

Rural Policy Centre



**Understanding consumers' trends on  
the purchases of dairy products**

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dairy chains workshop,  
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*Leading the way in Agriculture and Rural Research, Education and Consulting*

# Outline of the presentation



1. Why to care about consumer trends.
2. Product differentiation as a business strategy.
3. Knowing the market and its shoppers.
4. Some trends for health related products.
5. Major drivers behind the interest in 'healthy' products.
6. Specific consumers' interests on health and wellbeing
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# Why to care about consumer trends



- In mature, slow growth food markets such as in European countries, businesses find it difficult to build sales and margins.
- Some features of consumers and producers important to consider (Hughes, 2009a):
  - **On the demand side**, consumers are more sophisticated and their purchasing power gives them the possibility to be more exacting about their food requirements – e.g., ‘I want affordable, safe, tasty food, high in omega-3 and locally produced, too’;
  - **On the supply side**, food producers search for niche markets. e.g., in the past, eggs were eggs, now, there are from battery, barn, free range, organic, from specially fed and bred animals under high animal welfare conditions and specific farm provenance.

# Product differentiation as a business strategy



- Product differentiation is **commercially attractive** only if it increases **consumer satisfaction**. Only then it provides **opportunities for those in the food industry to ‘add value’**.
- In many cases product differentiation may **imply higher costs of production** due, for instance, to **low levels of production** and therefore not taking advantage of **scale economies** (in contrast to “commodity” products).
- **Product differentiation** and **adding value** are not the same. It is **easy to add cost**, but **more difficult to add value**.
- The **sole arbiter of whether value has been added** are the **final consumers**.

# Product differentiation as a business strategy



- The **incidence of repeat purchases** is an excellent measure of the presence of **value-added** in the eyes of buyers.
- This makes it crucial for firms to know about who buys and consumes their products. For instance:
  - Do a few buy a lot, or a lot buy a few?
  - Who are the few?
  - Why do they buy?
- The first step **before starting a** product differentiation strategy consists of **understanding consumer trends**.

# Knowing the market and its shoppers



- This includes knowledge of **demographic trends** and **social trends** (e.g., population and household dynamics). For instance:
  - Growth of different population segments (e.g., is the population getting older).
  - What type of household is predominant? (e.g., families with one child, big families, single person, pensioners).
  - In the UK predictions are that the distribution will be approximately (1/3) single person households, (1/3) two person, and (1/3) three or more person households by 2015.
- Specific geographic market and specific products need to be considered, for instance:
  - Where are the different segments located?
  - What do they buy?

# Some trends for health related products



- Many high income countries have a distinctly ageing population profile. In the EU, 20% are 60 years of age or more, predicted to rise to 33% by 2050. Implications may include (Hughes, 2009):
  - strong consumer interest in maintaining health and wellbeing into old age, specifically through greater attention to diet and exercise;
  - smaller portions;
  - more user-friendly for labelling/signage (eye sight related);
  - more user-friendly for in packaging (finger dexterity related);
  - bolder taste profiles as the taste buds become less sensitive.

# Major drivers behind the interest in 'healthy' products



- There are 7 major drivers associated with the growth in consumer interest in healthy products (Hughes, 2009):
  1. **Favourable demographic trends** (aging population concerned about its length and quality of life);
  2. The **rising obesity epidemic**;
  3. A **long-term healthcare crisis** in some countries, *i.e.* tax payer financed medical infrastructure under stress;
  4. A growing **consumer understanding** of the relationship between **diet and health**, and that the primary responsibility for their good health rests with themselves and not others;
  5. Emerging clinical research on **food nutrition** which is given **substantial national and international consumer media coverage**;

# Major drivers behind the interest in 'healthy' products



6. **Health claims** to be made on the **packaging about food and drink products**;
  7. The increasing **availability of healthy products in mainstream grocery retailers**, e.g. supermarkets, rather than just in health food and specialty shops.
- These trends and consumer interest in health and wellbeing present a possible niche for food industry business growth.

# Specific consumers' interests on health and wellbeing



- Health and wellbeing market opportunities emanate from consumers' interests (Hughes, 2009b):
  - To reduce their **weight**;
  - To improve **digestive health**;
  - To eat healthily **fresh and minimally processed foods**;
  - To use food intake to manage their **overall health** and even **improve appearance**;
  - seek food products that **match their busy lifestyles**;
  - to offer their **children 'fun to eat' food** that is also **nutritious and safe**;
  - to buy and prepare food that is **environmentally friendly** and respects **animal welfare**.

