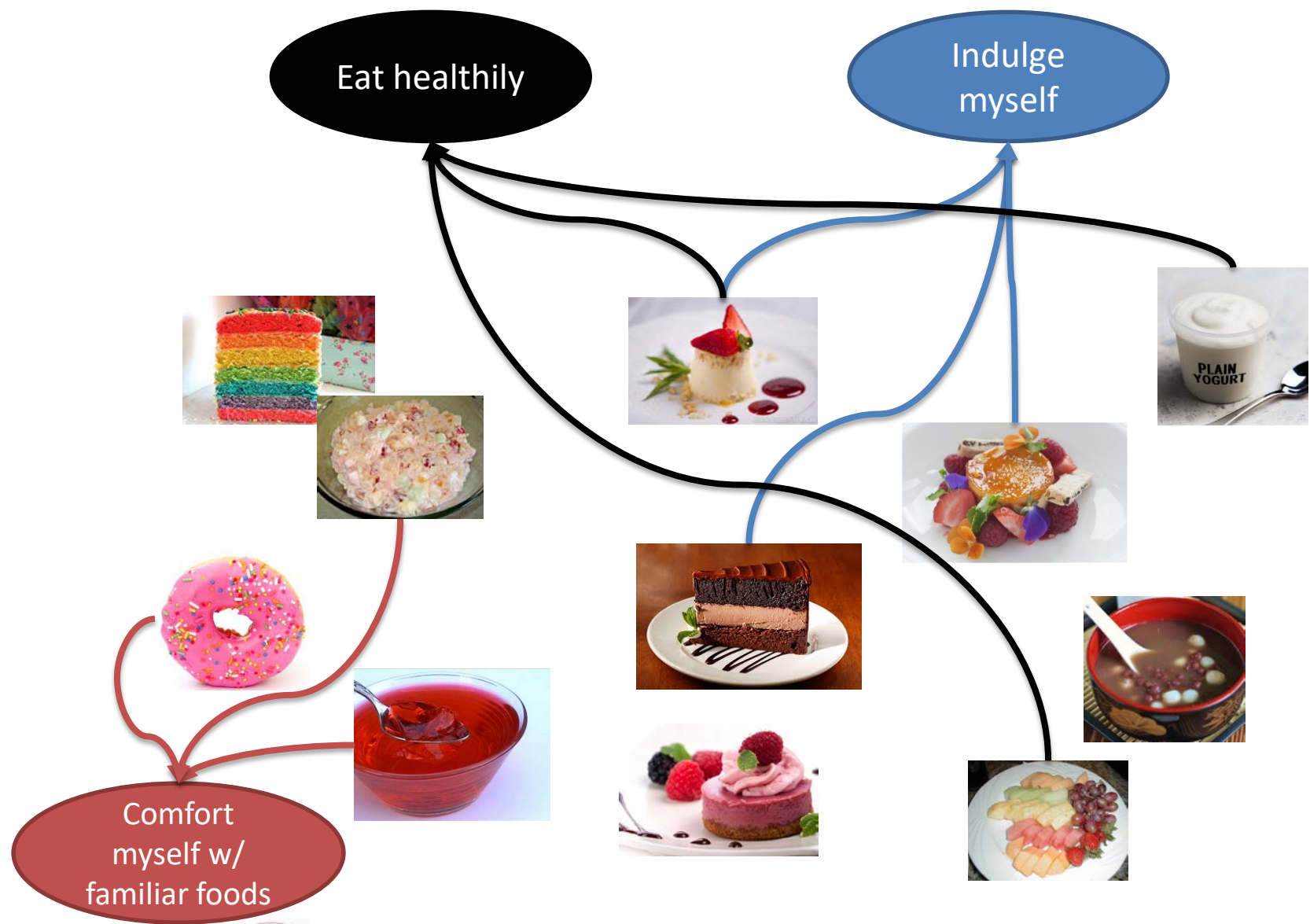
➤ EYE treatment simulates being watched during food purchase, to induce **social pressure**.

# 5. Goals & Motivations

- We are familiar with the challenge of **balancing multiple goals**: everyday we strive to **enjoy tasty food, improve our health**, develop our careers, etc.
- Our achievement of different goals varies, depending on external circumstances and cognitive strategies that we employ, (e.g. an urgent deadline at work force us to prioritize career-related goals).

# What would you like to eat, Madam?



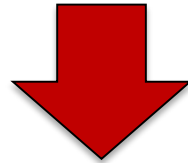


# Food choices and health

## Why is it important to investigate food consumers' choices?

They play a crucial role in shaping:

1. farming system
- 2. health**
3. environment
4. local and global economies.



Does knowing food determinants help in terms of **health policy**?

**Consumers' choices play a crucial role in health issues  
(...being overweight!)**



# Front of Pack Labels (FoPLs)

Nutritional information via food labels: effective tool to fight increasing unhealthy diet.

Dietary information: sugar, fat, saturated fat & salt contents (Guideline Daily Amounts - GDA).

