

WILL CONSUMERS ADOPT WHOLE GRAIN PRODUCTS FROM ALTERNATIVE GRAINS?

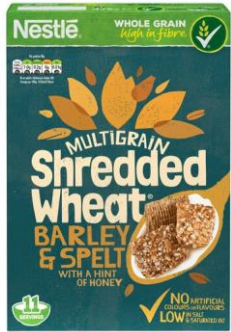
Klaus G. Grunert,
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MAPP - RESEARCH ON VALUE CREATION IN THE FOOD SECTOR
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ARE CONSUMERS INTERESTED IN ALTERNATIVE GRAINS?



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OR

DIETARY FIBRE CONFERENCE | KLAUS G GRUNERT

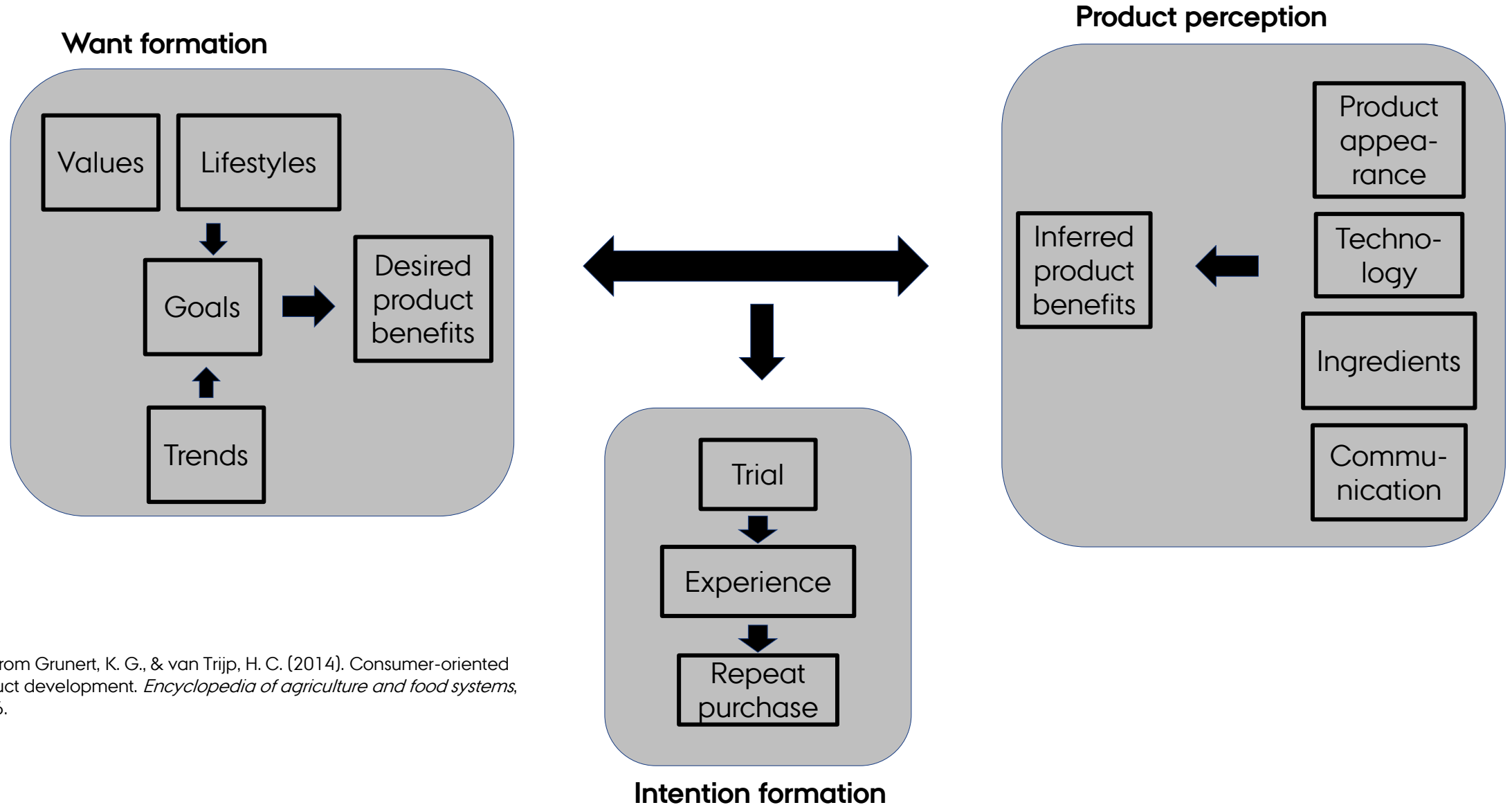




OVERVIEW

1. How consumers adopt new products
2. Want formation
3. Product perception
4. Intention formation
5. Implications for the adoption of whole grain products from alternative grains

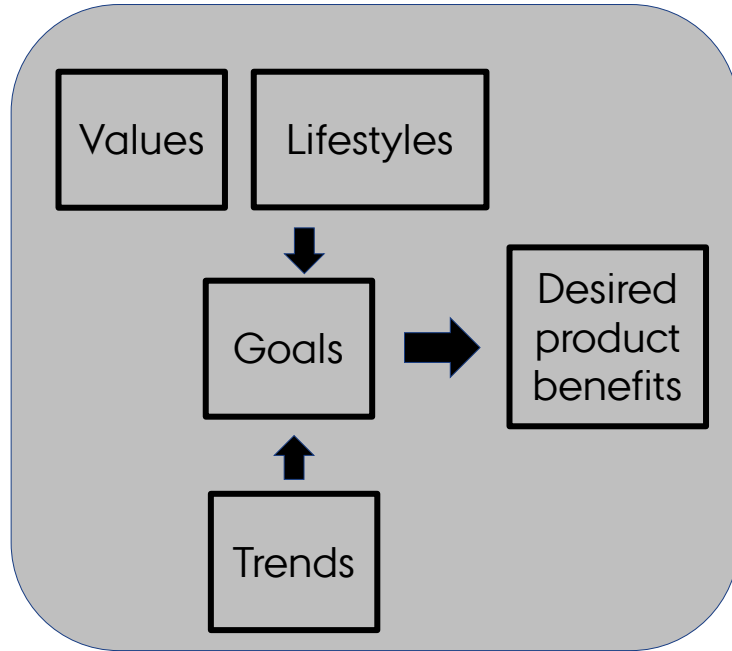
HOW CONSUMERS ADOPT NEW PRODUCTS



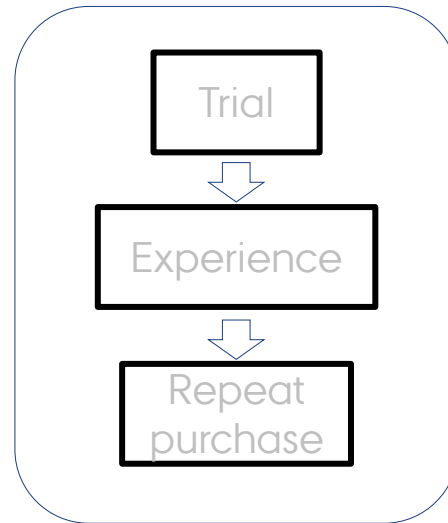
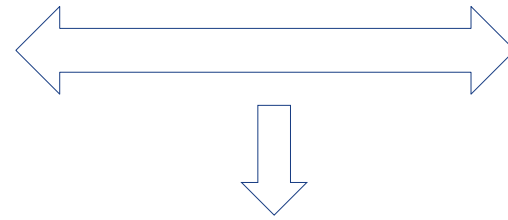
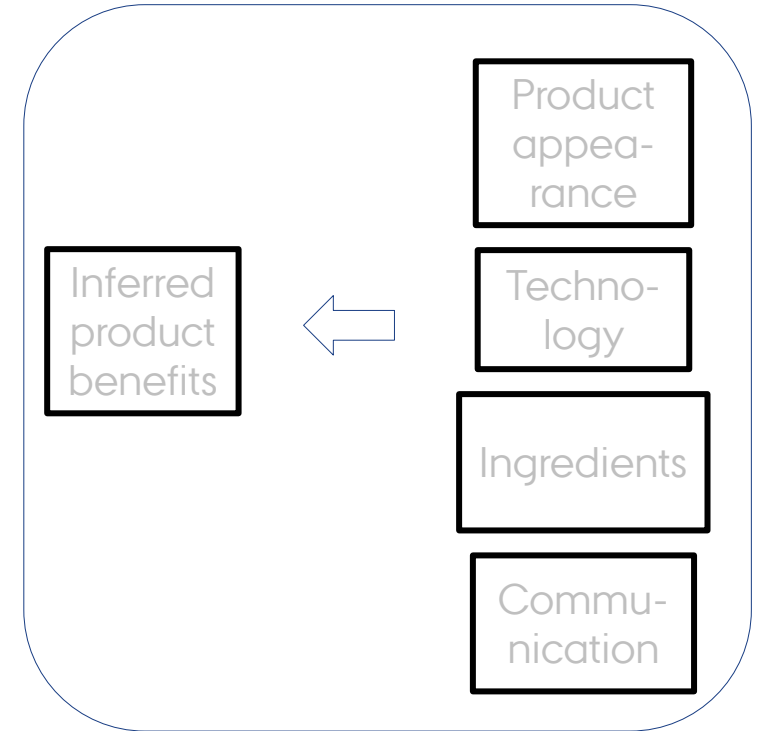
Adapted from Grunert, K. G., & van Trijp, H. C. (2014). Consumer-oriented new product development. *Encyclopedia of agriculture and food systems*, 2, 375-386.