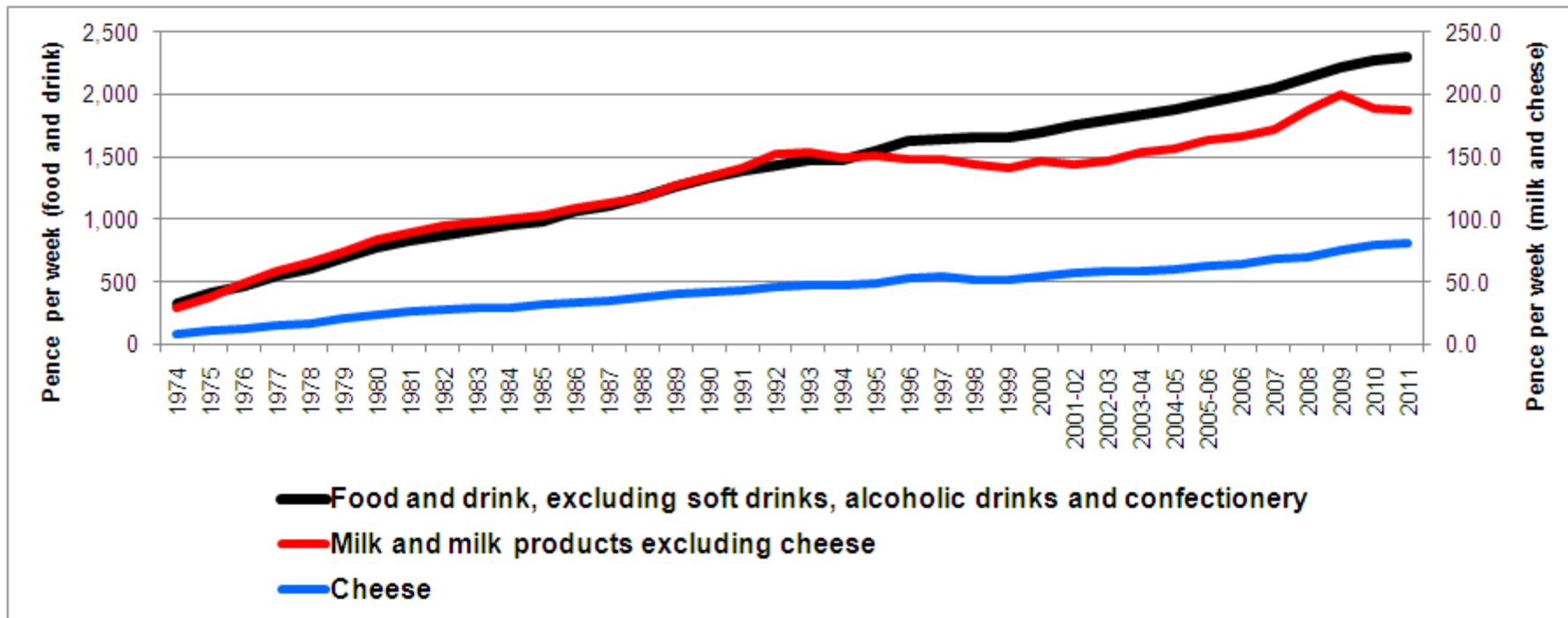
# Case study: dairy products in the UK

# Introduction



- The focus in this section is mainly on trends for the UK market.
- This market represents about 92% of the demand for Scottish products (DTZ, 2008).
- Two datasets were used for this analysis:
  - The results from the expenditure and food survey published in Defra's Family Food.
  - Information about promotions on the Scottish markets from Kantar Worldpanel data.
- The information about UK is presented as weekly averages per year and in *per capita* terms (*i.e.*, excludes the demographic growth of the demand).

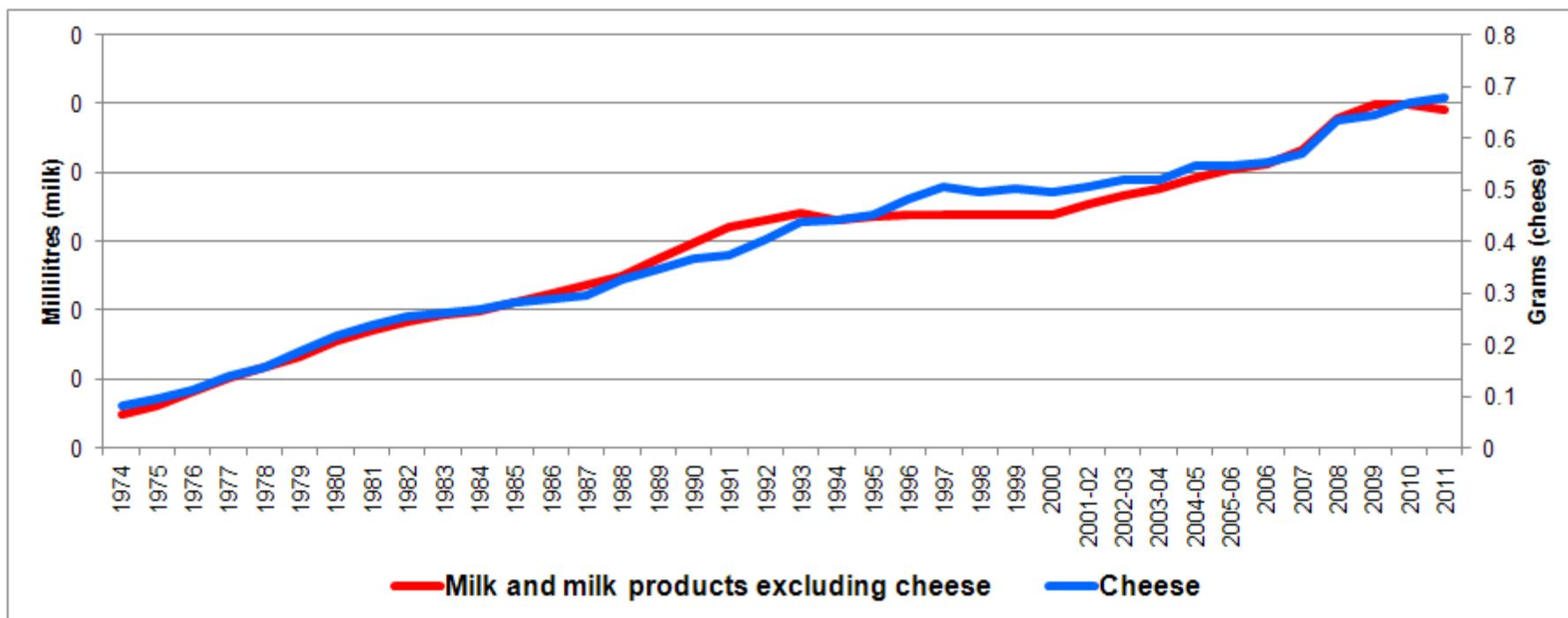
# UK market: Weekly nominal per capita expenditure on milk and products (exc. cheese) and cheese



Source: Defra, Family Food

Growth of the expenditure on milk and milk products (exc. cheese) similar to food and drink growth until early 1990s, when start growing a slower pace. Cheese growing a slower pace than food and drink.

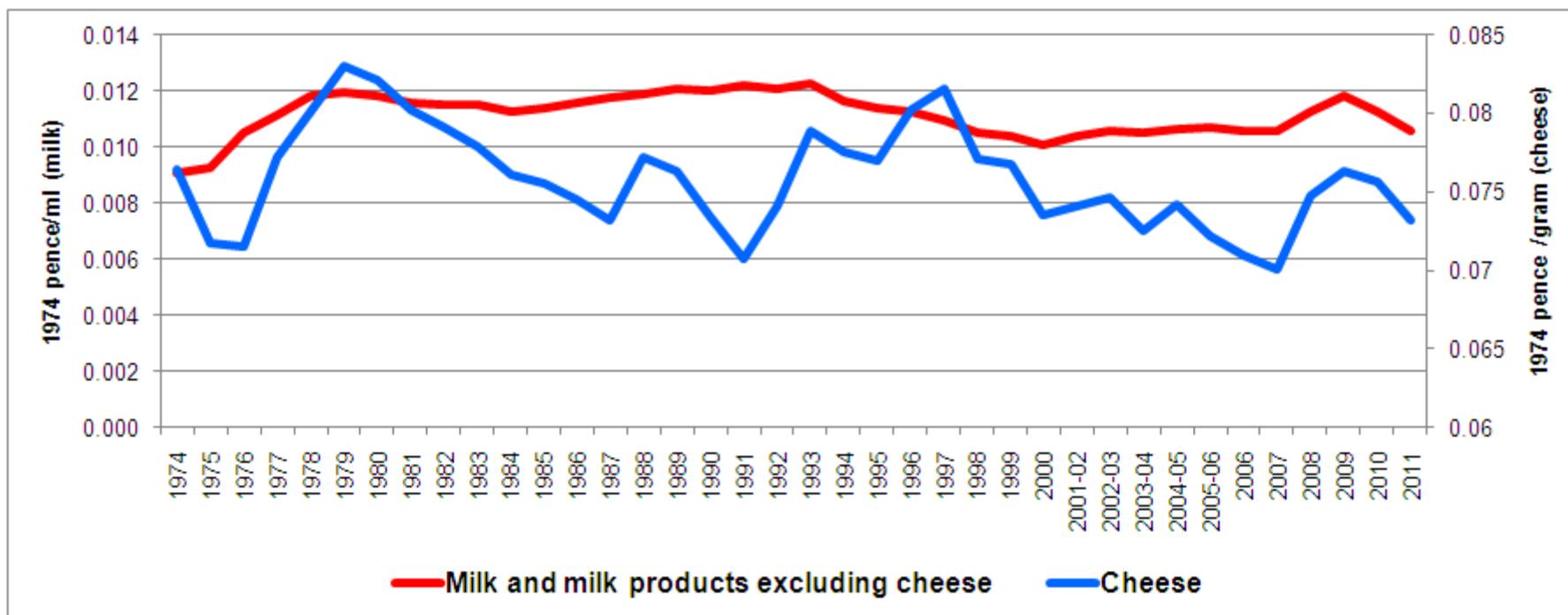
# UK market: Weekly nominal unit values on milk and products (exc. cheese) and cheese



