

NICE EXPERT TESTIMONY Frances Swallow – Category Technical Executive Nicola Currie – Category Technical Controller

INTRODUCTION

Greencore Group has a turnover of around €1.5 billion, employs over 8,000 colleagues and operates in four countries of the European Union and the USA. Following the acquisition of Hazlewood Foods in 2001, the majority of the Company's business now comprises of the convenience foods categories with core skills in customer-brand.

Its strategy for success is based on:

- Strong market position
- A 'Good Food Culture'
- Industry leading NPD (New Product Development) & innovation
- Lowest cost leadership in each of its categories.
- Investment in 'Centres of Excellence'

Greencore produces a wide range of convenience foods in twenty manufacturing facilities from prepared meals, quiche and bottled water to cakes, sauces, soups, pizza and sandwiches

FOOD MANUFACTURING PROCESS

Greencore Prepared Meals Category has three manufacturing facilities producing predominantly Italian and British meals. The largest of these facilities is in Warrington and produces approximately 1.2 million Italian meals per week, the largest product sector being lasagne. Lasagne recipes cover all categories: Value, Standard, Premium and Healthy. In brief the manufacturing process is as follows:

All raw materials are bought against agreed written specifications from Greencore approved suppliers. At delivery they are inspected, sampled and tested where relevant to ensure they meet the quality standards required. All pasta is freshly made and cooked in large in-line cookers; all sauce is made using kitchen store cupboard ingredients in large kettles. Although on a large scale the process is effectively the same as you would carry out in a domestic kitchen. Both come together in the high risk assembly area where the sauce is automatically deposited to the correct weight and the pasta is hand placed in the packs on large in-line conveyors. Each pack is visually assessed before it is sealed, date coded and packed

REGULATION

The site is audited and approved on a regular basis by the local Environmental Health Office and Trading Standards Officer. In addition they hold the British Retail Consortium Global Standard for Food Safety A grade accreditation and undergo an annual unannounced audit by our key customer and Greencore Group. This ensures that the highest standards of food safety and quality are maintained and continually improved upon.

DEVELOPMENT PROCESS

How do we adapt our recipes and manufacturing process to meet specific customer requirements?

All products are developed to a specific New Product Development (NPD) process which covers a set number of key gates. At all stages of the development cycle there is a close relationship between the food manufacturer & retailer.

Step 1 – Review of Category

The process firstly begins with a review of the category to understand market trends to ensure customer requirements are met. This process covers awareness of restaurant & ingredient trends, current topical affairs such as nutrition trends e.g. five a day campaign, changes in social & demographics. A benchmarking session of the current market is also reviewed to identify new opportunities.

Step 2 – NPD Brief

The NPD brief is written to capture all the points noted in the category review. Most NPD briefs are driven by our market knowledge.

Step 3 – Concept Generation.

Once a firm understanding of the market & customer requirements have been established products are developed by a team of chefs. At this stage, as well as close attention to the organoleptic attributes of the product, there is also consideration to the nutritional content to ensure they meet the Food Standard Agency (FSA) guidelines. Any health claims or benefits which can be promoted are also noted during this process. e.g. 5 a day claims, low fat. There are also strict guidelines for the use of additives, the use of artificial colours, flavours & preservatives are not permitted.

Step 4 – Product Sign Off

Products are signed off against a number of targets, ensuring nutrition content falls within the FSA guidelines. Products are also tested by a trained consumer panel, carefully selected to the target market to verify the product is viable.

Step 5 – Scale up trials/verification

Products are then scaled up to factory trials. At this point all products are sent for full nutritional analysis & shelf life testing. Packaging is generated & ingredient declarations are confirmed.

Step 7 – Launch

Products are launched into the market.

Step 8 – Product Review

All products are reviewed 6 weeks post launch for quality. Nutritional declarations are validated annually on standard products and quarterly on healthy products where we are making a claim.

How do we adapt a Lasagne to meet the different tiers in a range e.g. Value, Standard, Premium & Healthy Living?

All products are developed to the same development cycle regardless of the tier. All products must meet the same strict criteria for nutrition content, particularly saturated fat & salt. Value lines through to Premium lines all use similar base materials and no artificial colourings, flavours or preservatives are permitted in any of the ranges.

To further illustrate this point Table 1 compares ingredient declaration for a Value, Core, Premium & 'Healthy' Lasagne.