HOW CONSUMERS ADOPT NEW PRODUCTS

Want formation

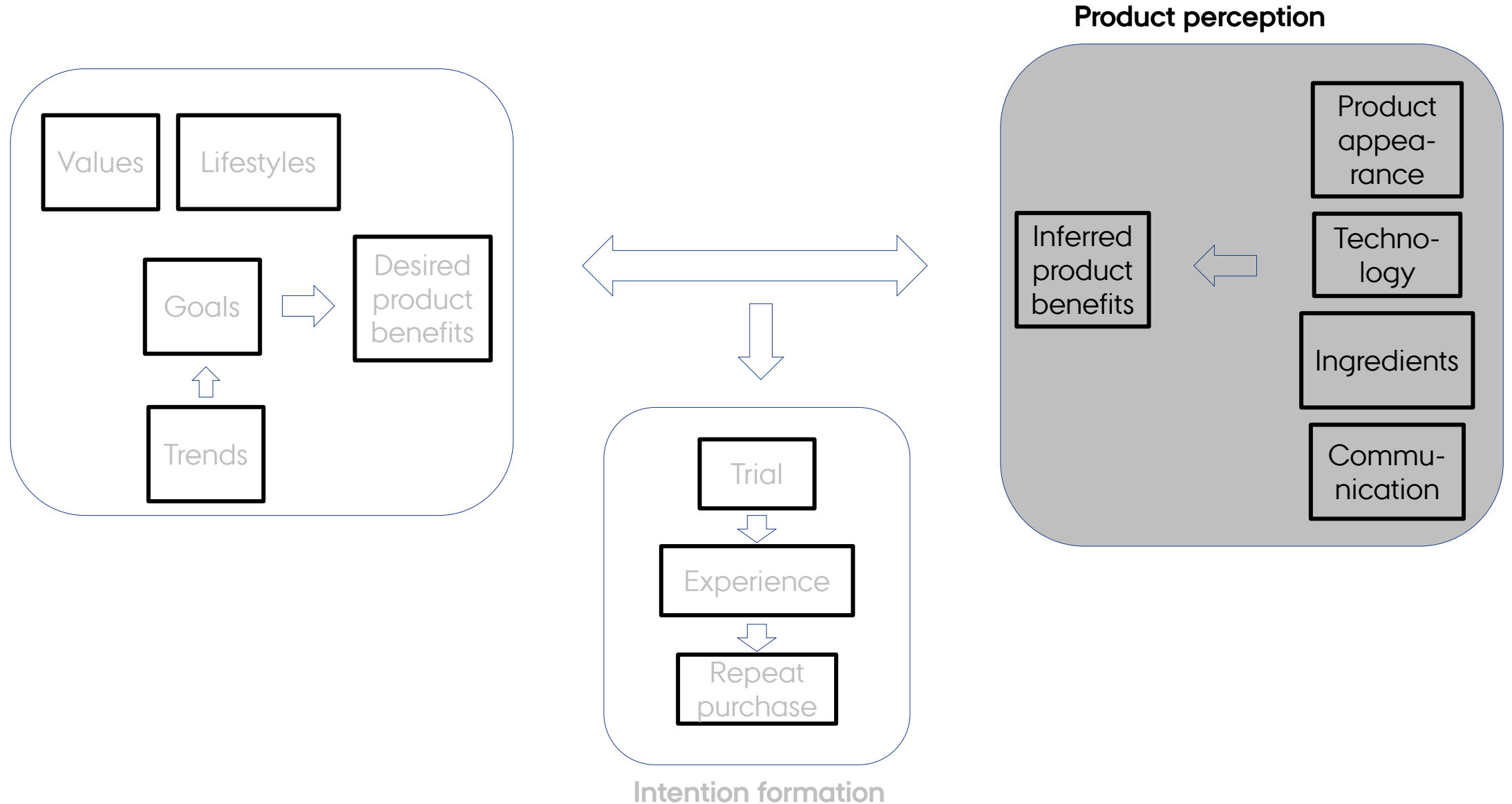


Product perception

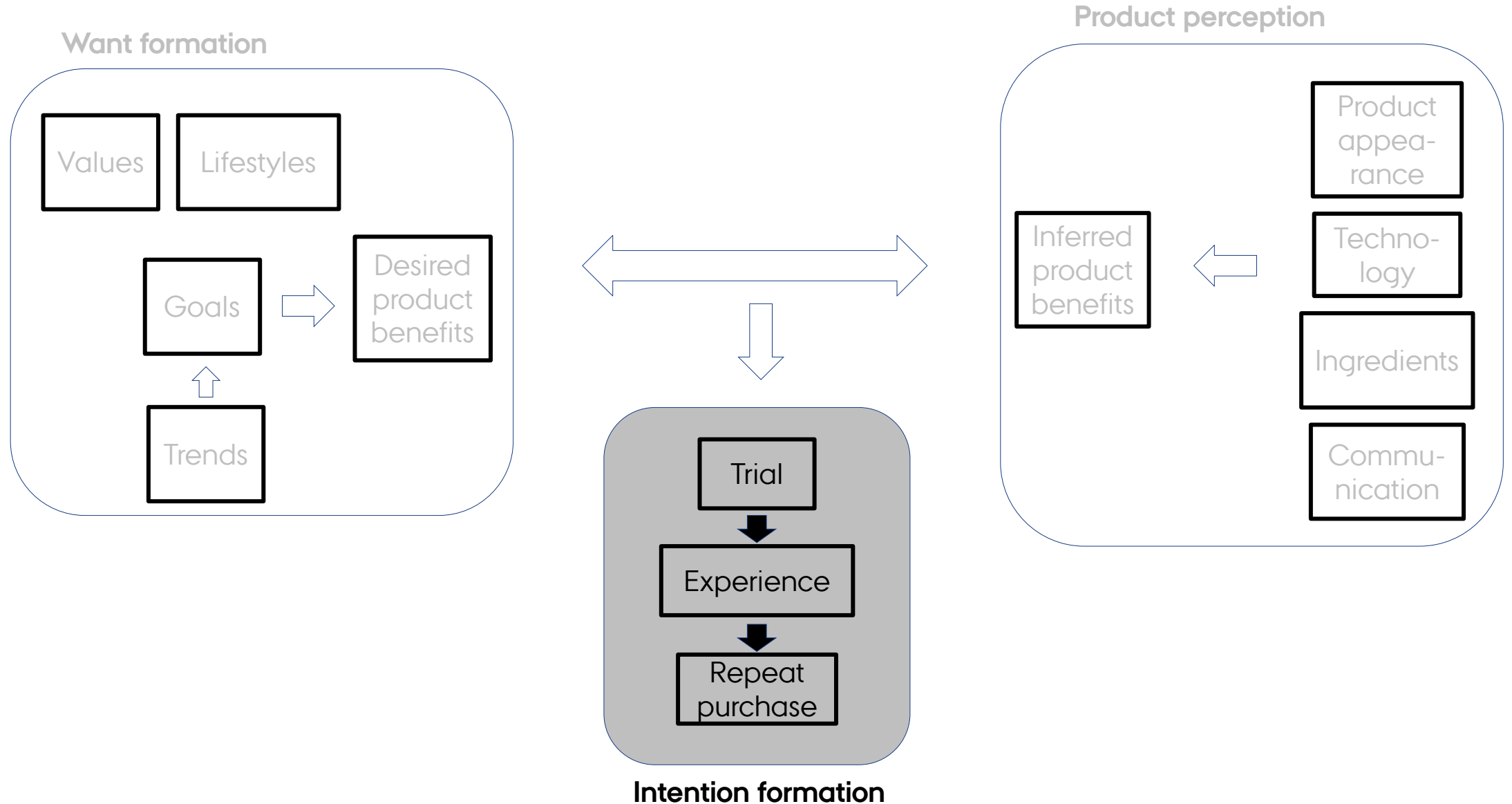


Intention formation

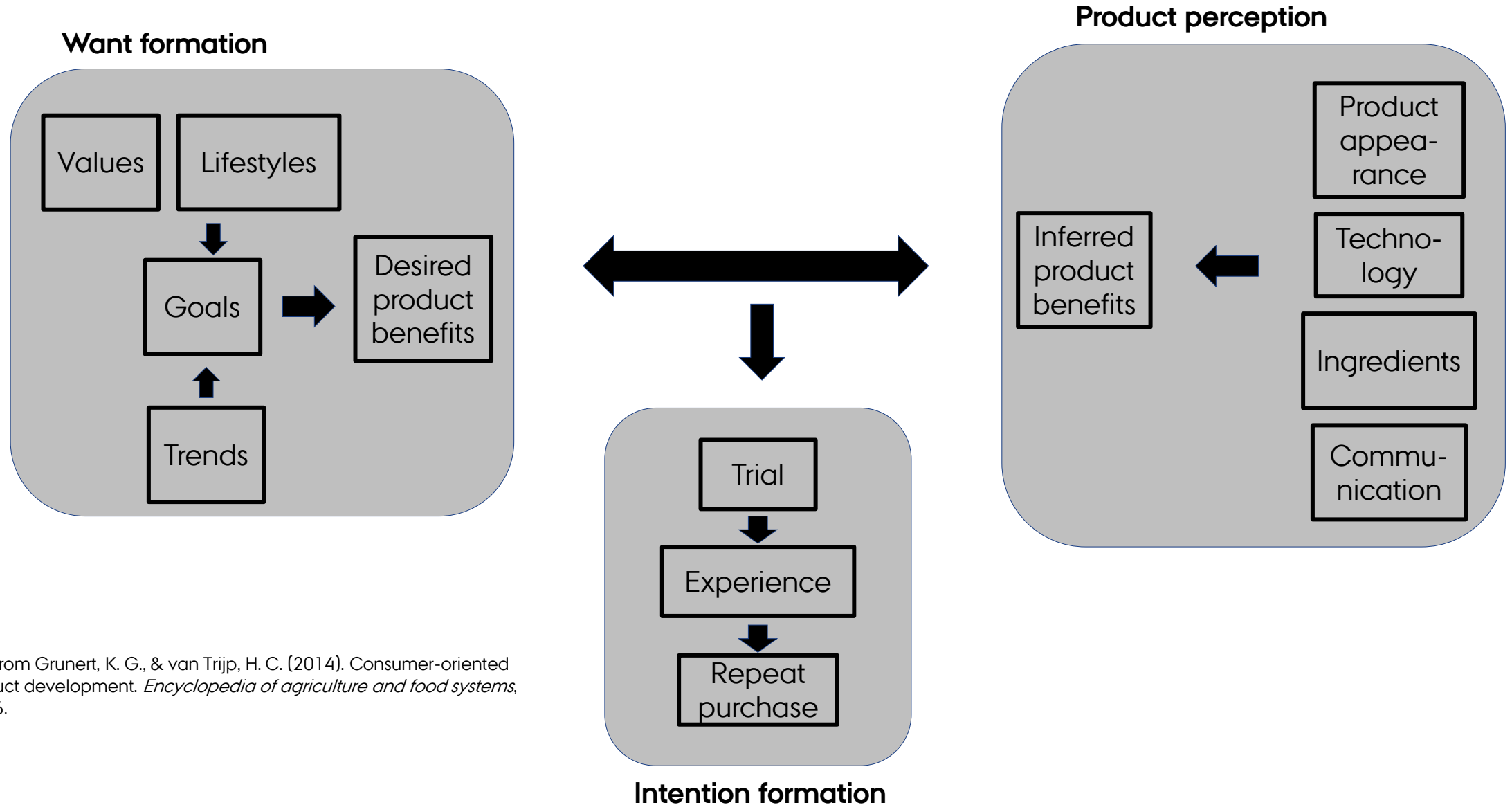
HOW CONSUMERS ADOPT NEW PRODUCTS



HOW CONSUMERS ADOPT NEW PRODUCTS

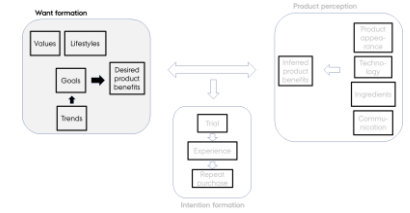


