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Communicating the importance of early nutrition for health in later life

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Consumer Science Baby Nutrition

The Power of Programming
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Bringing Science to Life



Creating the conditions for parents to “use” metabolic programming



- If we can deliver the science, how can we make parents act on it?
 - Smoking, exercise¹, breast feeding

So, what are barriers, specific to metabolic programming?
And how to overcome them?



Agenda

- Possible barriers
- Results studies:
 - A. Usage and attitude study
 - B. Consumers study
 - C. Health care professionals study
- Discussion & conclusion



Barriers

- Providing knowledge?
- However, educating has in most cases no or limited effect¹
- Other barriers?
- Hypotheses from health psychology and health economics:
 - Optimistic bias
 - Time discounting
 - Credibility: credence attributes



Optimistic bias and food

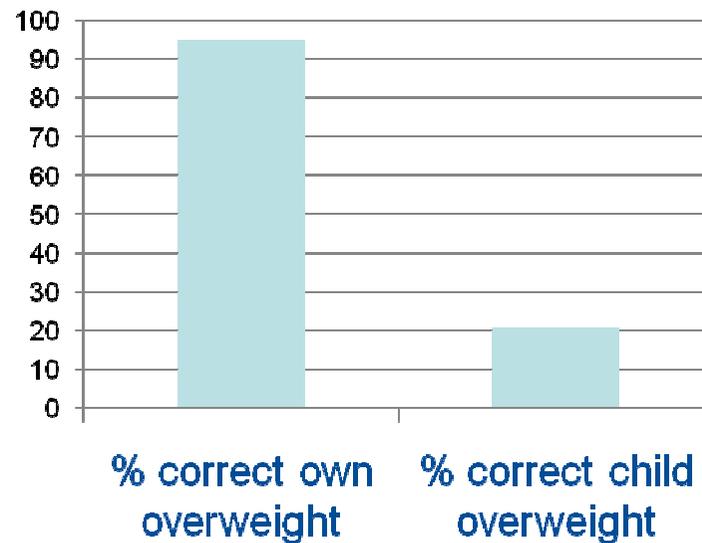
- What: belief that, in comparison with others, the individual is less likely to experience negative events and more likely to experience positive events
- Clear for food¹:
 - bias for risk of food related disease
 - bias for healthiness of own menu
- Transfer from parent to child:
 - Parents' valuation of child's health exceeds valuation of own health by roughly twofold, higher for young children²





Perceiving child obesity

- Parents of overweight and obese children underestimate their child's weight¹
 - E.g.²:



US, N = 622, children 23 to 60 months of age



Time discounting



- What: the value placed on delayed outcomes relative to more immediate outcomes¹
- Health benefits in later life may be discounted. Especially in situations which involve strong emotions^{1,2}

Credibility

- What: 'Credence attributes' are those characteristics which can not be verified by the consumer^{1,2}
- Health benefits of metabolic programming are not clear in themselves





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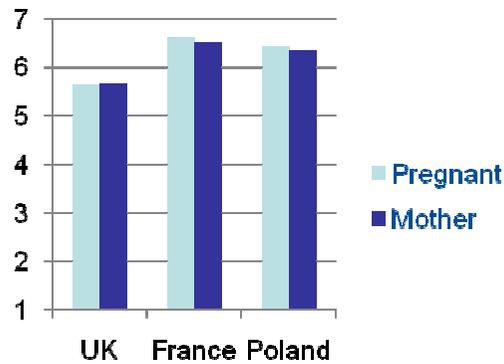
A: Usage and attitude study



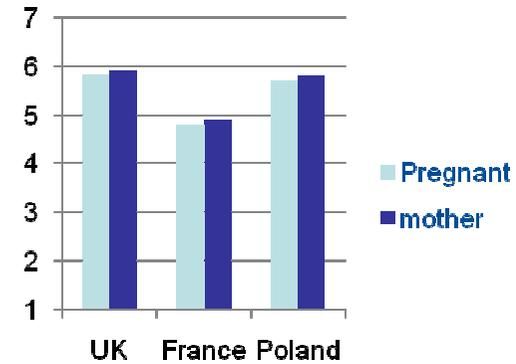
- Study on attitudes, habits and usage for baby and toddler foods
- Pregnant woman (50% first time)
- Mothers (50% first time)
- Over 22 countries, here:
 - UK: N=216, N= 1613
 - France: N=168, N=1114
 - Poland: N=150, N=1050
- In-home structured face to face interviews



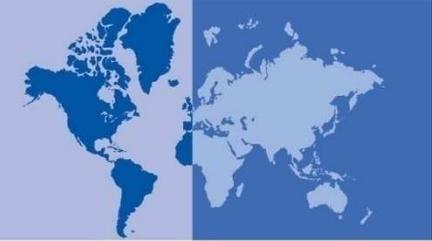
Mothers agree on importance of early food for later health