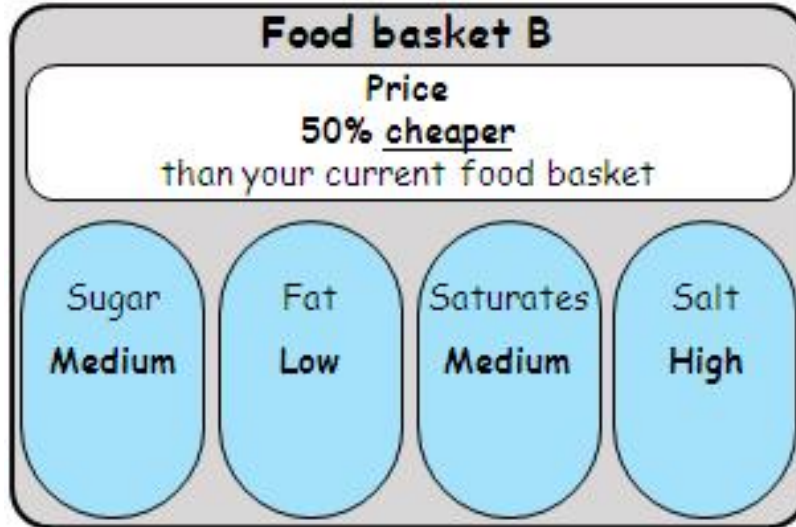
The UK Food and Health authorities promote nutritional information in pre-packed food **FoPLs**.



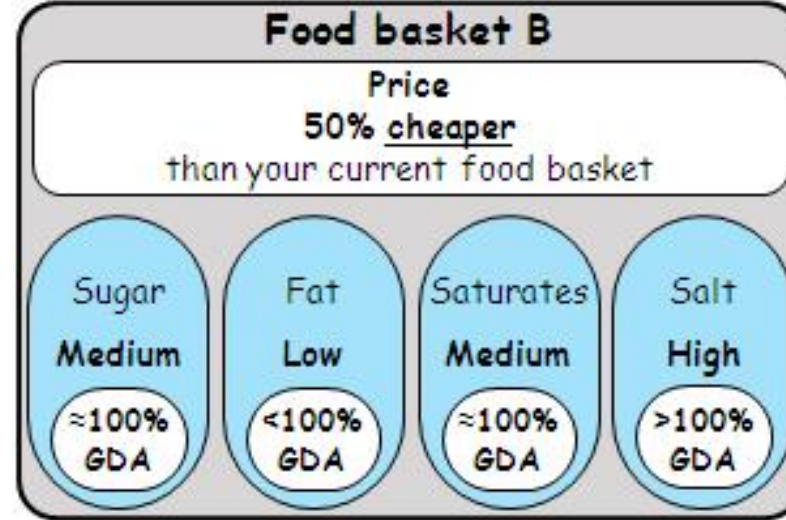
**How effective are FoPL formats to consumers?**

# FoPL Formats

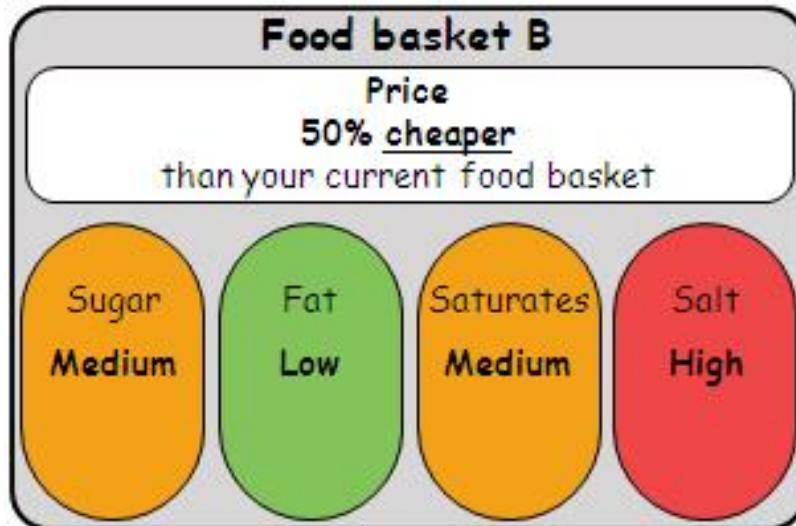
## Text only (TXT)