HOW CONSUMERS ADOPT NEW PRODUCTS



Adapted from Grunert, K. G., & van Trijp, H. C. (2014). Consumer-oriented new product development. *Encyclopedia of agriculture and food systems*, 2, 375-386.

WANT FORMATION

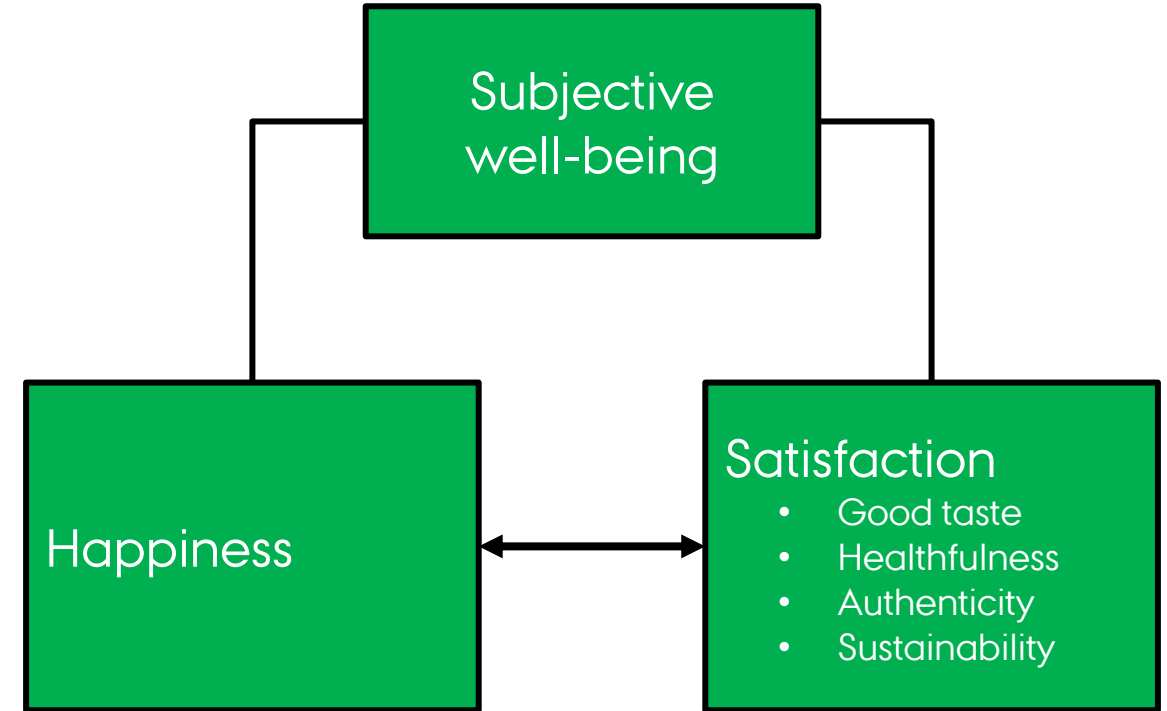


The overall goal with food choice is well-being!