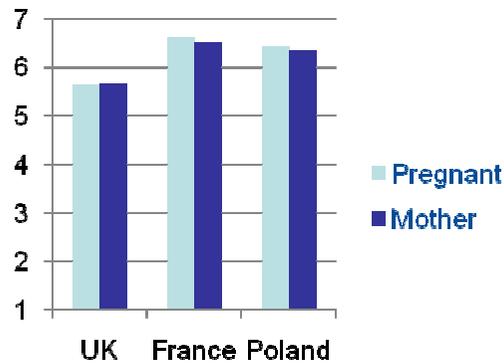
It is important to me that my child succeeds academically



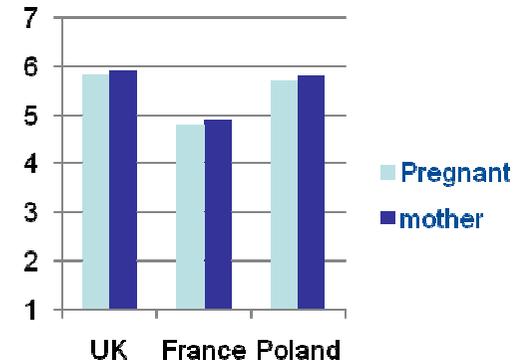
A good diet in the first 3 years can shape a child's food preferences in later life



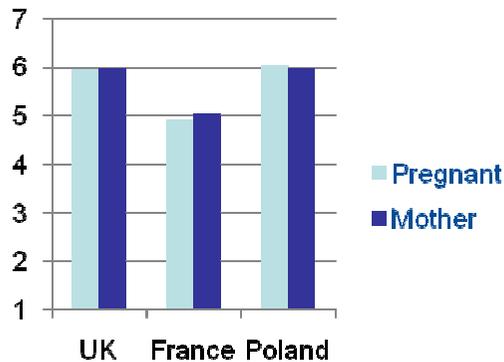
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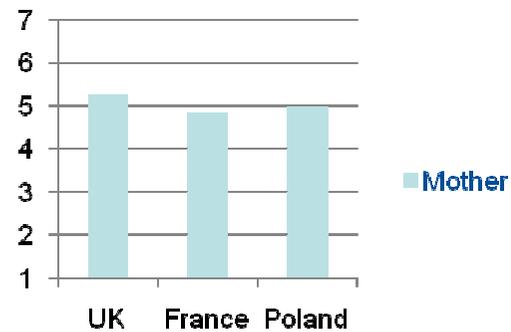
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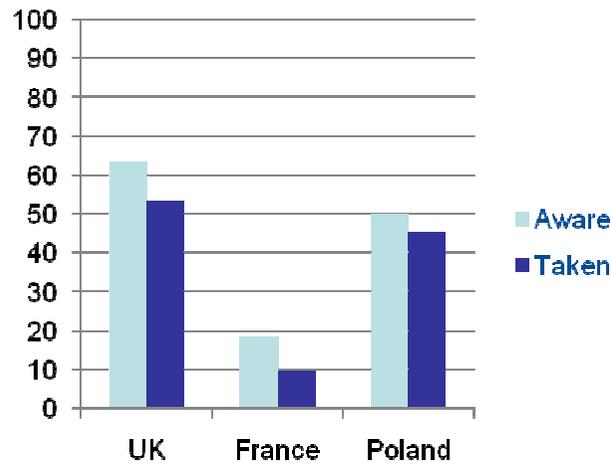
A good diet in the first 3 years can shape a child's health in later life



I am already taking steps to prevent my child from becoming overweight in later life

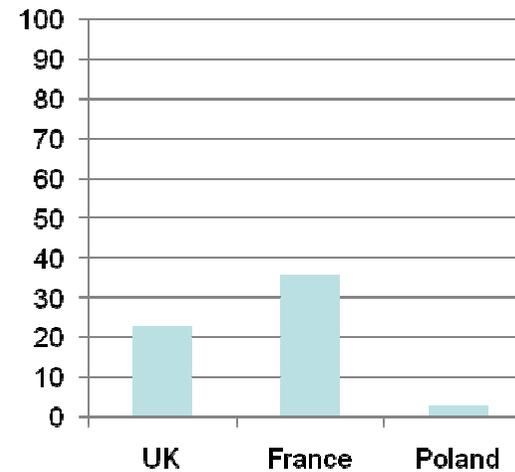


But they don't act on it



Awareness and taken folic acid

I stopped eating food related to specific health issues during pregnancy





B: Consumer study



- Study reaction of mothers to possible effects of metabolic programming
- Possible effects were presented as statements
- Structured mini-groups with mothers
- UK, France and Poland,
- Children 0 to 18 months
- 4 Groups of 7 mothers per country





