Consumer’s views on functional and GM foods

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Diet-related diseases have substantial costs both for the individual in the form of reduced life expectancy, life quality, and lost income in society in the form of medical costs, and lost productivity.

Not only the risk of disease makes food choice and availability an arena for policy; there are also health gains to be won from a nutritionally optimal diet.

Purpose

To define and explore consumer perceptions, knowledge and information requirements in regard to diet, agro-food and the metabolic syndrome. **This presentation will be centred in the agro-food scope.**
Work Conducted:

A series of focus group discussions and individual interviews were conducted in Portugal and Northern Ireland between July ’04 and February’05.

Consumers were recruited in Northern Ireland and Portugal by means of advertisement in supermarkets and slimming clinics, and interviewed individually or in focus groups.
Methodology:

Preliminary data were collected with a series of pilot focus group in both countries, and a **topic list** to conduct the discussions was developed.

Based on that topic list, each researcher was responsible to carry out the discussion, encouraging consumers (about 8 in each group) to argue about themes related with food, agro-food technologies (functional/organic/GM), lifestyle habits, chronic diseases, metabolic syndrome, and functional genomics.
Participants and methods:

A total of 14 focus groups and 20 interviews were carried out involving 50 consumers in each country, with ages between 18 and +58.

Participants were encouraged to spontaneously raise issues judged to be relevant to them in regard to agro-food technologies.

The data collected were recorded, transcribed and analyzed, using MaxQDA® and Nu*dist® qualitative packages.
Main results (similar in both countries):

- People are not aware of:
  METABOLIC SYNDROME

- People do not recognize the concept:
  FUNCTIONAL FOOD

- Generally people are not well informed about:
  GENETICALLY MODIFIED FOOD
Information sources/ Beliefs...

- Consumers felt lost and with doubts when they look for information about food.

“...credible information sources are difficult to find...” (♀ 24-33)

“...I trust more in relatives and friends opinions about something new, than in information I see in television...”

- Some do not look for information because they think that there is no trustable source.

“...I really do not go anywhere to look for information about food...” (♀ 24-33)
There are a few consumers who recognize the importance of reading the label (♀, age 18-41yrs), and they choose after they read it (calories), and for whom taste is the least important thing (♀ 18-24yrs).

“I always read the label, I check the fat and sugar content, and choose them... taste is the last thing I care about...” (♀ 18-24yrs)

“I check if it is a light food and the taste comes in last...” (♀ 18-24yrs)

“I like to read the label to check the origin and the certificate...” (♀ 34-41yrs)
There are consumers who buy foods because they are used to, because they know the brand, they know the taste and is easier.

“I go to the supermarket and I already know what I am looking for... I know the brand!”

(♂ 42-49)

“I buy because I know I like them!” (♀ 42-49)

“I am too busy too look for different products... I know them, I bring them... it is faster!”

(♀ 34-41)
Information sources/ Beliefs...

- Main information source – health professional (doctor/nutritionist)
  
  “… if we could ask a trustable doctor… it is the best way…” (♀ 42-49)

  “nowadays we have nutritionists that could inform us about what is good or not! …” (♂ 34-41yrs)

- Some people think that marketing don’t tell the truth most of the times.

  But some consumers buy foodstuffs because of advertisements.

  “sometimes marketing lies…” (♀ 34-41yrs)

  “marketing power is very strong… they only want to sell their products.” (♀ 42-57yrs)

  “I saw it, or my children saw it on the TV… I would like to try it…” (♀ 34-41yrs)
Some (youngest) **believe strongly** in the internet.

“If there is something I don’t know, I go to look in the internet… it is the safer place!” (♀ 18-25yrs)

“In the internet we could found information about everything we want to” (♂ 18-25yrs)

“Internet… it is the most trustable information place…” (♀ 18-25yrs)
Information sources/ Beliefs...

- Healthier food alternatives were viewed as more expensive, and increasing the price of foods perceived as unhealthy (fat tax) was viewed as one method of assisting problems of obesity.

‘The government (can help)… too much salt and sugar in the foods, in these places (retailers group).