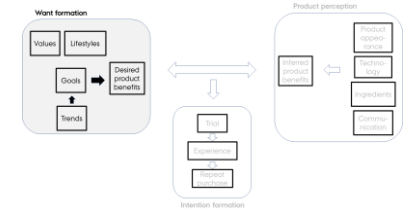
Well-being has an objective and a subjective side

Subjective well-being has a cognitive and an affective component

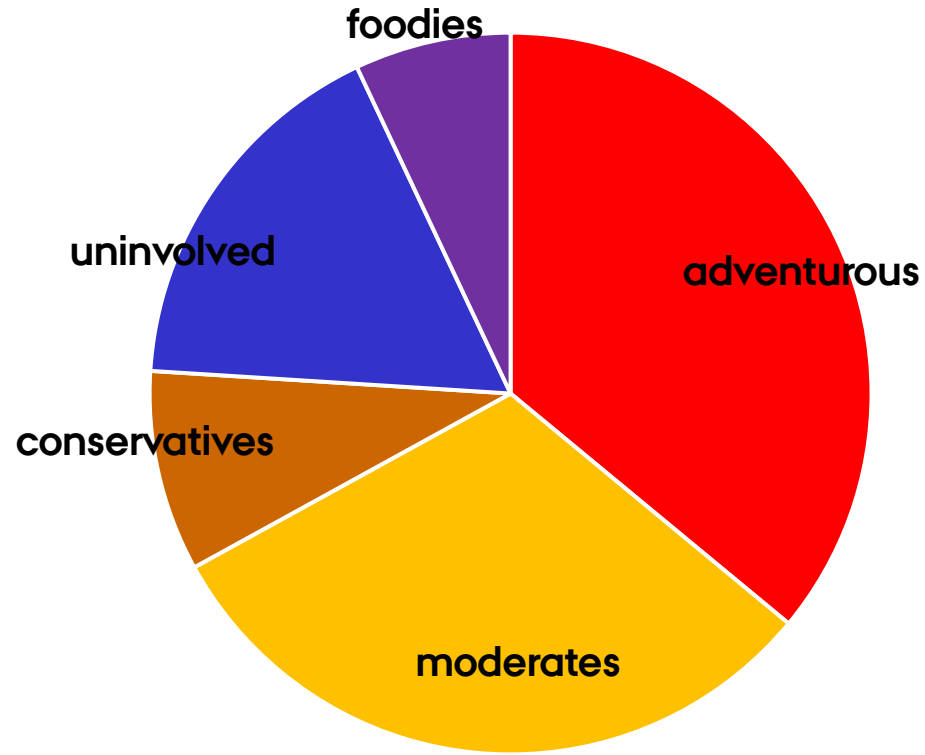
- The cognitive component: satisfaction
- The affective component: happiness



WANT FORMATION



Different goals and lifestyles



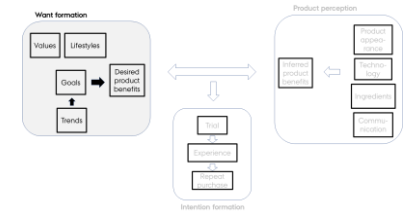
Current food trends

- Healthy eating
- Sustainable diet
- Authentic food
- Mindful choices
- Joy of cooking
- Being thrifty

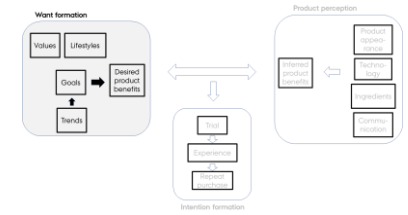
Brunso, K., Birch, D., Memery, J., Temesi, Á., Lakner, Z., Lang, M., ... & Grunert, K. G. (2021). Core dimensions of food-related lifestyle: A new instrument for measuring food involvement, innovativeness and responsibility. *Food Quality and Preference*, 91, 104192.



Trend	Desired product benefit	Adventurous	Moderates	Conservatives	Uninvolved	Foodies
Healthy eating	<ul style="list-style-type: none"> • Good for your health • Good for... • Part of a healthy diet 	Green	Yellow	Yellow	Red	Green
Sustainable diet	<ul style="list-style-type: none"> • Low environmental impact • Ethical production 	Green	Yellow	Red	Red	Green
Authentic food	<ul style="list-style-type: none"> • Produced as it used to be • Low tech • The real thing 	Yellow	Yellow	Green	Red	Green
Mindful choices	<ul style="list-style-type: none"> • The right choice 	Green	Yellow	Yellow	Red	Green
Joy of cooking	<ul style="list-style-type: none"> • Allows me to make great food 	Green	Yellow	Yellow	Red	Green
Being thrifty	<ul style="list-style-type: none"> • Saves me money 	Yellow	Yellow	Yellow	Green	Yellow



WANT FORMATION



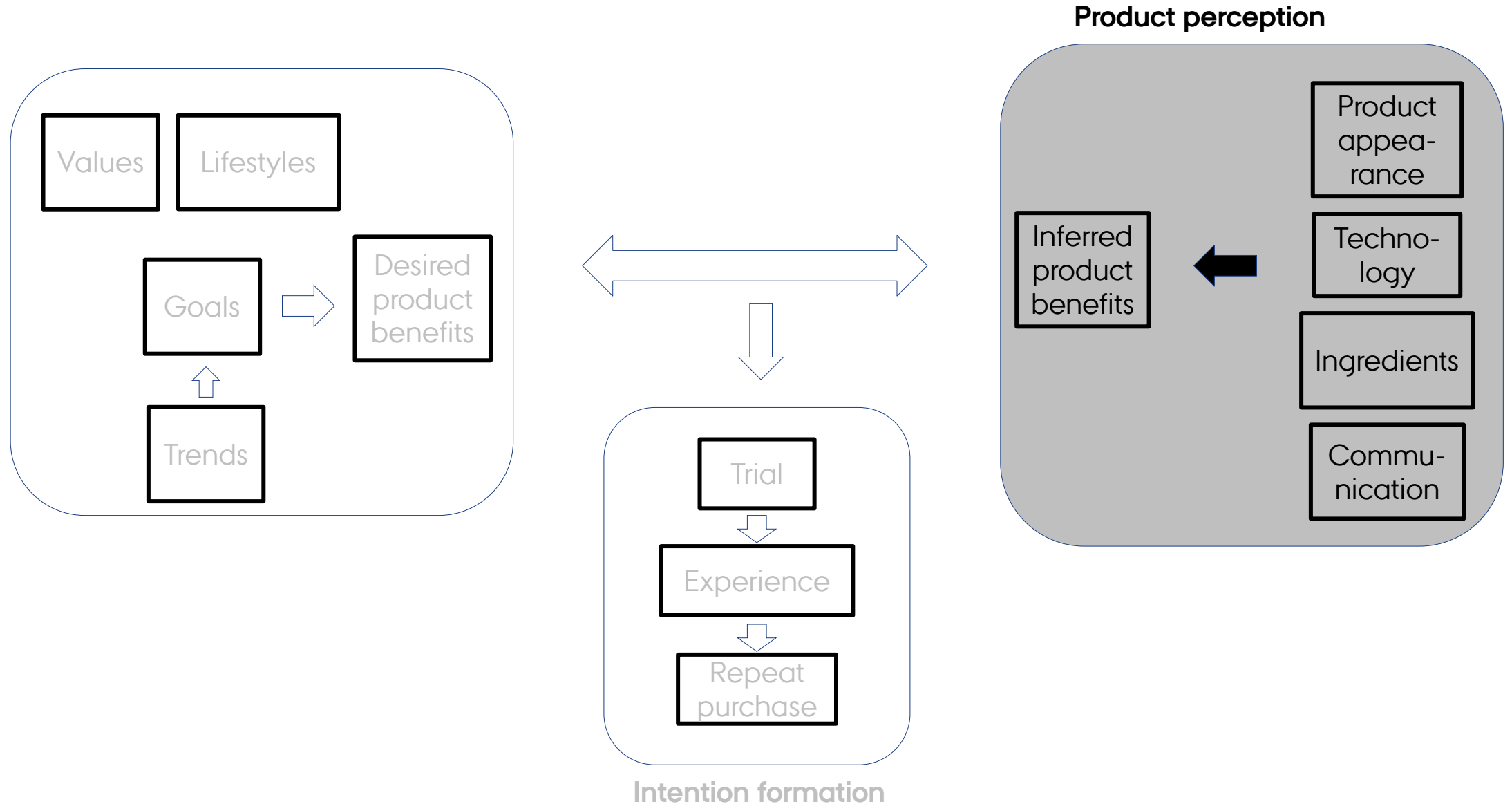
Consumer want products that contribute to their well-being, but desired product benefits differ between consumers