Source: Defra, Family Food.

Nominal unit values of milk and products (exc. cheese) and cheese have shown similar trends over time.

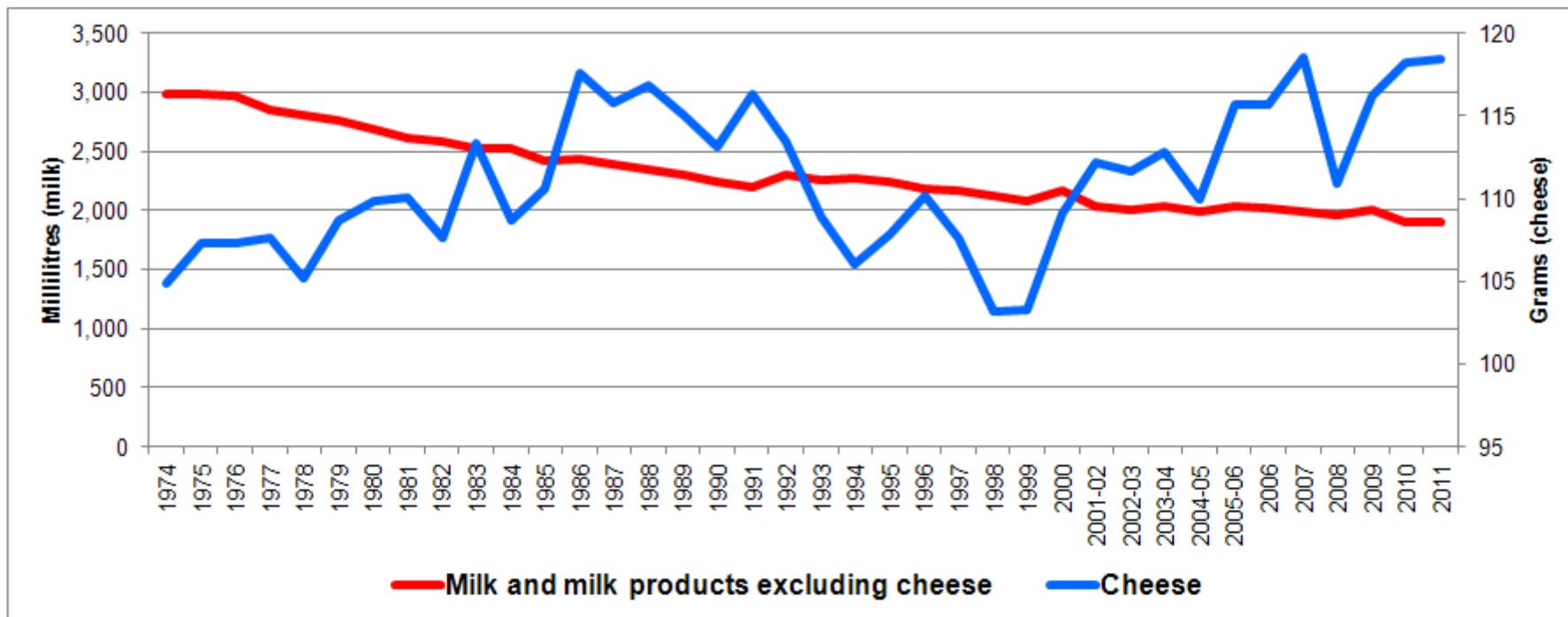
# UK market: Weekly real unit values on milk and products (exc. cheese) and cheese



Source: Defra, Family Food. Deflated using the RPI Jan 1974=100.

If inflation is removed, both series show different trends. Milks and milk products real unit values have remained constant over time. For cheese they are fluctuating. Note that they reflect not only prices but also changes in qualities and preferences.

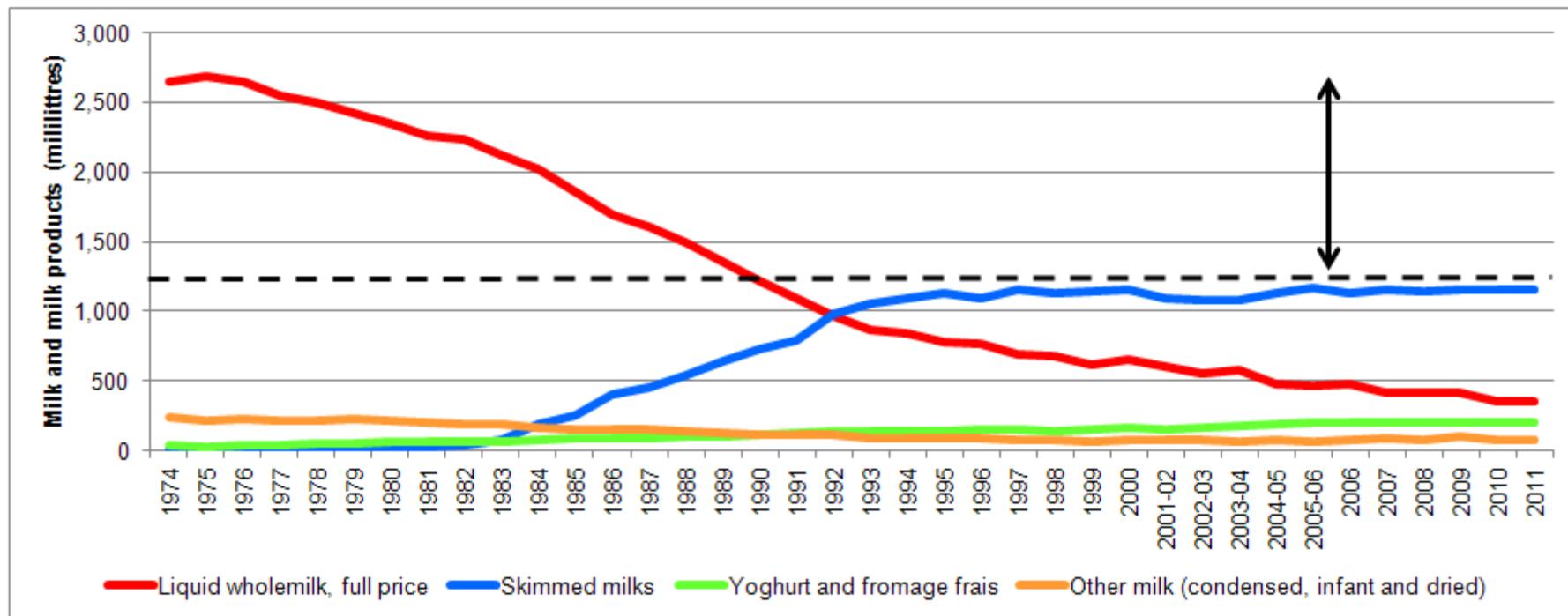
# UK market: Weekly per capita purchases on milk and products (exc. cheese) and cheese



Source: Defra, Family Food.