‘..like to see prices put way up for fatty foods, that’ll stop people buying it - chocolate, sweets, fast food…not dairy or meats though’ (♀ 18-24yrs)
None of the respondents had heard the term ‘functional food’.

“…functional food…I never heard about it!” (♀ 18-25yrs)

“Functional?... I don’t know what it means…” (♀ 26-33yrs)

Researchers tried to “ask” in a different way: “food with some specific characteristics that could prevent or help treatment of some health condition” answers like: fibre, fruit, vegetables and yogurt drinks, fat spread/ light butter and milk were mentioned.

“I think there are new yogurts to lower cholesterol levels…” (♂ 26-33yrs)

“dairy low fat products…” (♂ 34-41yrs)

“…salmon… and enriched fibre products…” (♀ 26-33yrs)
Functional foods...

- Most mentioned lipid altered foods were: butter that lower cholesterol levels and the bio light yogurts.

- Brands as becel/flora proactive, nestlé and benecol were the most popular.

- They do not talk too much about fatty acids. And one mentioned omega 3 and saturated fat as good and bad respectively, but even if they recognize the name, a big confusion was noticed:

  “I heard about low fat spreads... they have more saturated and less polynsaturated fats, haven’t they?” (♀ 34-41)
Functional foods...

- Functional foods were perceived as higher in price than standard products (the high cost of fat spreads in particular seemed prohibitive to long term purchase) where about one third commented on cost:

  "cost! (♀, 42-57 yrs)"

  "thought about it but the price put me off’ (♀, 58+ yrs)

  ".. Sometimes those things they are marketing are much more expensive... I don’t buy them because what I do is I read the back of the fat content and very often you find that the ordinary brands on the shelves are half the price has maybe got less fat than that, sometimes they are a gimmick.” (♀, slim focus)

- Some consumers think that functional foods could be bought in the supermarket or in the herbal shops.
Functional foods…

- Some respondents reported **health reasons** for purchasing functional foods, particularly in relation to trying/ repeatedly purchasing fat spreads including:
  
  ‘more healthy for you’ (♂ 18-25)
  
  ‘my husband has high cholesterol so I bought it’ (♀ 42-49)
  
  ‘healthier for my heart.. I don’t like it enough to keep on buying.. the stuff with olive oil in - it is probably just as good’ (♀ 42-49)
  
  ‘vitamin and calcium. for my osteoporosis’ (♀)
Functional foods...

- Consumers are concerned about claims! Some think they are not real, some think are a good information source.
  
  “I do not believe too much in that kind of food” (♀ 42-49yrs)
  “Sometimes I like to read those claims… but are they real? (♀ 42-49yrs)
  “I think it is a way to convey the information about food…” (♂ 34-41yrs)

- Those consumers who do not believe in FF think, and there are medical doctors who said: the “new foods” are a waste of money because they are unnecessary food stuffs.
  
  “I used to give my son enriched calcium milk, which I thought was something real good, and pediatrics said, dear lady… the only thing you are doing is loose a lot of money!” (♀ 42-49yrs)
Functional foods...

- **Two types of people:** those who do **not believe in functional food**, even if it is light or fortified, and those that think that what is written in the label is true.

- **In fact, consumers buy functional foods!**

  “During pregnancy, I tried to drink a lot of calcium enriched milk.” (♀ 34-41yrs)

  “I believe in science advances and I think some enriched food could be beneficial to our health” (♂ 42-49yrs)

  “I use to buy those bio yogurts to drink in my morning snack” (♀ 42-49yrs)

  “I usually drink one of those bio yogurts at breakfast, in fact it helps my bowels to work OK” (♂ 58+ yrs)
Organic food...

- Organic was referred as **expensive, but desirable**.
- ‘Organic’ and ‘natural’ are perceived as being **better for you**.

“…everything should be organic… but not everyone could buy it… if the prices were lower more people could use it…” (♀ 34-41)

“some products are accessible… but vegetables have prohibitive prices…” (♀ 26-33)

“…I am lucky… I have the advantage of buying unlabeled products, they are from a known farm…” (♀ 26-33)
Organic food...