Products need to appeal to both the cognitive and affective aspects of well-being

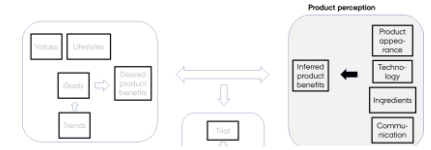
Current trends on healthy eating, sustainability, mindfulness and authenticity are well in line with many whole grain/alternative grain products

However, they may appeal only to certain consumer segments and their appeal may be too heavily towards the cognitive side

HOW CONSUMERS ADOPT NEW PRODUCTS



PRODUCT PERCEPTION



Healthfulness, sustainability, authenticity are all credence characteristics – they need to be communicated to the consumer in a credible and understandable way

Many consumer food choices are made with relatively little deliberation, little information processing, often in a spontaneous and intuitive way – although there is a trend towards more mindfulness

Consumers use ‘cues’ to infer whether a product has desirable characteristics

Therefore, the product label plays a major role in product perception

Online buying is a bit different



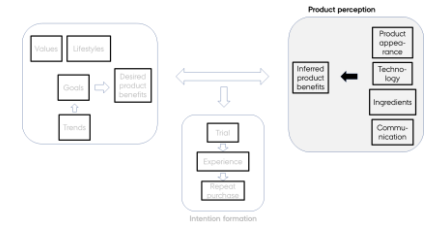
LOGOS AND CLAIMS AS CUES

Logos can communicate healthiness and authenticity and are easy to process for the consumer

Nutrition claims can communicate healthiness, but are also used to make inferences on taste

Health claims are often difficult to understand

Colours and imagery also lead to inferences about product characteristics



General claim

"Good for your blood glucose"

+

Authorized health claim

"Consumption of beta-glucans from oats or barley as part of a meal contributes to the reduction of the blood glucose rise after that meal"

OR

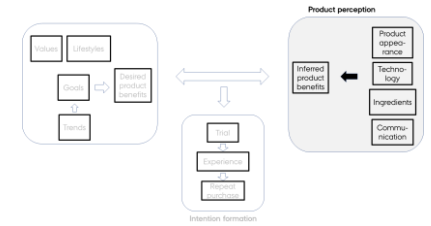
Reformulated health claim

"A meal with beta-glucans from oats limits the fluctuations in blood glucose after intake"

+

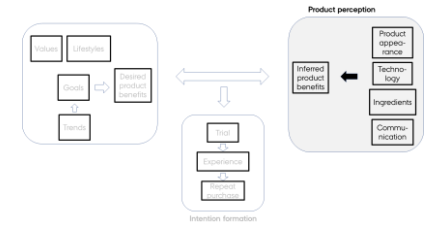
Additional information

Information on blood glucose and beta-glucans as fibres



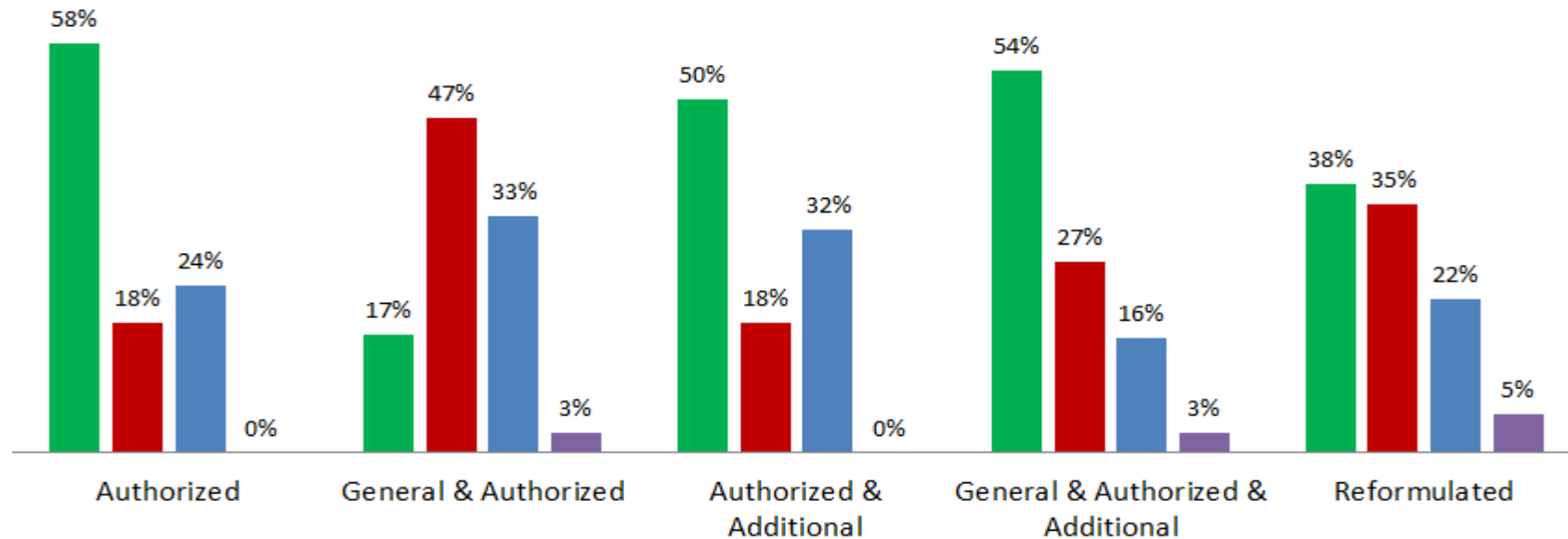
Developed by The Meal Partnership in Denmark

