

Food choice attitudes and motives of cheese consumers

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Presentation overview

- Context & Background
- Overview of food choice
- Research methods
 - National Adult Nutrition Survey
 - Food choice motives
- Results
 - Cheese consumption
 - Cheese correlations
- Implications
- Future research direction



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Context

- Irish food and drink exports worth €7.88 billion in 2010
- Dairy €2.29 billion (29% of exports)
- Cheese was a strong performing category
- UK accounts for two-thirds of cheese exports
- Food Harvest 2020:
 - diversify the dairy product mix
 - increase higher value products like cheese.



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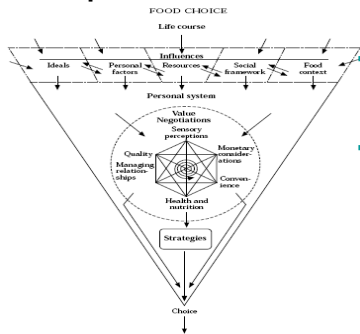
Know your consumer

- Thorough understanding of consumer behaviour and motivations of food choice is essential for new product development
- Increases likelihood of product success
- Insights into drivers of food consumption can leverage niche marketing opportunities and strategies
- Understanding consumer food choice process is complex
 - Complexity increases further at product level



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Conceptual model of food choice (Furst et al 1996)



3 components function simultaneously in the food choice process

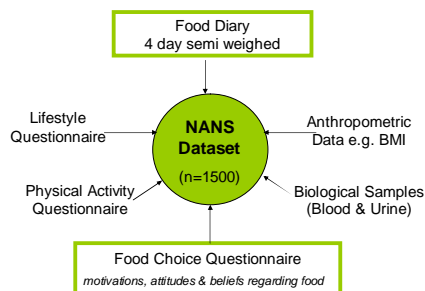
- Understanding these components & the relationship between them has the potential to result in a better understanding of how people make their food choices & in effect what influences them.

Research Aim



- To generate consumer insights into the impacts of food choice attitudes and motives on cheese consumption patterns to aid in the development of existing and new markets.

National Adult Nutrition Survey



Food Diary



- Measures the what, when and where
- 4 days – balance of week and weekend days
- Semi weighed
- All information on every food consumed recorded
 - Time
 - Location
 - All constituents in the meal/snack
 - Brand
 - Packaging
 - Recipes
 - Leftovers

TODAY'S DATE	DAY Mon Tues Wed Thurs Fri Sat Sun (Please circle one)	TIME	THIS MEAL IS CALLED	WHERE MEAL/SNACK WAS EATEN	WHERE MEAL/SNACK WAS PREPARED	
12 August	Tuesday	1pm	LUNCH (e.g. SNACK, LUNCH, DINNER)	WORK (e.g. HOME, WORK, RESTAURANT)	HOME (e.g. HOME, CANTEEN)	
FOOD OR DRINK (PLEASE DESCRIBE IN DETAIL)	AMOUNT OR WEIGHT (g) OF FOOD	AMOUNT AND DESCRIPTION OF ANY LEFTOVERS (IF ANY)	COOKING METHOD (IF COOKED)	BRAND	FOOD/DRINK PACKAGING	
					TYPE	SIZE
Brown toast	2 slices	None	grilled	Browns	Wax paper	500g pan
Butter		none		Tesco	Foil	250g
Tea	1 mug	Half mug	boiled	Lyons	Card	600
Milk		Half mug		Avonmore	Card	1ltr
Cheese	3 slices	none		Dublin	Wax paper	200g pack

Food Choice Questionnaire



- Likert scale
- Questions derived from previously validated scales
- Adapted for Irish setting & context
- 83 statements measuring 17 different constructs

Mood	External influences	Food Involvement
Health	Food Decisions	Food Life
Convenience	Portion Size	Health intention
Cost	Healthy habit	Intention
Sensory	Resources	Neophobia
Eating Control		



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Question 1

We would like you to imagine yourself in an everyday situation making your food selections. For each of the following statements, please indicate your level of agreement or disagreement, where (1) is strongly agree and (7) is strongly disagree. Please circle the number that best reflects your view.