Table 1 - Ingredient Declarations for Tesco Lasagne Range*

Value Lasagne 300g	Light Choices Lasagne 430g	Core Italian Lasagne 400g	Finest Lasagne 620g
Cooked Egg Pasta (21%),	Tomato (24%), Cooked	British or Irish Beef (22%),	British or Irish Beef (22%),
Water, Tomato Purée,	Egg Pasta (17%), British or	Tomato (16%), Milk,	Tomato, Cooked Free
British or Irish Beef (12%),	Irish Beef (14%), Skimmed	Cooked Egg Pasta (15%),	Range Egg Pasta, Milk,
Tomato (11%), Milk,	Milk, Tomato Purée, Water,	Water, Mature Cheddar	Water, Red Wine, Wheat
Onion, Cornflour, Mature	Onion, Cornflour, Cheese	Cheese (4%), Onion,	Flour, Tomato Purée,
Cheddar Cheese (1.5%),	(2.5%), Red Wine, Carrot,	Whipping Cream,	Whipping Cream, Onion,
Wheat Flour, Single Cream,	Single Cream, Garlic Purée,	Cornflour, Tomato Purée,	Grana Padano Cheese, Beef
Carrot, Celery, Butter, Salt,	Celery, Wheat Flour, Salt,	Carrot, Celery, Red Wine,	Stock, Mature Cheddar
Beef Stock, Garlic Purée,	Parsley, Beef Stock, Basil,	Wheat Flour, Butter, Salt,	Cheese, Celery, Carrot,
Vegetable Oil, Oregano,	Mustard Powder, Black	Garlic Purée, Beef Stock,	Cornflour, Garlic Purée,
Basil, Black Pepper, Sugar,	Pepper, Bay, White Pepper,	Vegetable Oil, Parsley,	Butter, Salt, Vegetable Oil,
White Pepper. Cooked Egg	Nutmeg. Cooked Egg	Basil, Black Pepper, Bay,	Oregano, Thyme, Black
Pasta contains: Durum	Pasta contains: Durum	White Pepper, Nutmeg.	Pepper, Bay, White Pepper,
Wheat Semolina, Water,	Wheat Semolina, Water,	Tomato contains: Tomato,	Nutmeg. Tomato contains :
Pasteurised Egg. Beef	Pasteurised Egg. Tomato	Tomato Juice. Cooked Egg	Tomato, Tomato Juice.
contains: Beef, Beef Fat.	contains: Tomato, Tomato	Pasta contains: Durum	Cooked Free Range Egg
Tomato contains: Tomato,	Juice. Beef Stock contains:	Wheat Semolina, Water,	Pasta contains: Durum
Tomato Juice. Beef Stock	Beef, Salt, Yeast Extract	Pasteurised Egg.	Wheat Semolina, Water,
contains: Potato Starch,			Pasteurised Free Range
Salt, Yeast Extract, Dried			Egg. Beef Stock contains:
Beef, Bay, Thyme, Black			Beef, Salt.
Pepper.			

^{*(}data valid for June 2009)

All products use the same key ingredients – e.g freshly made pasta, tomatoes. The step changes between the tiers are made by different amounts of the ingredients. For example Value Lasagne contains 12% Beef compared to Finest Lasagne which contains 22%. Premium lines have more direction to food cues using free range eggs, red wine & named ingredients with provenance .e.g Grana Padano cheese.

The Food Standards Agency has identified saturated fat & salt as the main diet-related risk factors contributing to the onset of CVD. As a result in May 2009 the Agency published revised salt reduction targets for 2012. The food industry has been addressing this issue for some time, working hard to control, where possible, the salt & saturated fat contents foods. Table 2 shows how saturated fat & salt have been reduced over the past three years in core Lasagne equating, to 11% less salt & a 79% reduction of saturated fat. This product therefore meets the guidelines set by the FSA of 0.63g salt/100g by 2012 3 years early.

Table 2 – Nutrition comparison of Lasagne between 2007 and 2009

PRODUCT NAME	Saturated Fat (g/100g)		Salt (g/100g)			
YEAR	2007	2008	2009	2007	2008	2009
Core Italian Lasagne 400g	7.0	3.9	3.9	0.68	0.68	0.6

It has also been noted by the Department of Health (2008) there is considerable variation between death rates from Cardiovascular Disease (CVD) between socioeconomic groups; with premature death from CVD being three times higher in lower socioeconomic groups than more affluent groups. Table 3 demonstrates how there is negligible difference (with the expectation of the healthy tier) between the ranges for salt & saturated fat, with Value & Premium having the same values.

Table 3 - Nutritional Content of Tesco Lasagne Range*

PRODUCT NAME	Saturated Fat (g/100g)	Salt (g/100g)	
Value Lasagne 300g	2.6g	0.6g	
Light Choices Lasagne 430g	1.2g	0.6g	
Core Italian Lasagne 400g	3.9g	0.6g	
Finest Lasagne 620g	2.6g	0.6g	

^{*(}data valid for June 2009)

Do briefs or specifications vary between retailers?

Each retailer has there own specific guidelines that must be met and we incorporate these in the development process.