UNDERSTANDING OF DIFFERENT CLAIM VERSIONS



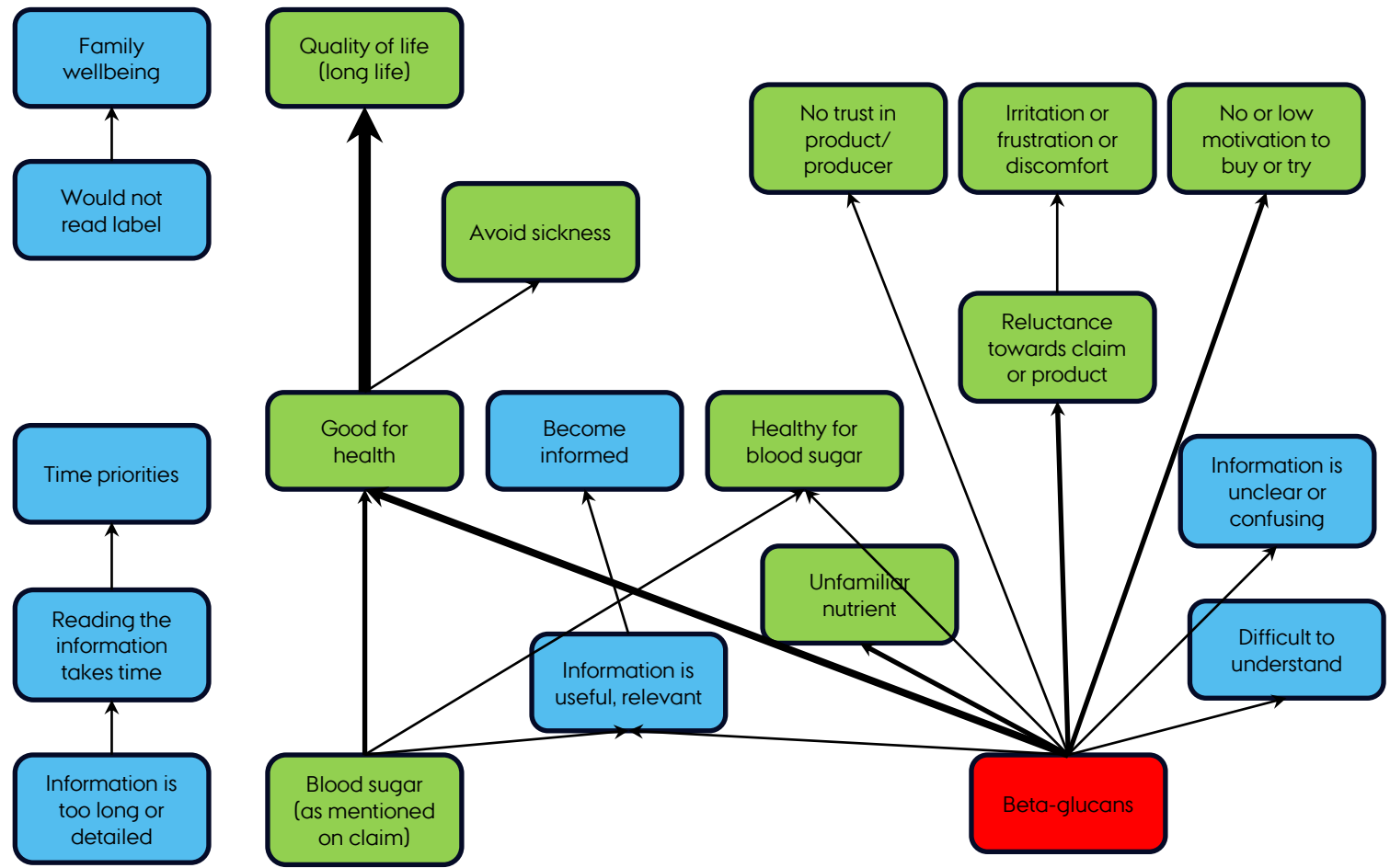
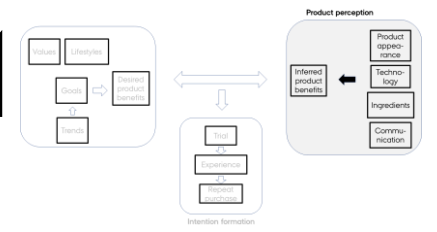
Example Betaglucan claim

■ Safe ■ Risky ■ Other ■ Restatements only

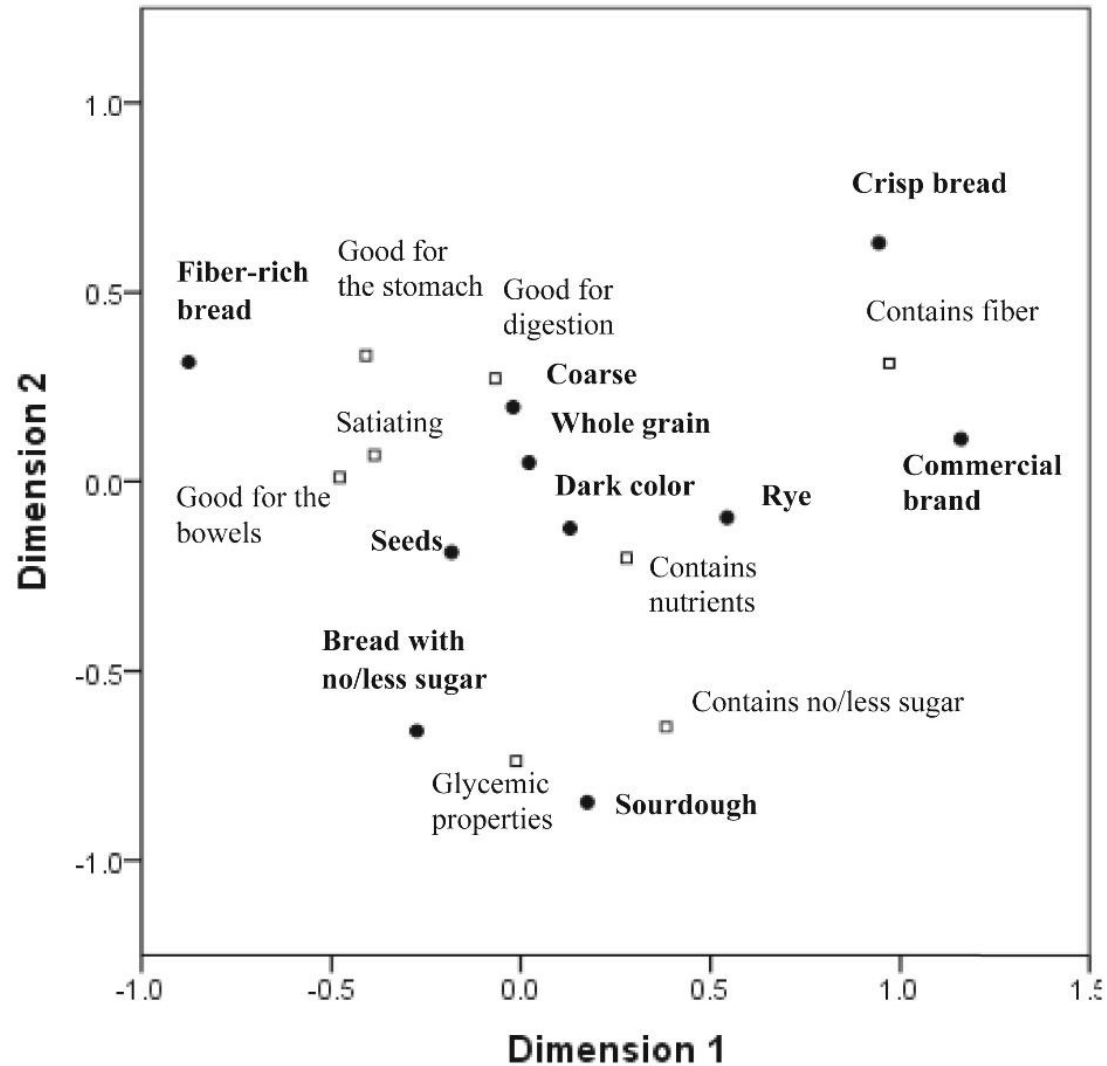


Stancu, V., Grunert, K. G., & Lähteenmäki, L. (2017). Consumer inferences from different versions of a beta-glucans health claim. *Food Quality and Preference*, 60, 81-95.

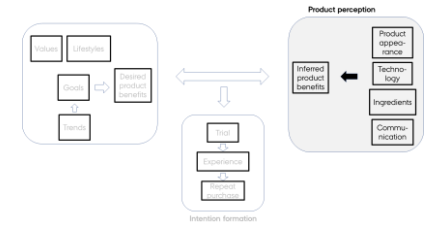
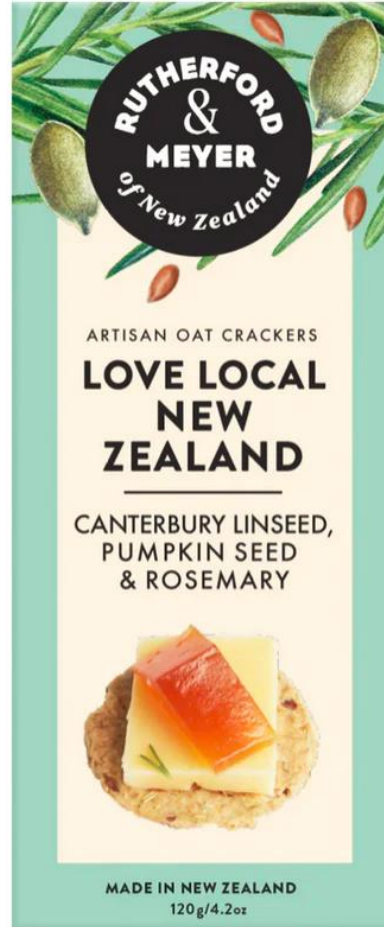
BETAGLUCAN AUTHORIZED CLAIM



PERCEPTION OF HEALTH BENEFITS - EXAMPLE BREAD



Sandvik, P., Nydahl, M., Kihlberg, I., & Marklinder, I. (2018). Consumers' health-related perceptions of bread-implications for labeling and health communication. *Appetite*, 121, 285-293.