Consumer: optimistic bias

- “No” to serious health-consequences for baby
 - Statement: ‘helps to prevent high blood pressure later in life’
 - *‘We don’t want to think about these diseases, ... that the child would suffer from them’*
- Enough worries as is
 - *‘How he develops in the future is something I will have to deal with as things go on, I just do the best that I can for him now ... I have too much to worry about now’*
- At odds with positive emotions
 - *‘This could scare people ... you just want to nurture this new lovely baby’*





Consumer: time discounting

- “Yes” to here and now
 - Successful statement: *‘Helps your baby’s body to use ingredients in the most efficient/effective way’*
- “No” to any statements with ‘future’ or ‘later health’
 - *‘It talks about the adult, it’s too far off. At best, we can imagine our children as teens’*





Consumer: credence

- Understand simple explanation of metabolic programming
- Interesting and credible to an extent
- However, several longer-term benefits were not believed
- And obesity and later disease seen as linked to factors outside this process, such as life-style choices
 - *'How fat is distributed is in our genes, milk is not going to make fat store in your buttocks'*
- Additional barrier



Consumer: locus of control

- Feeling that long-term well-being is out of their control
 - *'But then, when they start asking for food, crisps, chocolate and it's all undone'*
- And genetics, lifestyle, diet ...
 - *'It's in your genes, our family, we are all overweight, we were breastfed'*
- What: belief that certain outcomes result from own action or from other forces independent of self¹
- Maternal health locus of control regarding child's health has predictive value for health behavior and child health²



C: Health care professional study



- Aim was to study reaction of health care professionals to possible effects of metabolic programming
- Possible effects presented as statements
- Structured interviews with 7 health care professionals per country
- France, Poland and UK





HCPs: optimistic bias

- Accept risks without problem. Obesity and disease related statements received well
 - *'It's interesting to reduce diabetes and high blood pressure'*
 - *'Eliminating future risk of obesity is interesting'*





HCPs: time discounting



- Consider health later in life and probably do not discount
 - *'A lot of what we do in pediatrics is preventive medicine'*
- Willing to discuss later health with mothers if opportunity
 - *'Good to encourage mums to think about the impact of early nutrition in later life'*
- Recognize importance of obesity¹

Childhood-obesity way to discuss later health with mothers



HCPs: credence

- Metabolic programming not known and difficult to explain
 - *'The body has it's own program ... You are born with that program and the way you eat doesn't have much influence on it'*
- HCPs look for certainty
 - Scientific evidence
 - Which fits their frame of reference
 - *'We need references, details about the mechanism involved and facts about the impact of infant nutrition on later life'*



HCPs: locus of control

- Believe that genetics, lifestyle choices and diet much later in life are key in obesity and diseases such as diabetes

Hence, limited credibility of the importance of early nutrition and metabolic programming

- *'Reducing the risk of diabetes/high blood pressure in later life is difficult to believe. Other factors, such as genetics, the environment and diet also play a role'*
- Related to lack of understanding and credibility of metabolic programming



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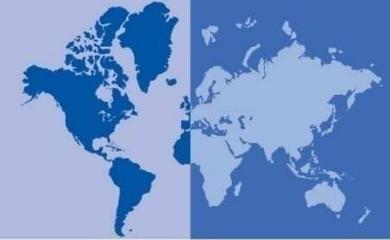
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Conclusion

- Mothers see importance of early nutrition but take limited action
- HCPs recognize the growing problem of obesity and related diseases

	Consumers	HCPs
Optimistic bias	-	+
Time discounting	-	+
Credence	+/-	+/-
Locus of control	-	+/-



How to help mothers to use metabolic programming

Theory → solutions



Optimistic bias: Communicate before infant feeding becomes emotional (pregnancy and before)



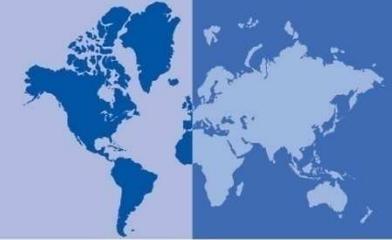
Time discounting: Search for benefits or markers which are immediate or near-term next to long-term benefits



Credence: Explain with tangible benefits and provide evidence



Locus of control: Education programs may be focused not only on providing knowledge but also on changing parents' health beliefs



Future health and nutrition: role of HCPs

- Willing to discuss early nutrition and later health with mothers: “preventive medicine”
- Childhood obesity as middle ground¹

- | | |
|------------------|---|
| Optimistic bias | ✓ |
| Time discounting | ✓ |
| Credence | ✓ |
| Locus of control | ✓ |

Medical community key to communicating this new science to consumers





Bringing **Science** to Life