- Those who purchase organic preferred their taste (organic items were sometimes purchased by accident or only due to price reduction in promotion or sale)

  “...I look for organic food for pleasure, to smell, to taste it!...” (♀ 34-41yrs)
  “... when I eat organic food I feel the taste... in standard products we could not taste them... they have no flavour!...” (♀ 34-41yrs)

- Some of them believe in organic food, so they buy them even spending more money.
  “Products are not so pretty but they are tastier and have less pesticides” (♀ 34-41yrs)
  “I know they are expensive... but is the best for my family” (mother 24-41yrs)
They also said that for **children it is important to avoid food with pesticides**, which means that they **should include biological foods**. (mothers).

If they could choose between **one normal and one organic**, they would choose the organic.

“*if I could choose … I always have a preference for organic, even if it is expensive!*” (♀ 34-41yrs)

**Some** of them never bought any kind of organic products.

“*…I never bought them…they are too expensive!*” (♀ 34-41yrs)
To some there are too many additives in some foods and also people are not well informed about the problem. And some are dubious about sustainability, and damage to environment in the transport of organic foods from more distant suppliers.

“the transport of products is only possible with the use of conservatives... if they do not exist... products were not consumable...” (♂ 34-41)
A **negative opinion** was expressed about GM foods by some. 50% reported knowing little about GM, a minority (<5%) never heard of GM, the others reported knowing something. However, this would not always prevent the choice.

‘. *They should never be touched.* (♂, 18-25yrs)
‘. *GM are not the real thing… not natural*’ (♀, 42-49yrs)
People do not know too much about GM food. They are afraid because they think it is something bad to health.

“I really am afraid thinking in that kind of food” (♀, 34-41yrs)

“I always stay in doubt!” (♀, 42-49yrs)

“…With time there are a lot of foods which have secondary health effects…” (♀, 34-41yrs)
Genetically Modified Food...

- Some of those with no knowledge of GM foods (25%) would purchase GM foods. And some think that they would probably eat a lot of these products, but they really do not know.

  - ‘we’re already buying it.. vegetables’ (♀, 58+yrs)
  - ‘-no difference, I’d pick it up anyway’ (♂, 50-57yrs)
  - ‘is it good or bad? I probably would, yes’ (♂, 34-41yrs)
  - “usual dairy food products… almost are GM!” (♀, 34-41yrs)
  - “we eat GM food not knowing we are doing it” (♀, 42-57yrs)
Genetically Modified Food…

- A few, informed, completely agree with the GM.

“these foods are modified in the laboratory, it origin was in lab and thousand of tests were applied … in the next 10 years it could be worst to health, but when we try to change something is to improve qualities” (♀, 34-41yrs)

“GM food are not bad… the mistake is in people and in the kind of information they get…” (♂ 34-41yrs)
Genetically Modified Food…

- A few, **discuss about the advantages of GM food.**

  “Food production will be improved and increased, and a great variety will be possible”
  (♀, 34-41yrs)

  “I think GM food is the FUTURE to the food chain!!!!” (♂ 34-41yrs)

  “GM food are and will be important to prevent/treat specific diseases…” (♂ 34-41yrs)

  “Food products will be more resistant...so food will be certainly better! (♀ 28-33)”
They argue about the **lack of information** about the matter, and also contradictory.

“...there are few information about it...” “...The americans say it is good, The europeans it is bad...we feel lost!... (♂ 34-41yrs)

**Tomatoes, rice, corn** and **soya** were recognized as key GM food stuffs.

There is a lot of confusion about this theme because some consider "**enriched milk as something that was genetically modified**".

“...when I buy enriched milk I know it is genetically modified, isn’t it?” !... (♀ 34-41yrs)
Looking for GM food…

- Most consumers think they could buy GM food in specific places inside the supermarket.

- Approximately 50% were unsure whether they would buy a food containing GM ingredients.

‘I would worry.. in the back of my mind.. seen on the news’ (♀, 26-33yrs)

“probably… I don’t know… if I like the taste… if it was controlled…” (♀ 26-33yrs)
Looking for GM food...

- Approximately **25% would not purchase** GM foods, with the majority of those stating reasons of negative media coverage, and long term concerns and worries about GM foods.