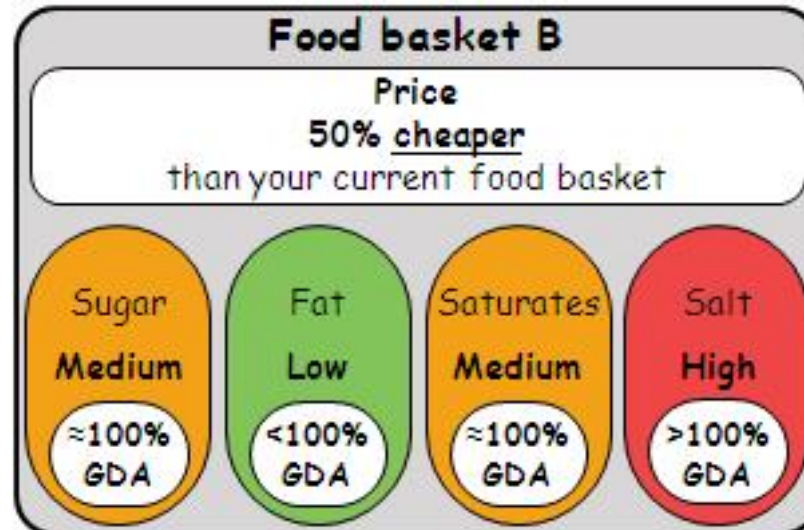
## % Guideline Daily Amount (GDA)



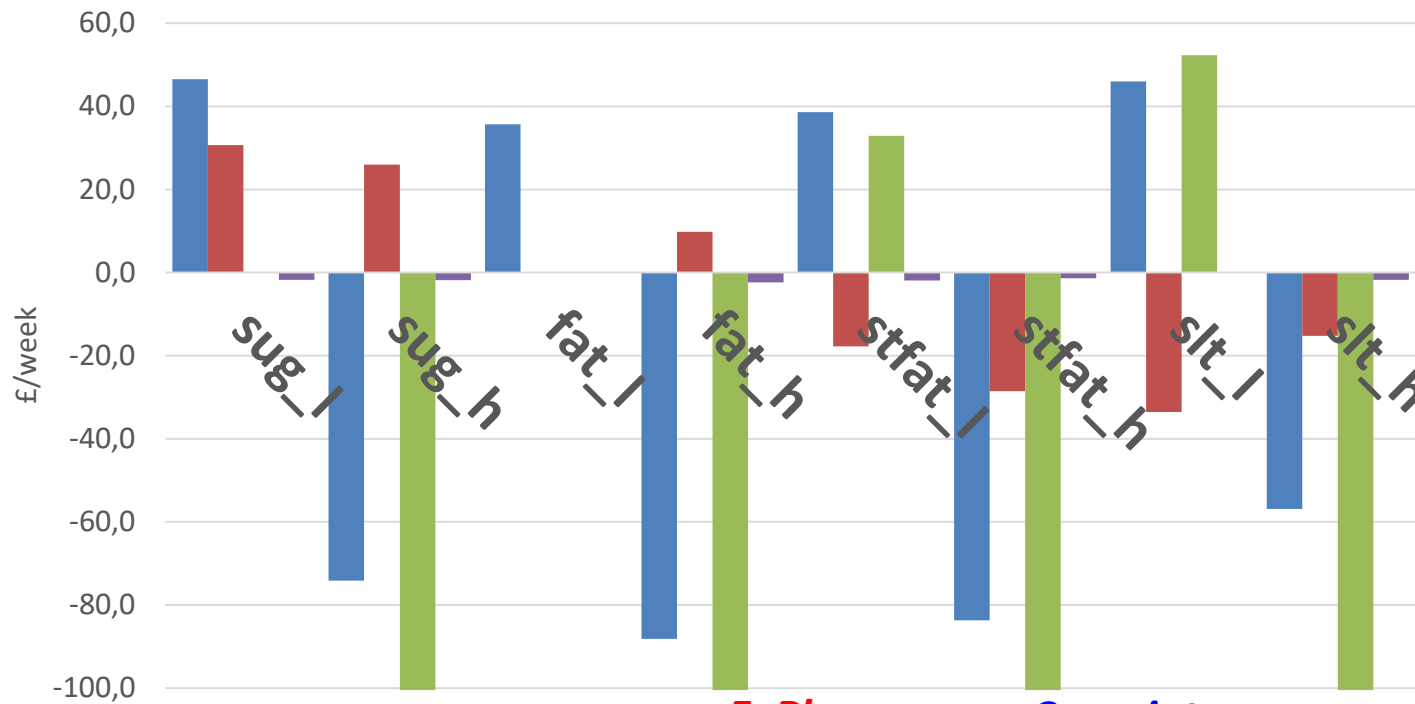
## Multiple Traffic Light (MTL)



## Hybrid (HYB)



# Marginal WTPs Estimates (£/week)



**FoPl:**

**Covariates:**

■ CI1 Healthy all rounders (38%)

■ CI2 High fat lovers (32%)

■ CI3 Selectively focussed (20%)

■ CI4 Moderately interested (11%)

**GDA- MTL-**

**Old age+ Freq. reading- Ideal body weight+**

# Conclusions

Choice Models are tools to investigate:

- i) The **probability of choosing a food** within a set of **food options**
- ii) **Determinants of food choice**
- iii) **Tradeoffs** between **food** determinants (e.g **health vs taste**)
- iv) The marginal **WTP** for an increase/decrease of a given **food attribute**

... all crucial information for the market...and not only



Thank you!