The evolution of purchased per capita quantities of milk and products show a clear negative trend, while in the case of cheese it is fluctuating.

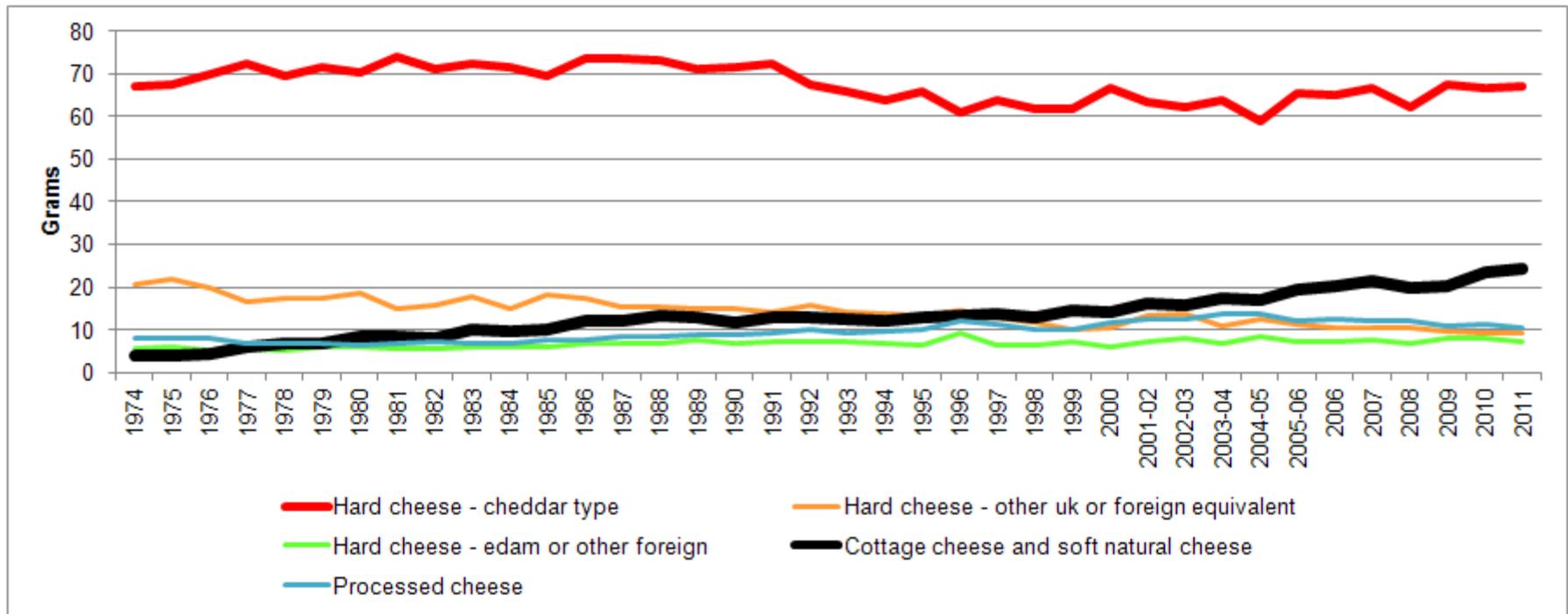
# UK market: Weekly per capita purchases on milk and products (exc. cheese) by product



Source: Defra, Family Food.

Purchases of whole milk have decrease substantively since 1974, compensated only partially by the increasing demand for “skimmed milks”. Yoghurt has a slow increasing trend. Other milk follows a slightly decreasing trend.

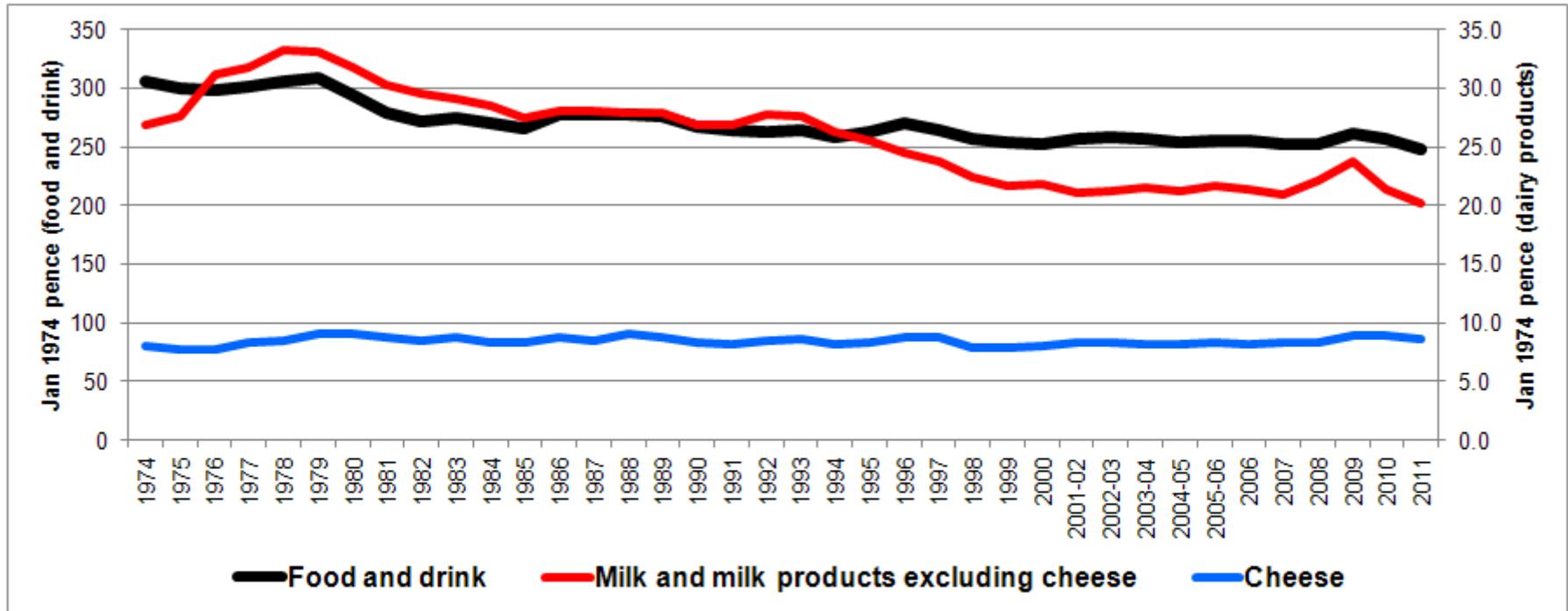
# UK market: Weekly per capita purchases of cheese by product



Source: Defra, Family Food.