It is important to me that the food I eat on a typical day ...	Strongly Agree	Agree	Some-what Agree	Neither Agree nor Disagree	Some-what Disagree	Disagree	Strongly Disagree
is not expensive.	1	2	3	4	5	6	7
contains vitamins and minerals.	1	2	3	4	5	6	7
looks nice.	1	2	3	4	5	6	7
keeps me awake/alert.	1	2	3	4	5	6	7
is good for my appearance (skin/teeth/hair/nails/etc.).	1	2	3	4	5	6	7
is cheap.	1	2	3	4	5	6	7
helps me to cope with life.	1	2	3	4	5	6	7
is nutritious.	1	2	3	4	5	6	7



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Database restructuring & statistical analyses

- Factor analyses was undertaken to confirm constructs in the food choice questionnaire
 - Reliability tests were good
- Food Diary
 - Converted to mean daily intakes of 19 food groups
 - Merged with demographics and BMI
 - Consumption variables merged with food choice constructs
 - Mean, std deviations and Pearson correlations one way anova



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Cheese consumption results

- 65% of the population consumer cheese (74% consumers in 2000 survey)
- Mean daily intake of 21g (std. dev =18). (17g/d in 2000 survey)
- Contributes to 5% of total fat in the Irish diet
- No significant difference in cheese consumption across age groups
- Correlations provides a measure how of how variables are related.
- Cheese consumption was correlated with food choice motives and attitudes
- Only 5 motives had significant correlation with cheese consumption (P<0.05)
- The 5 motives explained 6% of variance in cheese consumption



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Motives correlated with cheese

Motive	Pearson	P2	P value	n
Mood	-0.089	0.008	0.013	786
Health	-0.067	0.005	0.057	796
Sensory	-0.071	0.005	0.046	802
Portion	-0.128	0.016	0.000	814
Ability	-0.087	0.008	0.013	817
Intention	-0.149	0.022	0.000	804



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Food consumption patterns in cheese consumers (1)

	non n=440	low n=274	med n=268	high n=281
Cheeses (g/d)	0	7	16	40
Energy (kcal)	1893	1944	2069	2330
Protein (g)	80	80	83	96
Fat (g)	71	74	80	94
Pct contribution of fat to energy	34	34	35	36
Carbohydrates (g)	223	223	235	251
Grains, rice, pasta & savouries (g/d)	56	59	68	72
Bread & rolls (g/d)	107	110	115	135
Butter, spreading fats & oils (g/d)	13	14	14	17
Beverages (g/d)	1411	1608	1559	1633
Sugars, confectionary, savoury snacks (g/d)	29	28	34	33
Soups, sauces (g/d)	52	48	61	69
All food groups significant across tertiles at P<0.05				
BMI	27.3	26.7	26.5	26.9
ns across cheese tertiles				



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Food consumption patterns in cheese consumers (2)

	non n=440	low n=274	med n=268	high n=281
Breakfast cereals (g/d)	65	56	62	61
Biscuit, cakes & pastries (g/d)	30	29	30	31
Milk & yoghurt (g/d)	235	230	248	260
Creams, ice-creams & chilled desserts (g/d)	19	19	21	23
Eggs & egg dishes (g/d)	17	17	17	17
Potato & potato dishes (g/d)	128	114	109	112
Veg & veg dishes (g/d)	111	111	122	116
Fruit & fruit juices (g/d)	144	149	154	156
Fish & fish dishes (g/d)	29	30	27	27
Meat & meat products (g/d)	180	178	173	188
Nuts, seeds, herbs & spices (g/d)	2	3	3	3
All food groups <i>non</i> significant across tertiles				



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Implications

- Food choice motives *alone* do not distinguish well for the cheese product category
- Certain opportunities exist to promote some aspects of cheese
 - Sensory,
 - Feel good/mood
 - Health – possibility to maintain healthy diet and weight while still consume cheese
 - Promotion of other food groups with cheese
 - food pairings/concordant consumption of foods



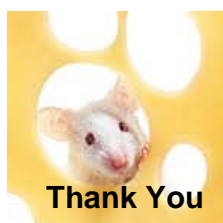
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Future research....

- Determine relationship between cheese consumption and indices of diet quality
- To determine if specific cheese segments exist in the Irish population to develop strategies for marketing cheese
- Cheese Board Research Programme
 - FIRM funded programme awarded 2011
 - Co-ordinated by Dr P Kelly (TFRC Moorepark)
 - Six key tasks including cheese reformulation, bioactives, consumer drivers
 - Consumer task
 - To generate a range of potential new concepts for cheese by studying market trends, drivers and product launches



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Thank You

Acknowledgements

This work was funded under the Food and Health Research Initiative (Dept. of Agriculture, Fisheries & Food, Health Research Board, Department of Health and Children)

A special thank you to the NANS fieldwork team and all of the participants in the survey



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