Local origin is often used to infer authenticity and sustainability

Artisanal production is likewise used to infer authenticity, but also healthiness and good taste

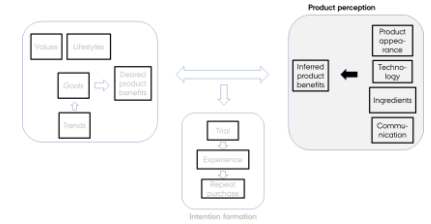
Barley – The Original Superfood

If it's good enough for the gladiators of ancient Rome...

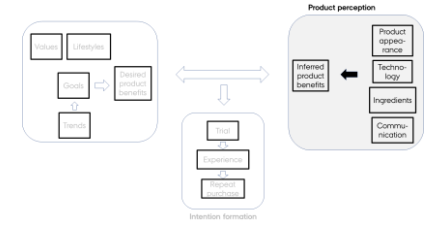
Barley is the oldest grain that people been known to cultivate – it has been known by Pre-Christian cultures as 'The Holy Grain'. It was a staple in the diet of the ancient gladiators in Rome and its Legionnaires , and is referenced in the bible that 'It was with five **barley loaves** and two fishes that our Lord fed the five thousand' (John 6: 9-10).

This ancient grain can help you lose weight and prevent disease

This Swedish breakfast bread could add years (and happiness) to your life.



PRODUCT PERCEPTION



Most desired benefits of grain-based products are not immediately obvious and need to be communicated or are inferred from physical product characteristics

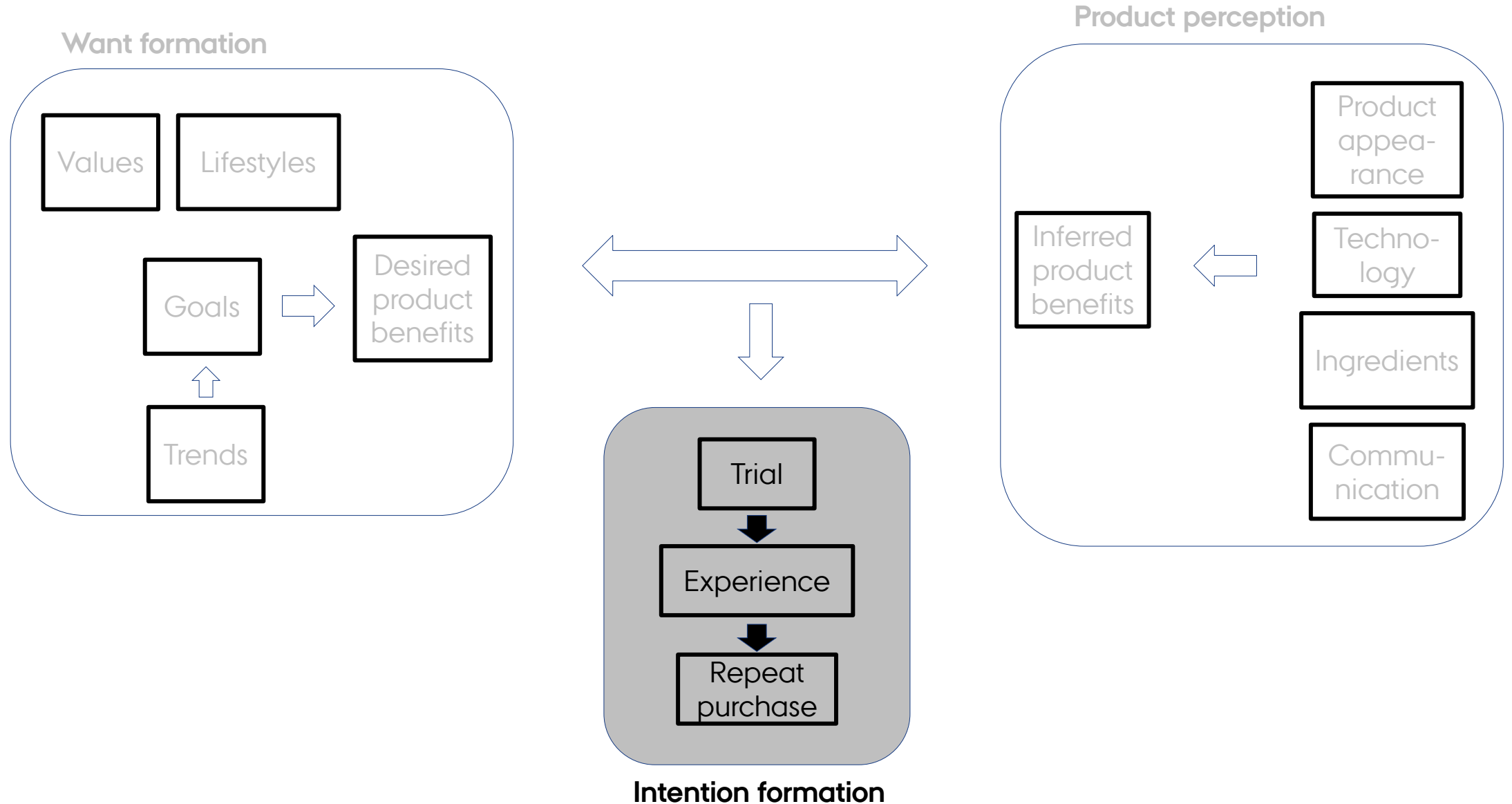
Logos, nutrition and health claims can communicate benefits related to health

Origin and type of processing/technology are used to infer benefits related to health, sustainability and authenticity

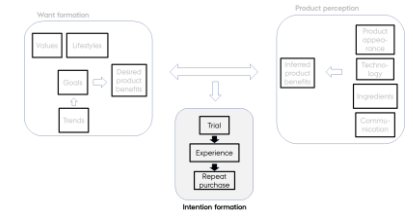
Benefits are also inferred from product appearance and type of messaging

Different consumers may perceive the product in different ways, depending on their food choice goals and their level of knowledge

HOW CONSUMERS ADOPT NEW PRODUCTS



INTENTION FORMATION



If consumer wants and perceived product benefits match, consumers may form an intention to buy the product