The purchases of cheese remained more or less constant (being cheddar type the most important). Note that cottage cheese and soft natural cheese are the only ones with a clear increasing trend.

# UK market: Weekly real expenditure on food and drink and in dairy products

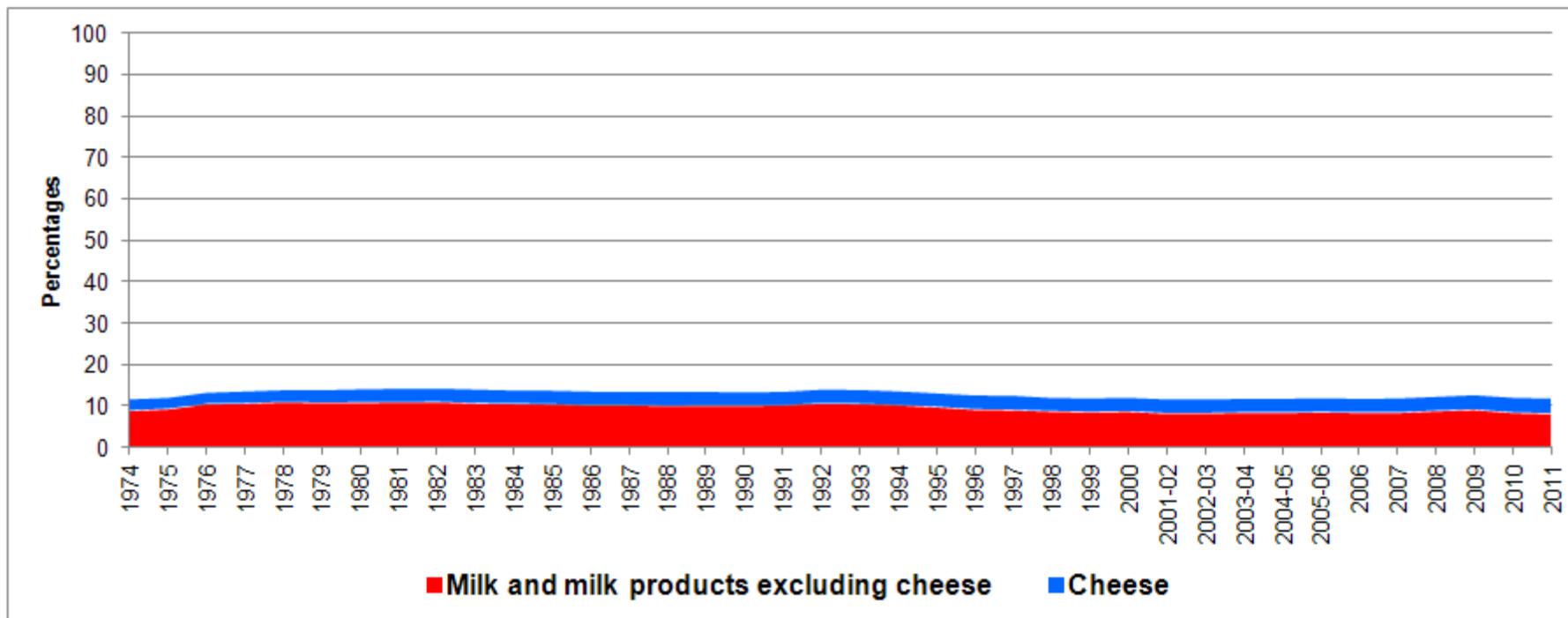


Source: Defra, Family Food.

Note: Total food and drink excludes alcoholic drinks and confectionery.

In summary, the revenues in real terms from milk and milk products are decreasing faster than the food and drink category and cheese remains constant.

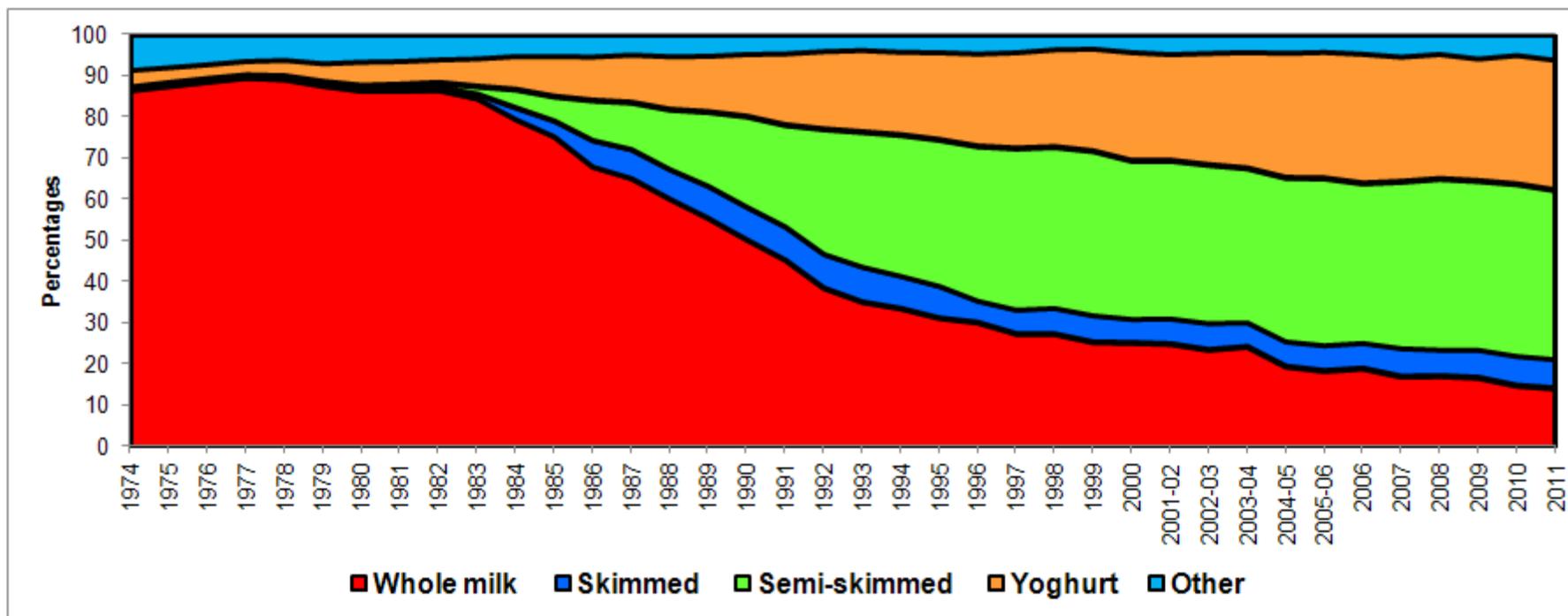
# UK market: Share of milk related products and cheese in total food and drink expenditure



Source: Defra, Family Food.