  “No. ...labeling would have to be clear’ (♀, 42-49yrs)

  “No, I’ve heard it’s not very good for you.. from the TV’ (♀, 50-57yrs)

  “Not the real thing, not natural’ (♀, 42-49yrs)

  “in years to come it (GM) may not be good compared to naturally grown (foods)” (♀, 58+yrs)

  “I’m afraid to buy GM food...” (♀, 34-41yrs)
Functional/GM food and Health…

- **GM food could be harmful to environment** because they will change the natural fauna and flora.

  “GM are something unnatural!!!!”(♀ 42-57yrs)

  “There are no natural reproduction... all of the foods are manipulated!!!!!” (♀ 34-41yrs)

  “When human being put his hand on something created by the mother nature ... it could not have good results!!!” (♂ 42-57yrs)
Functional/GM food and Health…

- Things **grow too fast** and so problems could be present, **it is different to** eat something like a chicken or a farm chicken, **the taste is not the same** and they **have no additives**.

“…thinking in GM seed is awful!… Every season the farmers need to buy the seeds to the same person to continue the work… if they don’t buy seeds, they could not have new food products” (♀ 34-41 yrs)

“…Birds and insects will probably disappear… they couldn’t feed themselves with GM seeds!”

(♀ 26-33)

“someone will be a very rich person…” (♀ 26-33)
If consumers were in risk to develop some disease, as Metabolic Syndrome (MS), and GM food was a prevention… they answer it could be a solution:

“If I was at risk… I probably buy it!” (♂ 42-49)

“If was a children… certainly I would buy those new products.” (♀ 34-41)

“When we are sick… we get what we could… so GM could be something to save me! ” (♀ 34-41)

“If it has a great efficacy… I probably buy those new foods…”(♀ 42-49)
Functional/GM food and Health…

- If consumers have the **opportunity to choose** between **medication** and **functional/GM food to prevent MS**, they answer that the **medication** is **faster**, but the **food is more natural**, so they would **choose GM foods**.

- It is more important to **invest in foodstuffs than in medication**.

  “*If I am in doubt about GM food, I could be in doubt with medicines…*” (♀ 34-41)

  “*It is better to eat a strange food than a common medicine…*” (♀ 26-33)

  “*If I trust in my doctor, and it was his advice… I would buy GM food*” (♂ 26-33)

  “*If it was good for me… I probably would recommended it to my relatives…*” (♀ 26-33)
80% would choose to take a functional food over a pill as a means to address an identified health risk, 15% of those responses were qualified with ‘definitely’ and ‘not pills’. 15% would choose pills, while 5% would take the advice of a GP.

Acceptability of a GM food over pills to address a health risk reduced from 85% taking a functional food to 40% accepting a GM functional food.
Some showed fear in the intake of something that was genetically modified.

Manipulated food, genetically or not, are the responsible to the diseases development, so they could not prevent them.

“I think food are the responsible of chronic diseases... how is it possible to prevent them?! (♂ 42-47yrs)
Conclusions:

- Generally consumers are interested in food related issues, and they would like to have more information about it.

- The concept *Functional foods* is not recognized, but almost of the consumers are used to buy them.

- People choose Functional Food because are better for health and have specific characteristics that improve health.
Conclusions:

- GM foods have a general **negative connotation**, due to a lack of credible information sources.

- Consumers with no knowledge about GM think in a negative way, informed people **think positive**!

- Reason not to buy GM were due to **aggressions of the environment** and to an **unnatural way of growing**.
Conclusions:

- Generally people believe that some food could prevent metabolic complications, they would adopt the idea if they liked the product.

- There are people who think that it was necessary to demonstrate the efficacy in order to buy GM food.

- There are people who never look for GM food.

- For some, promotions could be an incentive to buy the products.
Conclusions:

- **Health professional opinion** could influence choices related with **functional** and **GM foods**.

- Even being **against GM food**, if consumers need to tackle chronic health conditions, like metabolic syndrome, **GM food could probably be a good option**.

- **People prefer to spend money in food than in pills**!
Thank you!