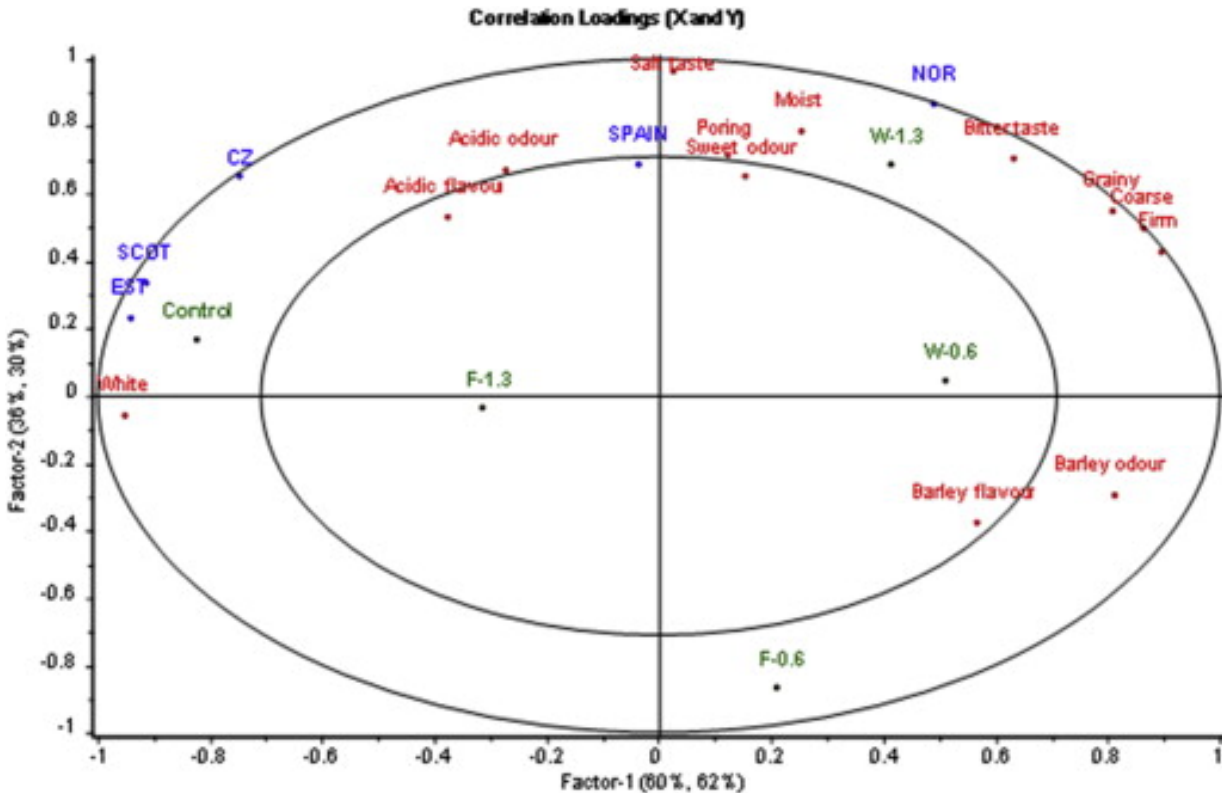
When a product is bought for the first time, intention formation will be based only on the appearance of the product and on the information received about the product

However, after the first purchase, consumers have experiences with the product, and these experiences will have a major impact on future purchase intentions

- The experienced TASTE of the product – taste remains a major driver of consumer food purchases
- The experienced CONVENIENCE in storing, handling, using and eating the product

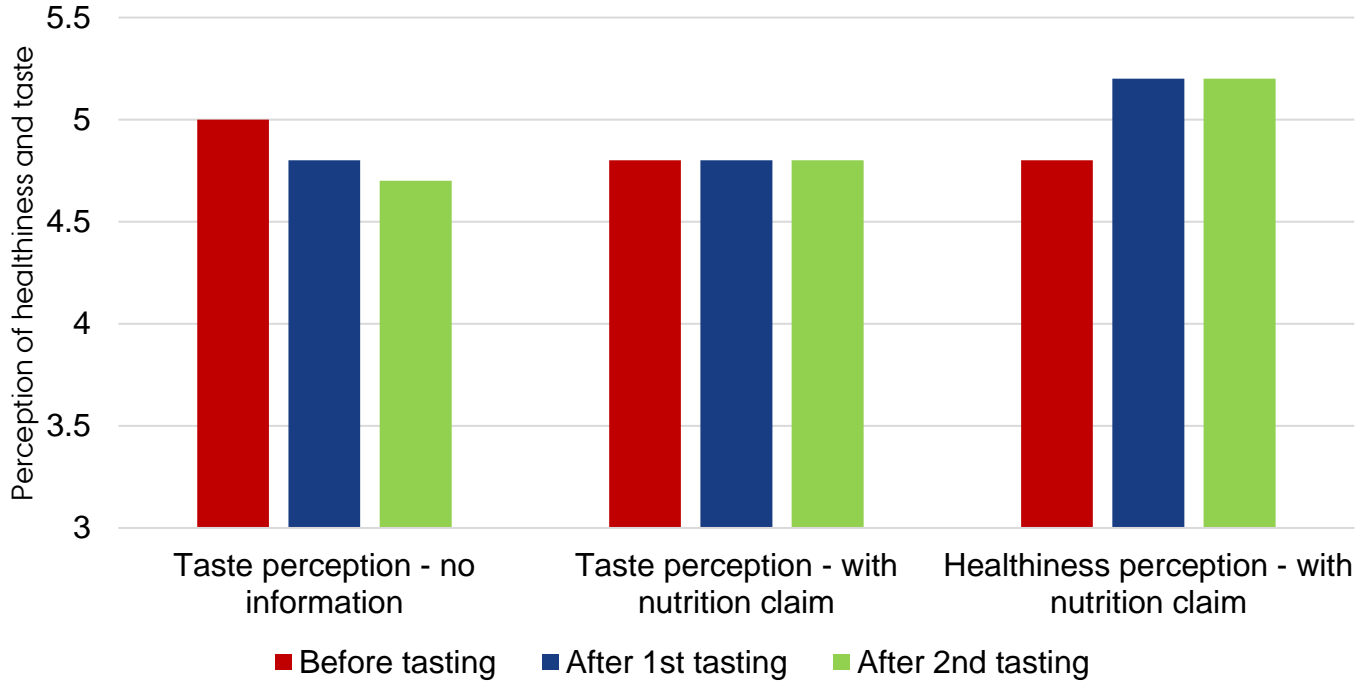
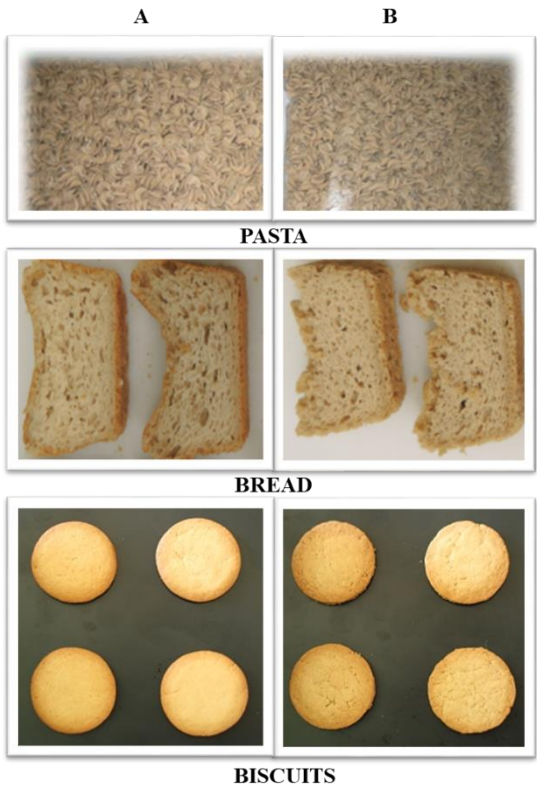
These experiences can also change the perception of healthiness, sustainability and authenticity

TASTE EXPERIENCES AND PREFERENCES DIFFER



Rødbotten, M., Tomic, O., Holtekjølen, A. K., Grini, I. S., Lea, P., Granli, B. S., ... & Sahlstrøm, S. (2015). Barley bread with normal and low content of salt; sensory profile and consumer preference in five European countries. *Journal of Cereal Science*, 64, 176-182.

TASTE EXPERIENCE AND PERCEPTIONS OF HEALTHINESS INTERACT



Banovic, M., Arvola, A., Pennanen, K., Duta, D. E., Sveinsdóttir, K., Sozer, N., & Grunert, K. G. (2022). A taste of things to come: Effect of temporal order of information and product experience on evaluation of healthy and sustainable plant-based products.. *Frontiers in Nutrition*, 9.

IMPLICATIONS FOR ADOPTION OF WHOLE GRAIN PRODUCTS FROM ALTERNATIVE GRAINS

Consumer may not be interested in alternative grains – but alternative whole grain products have a lot of potential to provide benefits that consumers will think are of interest

Products must provide a mix of benefits, including healthiness, sustainability, authenticity and GOOD TASTE

Products should provide both satisfaction and emotional experience

The value chain, the processing technology, the communication and the sensory properties need to play together

Communication is key – make use of all instruments and all channels

Credibility and consumer are a key success factor in new product development

MAIN MESSAGES

New products based on alternative grains need to....

- ...create enjoyment and spontaneous positive effect
- ...while at the same time living up to requirements on healthiness, sustainability and authenticity
- ...be based on credible information about production and product characteristics
- ...be produced in a way that is seen as transparent and natural
- ...provide consumer benefits derived from the consumption situation

Thank you for your attention!





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