The share of expenditure on both dairy categories are almost constant over time as proportion of food and drink.

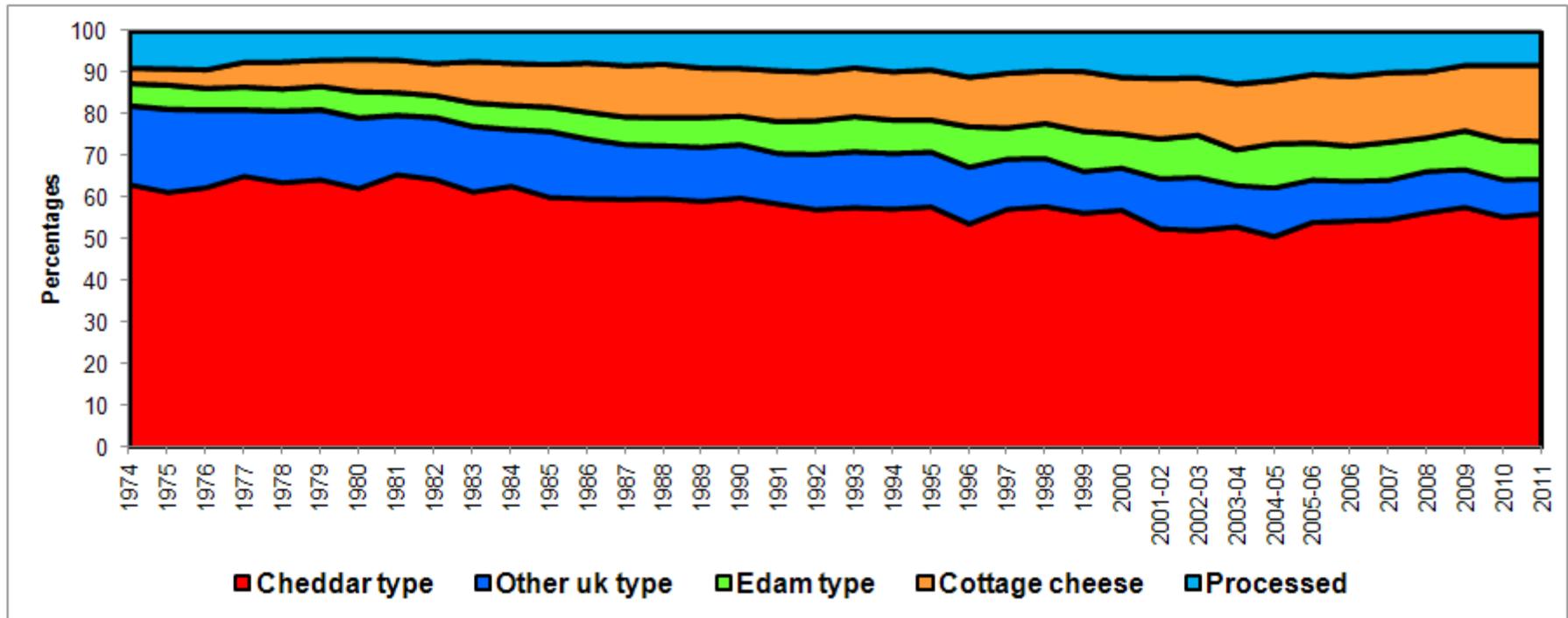
# UK market: Share by products on the expenditure of milk related products



Source: Defra, Family Food.

The shares show that within the category semi-skimmed and yoghurt have almost replaced whole milk. Also interesting that despite the interest on healthy products, skimmed milk does not follow the same pattern as semi-skimmed (taste versus healthiness).

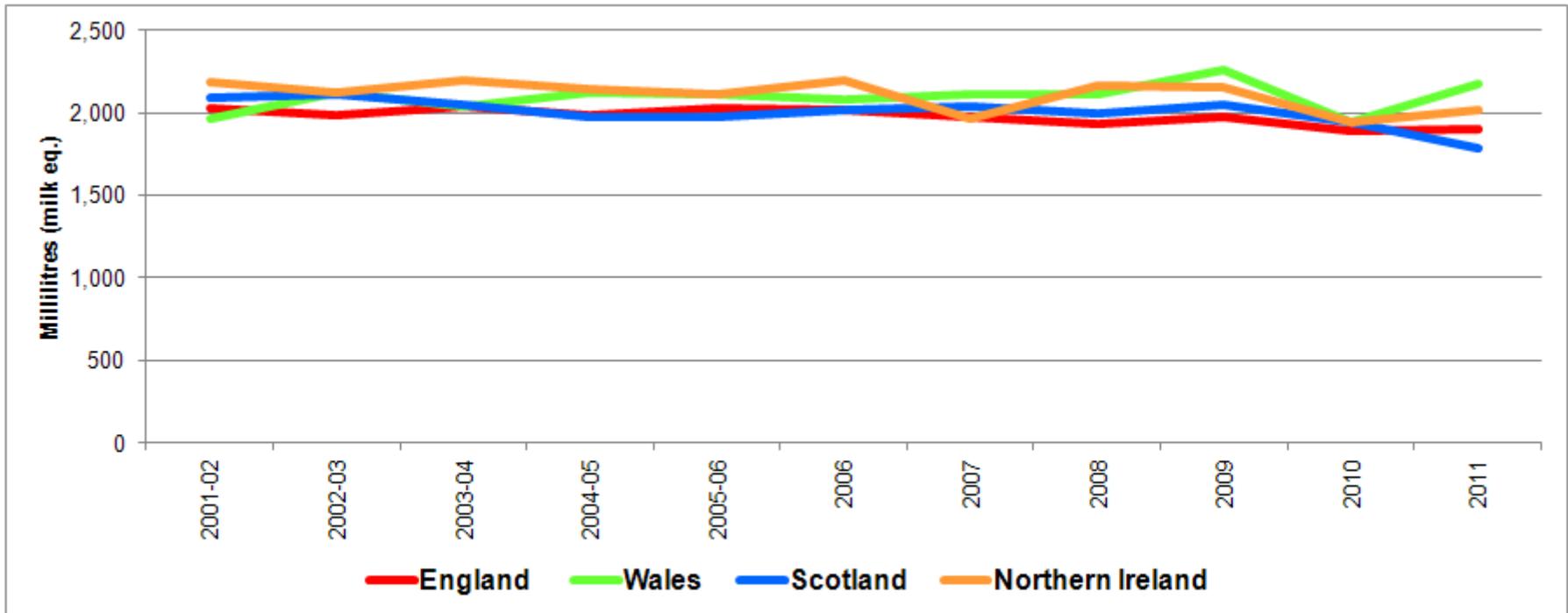
# UK market: Share by products on the expenditure of milk related products



Source: Defra, Family Food.

All the shares within the cheese category are very stable except cottage and soft cheese, which has grown over time.

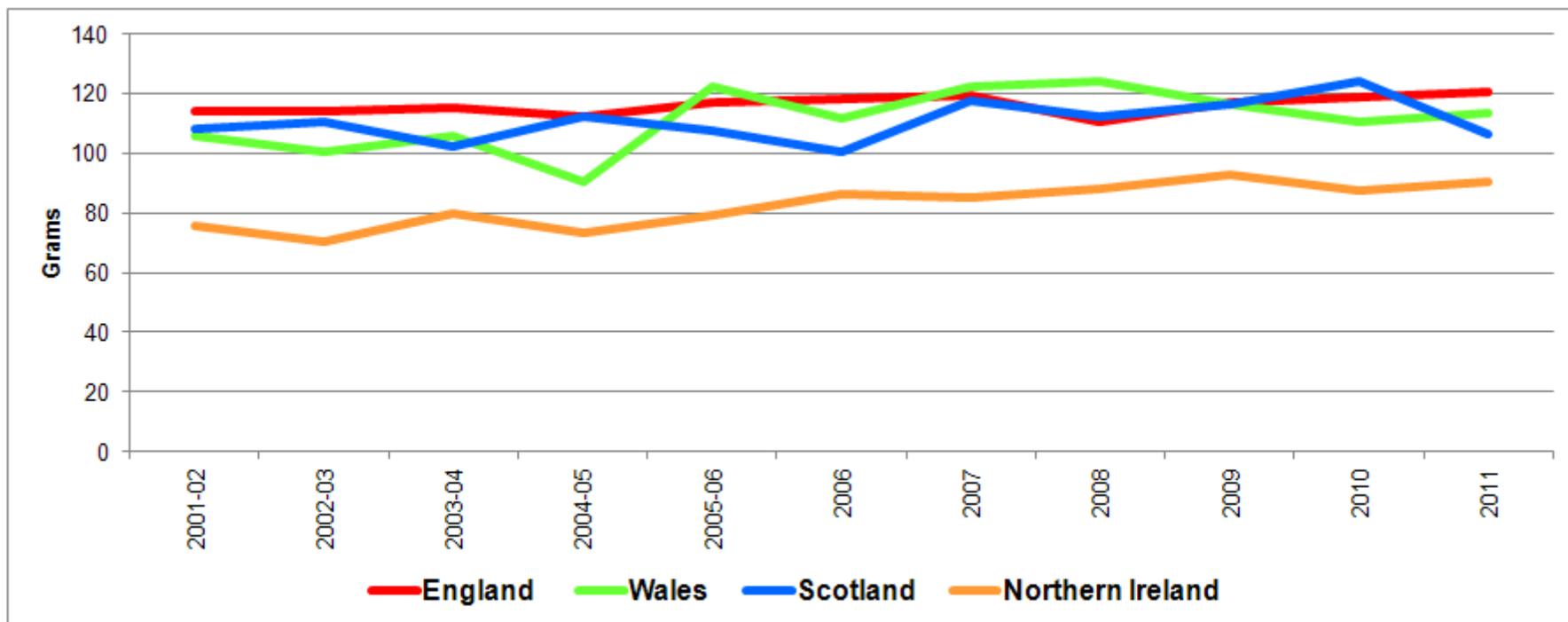
# UK market: Weekly per capita purchases of milk related products (exc. cheese) by country



Source: Defra, Family Food.

Not major differences by country on the purchases of milk and milk products (exc. cheese).

# UK market: Weekly per capita purchases of cheese by country



Source: Defra, Family Food.

On the purchases of cheese, similar trends for all the countries except for Northern Ireland with lower purchases for the entire period.

# UK Market: Price elasticities for the milk and related products and cheese



	Marshallian price elasticities										Hicksian price elasticities										Expenditure elasticity	Sig.	
	Liquid wholemilk price	Sig.	Fully skimmed milk	Sig.	Semi skimmed milk	Sig.	Yoghurt and fromage frais	Sig.	Other milk (condensed, infant and dried)	Sig.	Liquid wholemilk price	Sig.	Fully skimmed milk	Sig.	Semi skimmed milk	Sig.	Yoghurt and fromage frais	Sig.	Other milk (condensed, infant and dried)	Sig.			
<b>Demands</b>																							
Liquid wholemilk, full price	-0.83 *		0.02		-0.17		-0.18 *		-0.08 *		-0.22 *		0.08 *		0.12 *		0.05		-0.02		1.24 *		
Fully skimmed milk	0.64		-1.16		0.51		0.03		-0.31		0.78		-1.15		0.58		0.08		-0.29		0.28		
Semi-skimmed milk	-0.10		0.09		-0.91 *		0.09		0.11		0.25 *		0.12		-0.74 *		0.22 *		0.14 *		0.71		
Yoghurt and fromage frais	-0.16		-0.01		0.15		-0.72 *		0.15 *		0.12		0.02		0.29 *		-0.61 *		0.18 *		0.58 *		
Other milk (condensed, infant and dried)	-1.26 *		-0.39		0.15		0.23		-0.90 *		-0.20		-0.28		0.65 *		0.62 *		-0.79 *		2.17 *		
	Marshallian price elasticities										Hicksian price elasticities										Expenditure elasticity	Sig.	
	Hard cheese cheddar type	Sig.	Hard cheese other uk or foreign equivalent	Sig.	Hard cheese edam or other foreign	Sig.	Cottage cheese and soft natural cheese	Sig.	Processed cheese	Sig.	Hard cheese cheddar type	Sig.	Hard cheese other uk or foreign equivalent	Sig.	Hard cheese edam or other foreign	Sig.	Cottage cheese and soft natural cheese	Sig.	Processed cheese	Sig.			
<b>Demands</b>																							
Hard cheese - cheddar type	-0.95 *		0.18		0.08		-0.09		-0.06		-0.46 *		0.29		0.14		0.01		0.01		0.84 *		
Hard cheese - other uk or foreign equivalent	0.68		-1.49 *		0.18		-0.18		-0.22		1.28 *		-1.36 *		0.26		-0.06		-0.13		1.03		
Hard cheese - edam or other foreign	0.19		0.25		-1.39 *		0.00		-0.67 *		1.14		0.46		-1.27 *		0.19		-0.52		1.63 *		
Cottage cheese and soft natural cheese	-1.07		-0.32		-0.02		-0.37		-0.13		0.05		-0.06		0.12		-0.15		0.04		1.91 *		
Processed cheese	-0.09		-0.23		-0.44		0.02		0.44		0.09		-0.19		-0.42		0.05		0.47		0.31		

Source: Own elaboration based on Family Food data.

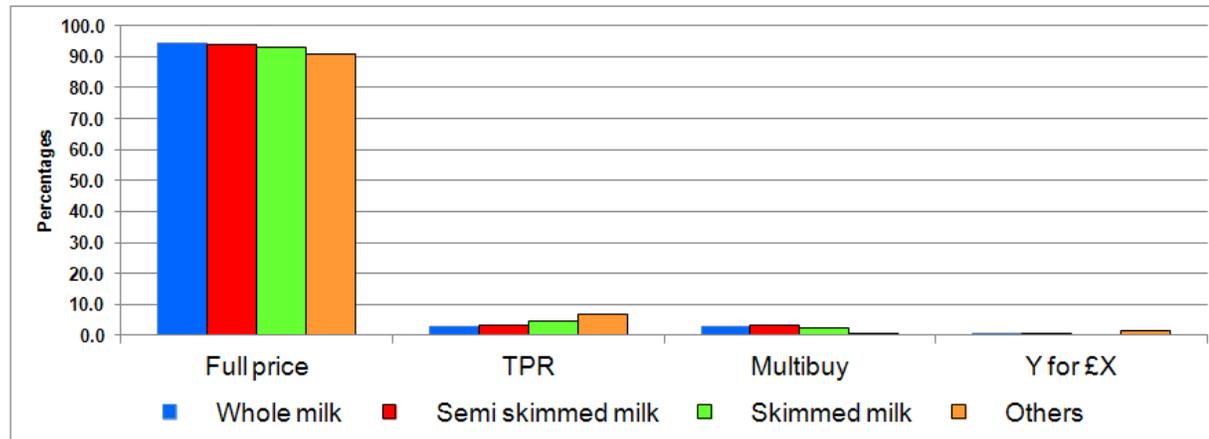
Note: \* indicates that the elasticity is statistically significant at 1 per cent. Marshallian price elasticities indicates the reaction in the demand due to a price change. Hicksian price elasticities indicate the same but exclude the income effect generated by the change in prices. Expenditure elasticities measure the change in the demand due to a change in the category expenditure. All the elasticities have been measured at the mean values.

Price are important for most dairy products except skimmed milk, cottage cheese and processed cheese. The demand for skimmed milk does not show price or expenditure effect. Various substitution effects are significant on milk and products. On cheese, the products appear as differentiated.

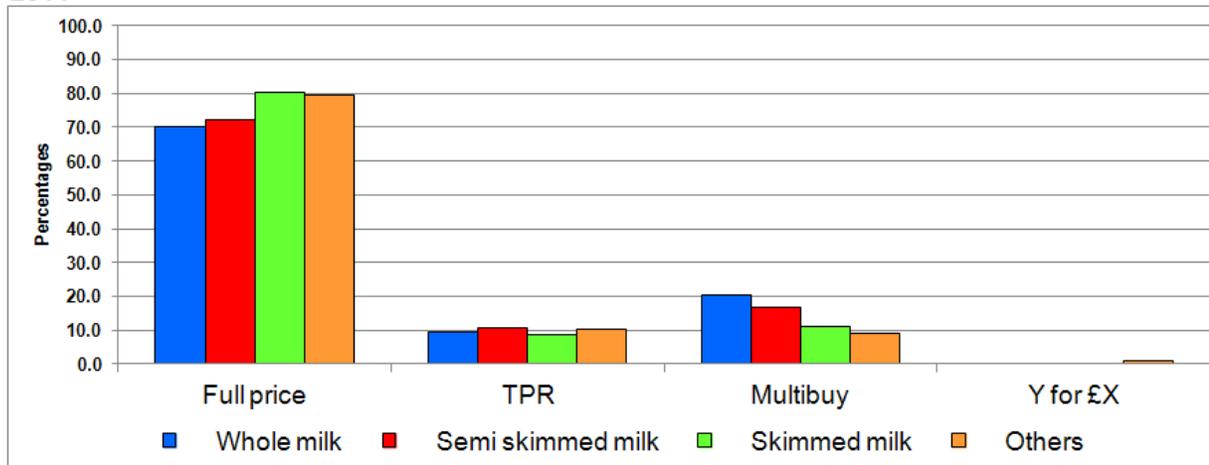
# Scottish market: Analysis by type of promotion – 2007 and 2011



2007



2011



Source: Own elaboration based on Kantar Worldpanel data.

There has been a change during the recession period and a higher proportion of milk is being marketed through promotions temporary price reductions and multibuy

# Final remarks



- The figures show the UK dairy market as mature market, growing on by increases in the population.
- Overall since 1974 the demand for milk and milk products has decreased steadily. The demand for cheese have been unstable over time (no specific trend).
- Within each category there have been clear changes that indicate that consumers are more interested on healthy products.
- On the milk and products category, the growth on the demand for “skimmed milks” is a clear signal in favour of healthy products.

# Final remarks



- On the cheese category, the increase in the purchases of cottage cheese and soft cheese can also be another signal towards healthy products.
- For the dairy sector as a whole, revenues from the UK market, in real terms, have decreased over time.
- For dairy farming, the consumer trends imply a contraction of the demand for milk (raw material).
- The use of promotions, if retailers keep their margins, may mean that processors and farmers may face more reductions in their profitability.
- For dairy research, the implications of consumer trends are to focus not only on **healthy products** but take into account other attributes such as **taste**.

# Final remarks



- Note that the effect of the introduction of new healthy products is not necessarily an increase the demand for the dairy categories but to substitute “unhealthy” products.

# Acknowledgements



- This work is part of the Scottish Government Rural Affairs and the Environment Portfolio Strategic Research Programme 2011-2016, Theme 5: Efficient and resilient supply chains for food.



Thank you for your attention!

# Disclaimers



- This work combines publicly available data from Defra's Family Food and proprietary data (Kantar Worldpanel).
- The link to Defra's Family Food is:  
<http://www.defra.gov.uk/statistics/foodfarm/food/familyfood/>
- The data from Kantar Worldpanel is exclusively for academic research on food and drink purchases trends in Scotland and not for commercial market research for businesses.
- SRUC do not provide market research services to businesses.

# References



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- Hughes, D. (2009b). European Food Marketing: Opportunities in Connecting with Consumers on Health and Well-being. *EuroChoices* 10(2): 48-54.
- Revoredo-Giha, C., Barnes, A. Leat, P. and Walker, A. (2013). *Scottish Dairy Sector Efficiency and UK's Dairy Purchases Trends - A Contribution to the Scottish Dairy Sector Review*, SRUC, Edinburgh.