































Recipe for change





Our recipe for change

By Melanie Leech

Food and Drink Federation

The UK food and drink sector is hugely innovative. And it's thanks to our sector's world class capabilities in research and development, and its deep knowledge of consumers, that our members have been able to respond so positively in the ongoing debates about the health of the nation by developing new products for consumers and refreshing old favourites so that they are lower in fat, sugar or salt.

Changing the recipes of much-loved British brands is a complex task – and it needs to be done in a way that does not impact functionality, quality or price. As you will read in this new report, our members have been voluntarily embracing this particular challenge for a number of years, and they are now leading the way when it comes to the reformulation of popular products – meeting consumer concerns about health in a way that doesn't make any compromises on taste.

Our report profiles the work of member companies of all sizes, from the biggest multinational to smaller private operators, working across every type of product category. We asked each of these companies to focus on one aspect of their innovation projects – as a way of giving

you a flavour of all the work currently underway across our sector. Each case study will help you to understand the very significant technical, financial and consumer challenges that companies need to overcome with every new product or recipe development.

I believe you will be impressed by the individual stories that jump off each page in this report; but remember these are just a small sample of the huge range of voluntary initiatives being taken by food and drink companies across the country.

Change on this scale requires a huge financial commitment by business. The recession is clearly forcing companies to reprioritise their investment decisions, and policy makers and regulators do need to be sympathetic to the immediate economic pressures faced by food and drink companies. They may need to be more realistic about the pace at which our members can be expected to keep delivering new and expensive innovations in what has become a very competitive, value-driven market.

That said, everybody should be absolutely clear, our members remain totally focused on delivering the best possible products for consumers. This report is, therefore, a timely reminder that our commitment to healthier recipes is long-standing – in fact, it was a key pillar of the industry health and wellbeing action plan unveiled by Food

and Drink Federation members way back in 2004.

You will not just hear from members of the FDF in this report. As you turn the next few pages, you will see that we have asked a number of experts to give their perspective. Why do they believe changes to products are so important? What do they think has been achieved to date? And what hurdles are now facing manufacturers? The answers can be found in the thoughtful essays that appear at the start of this report.

Is reformulation the sole answer to society's concerns about the health of the nation? Of course not. That's why our sector is focusing on a range of areas where we know we can make the biggest difference. Whether it's the provision of clearer on-pack nutrition labelling or the introduction of workplace wellbeing schemes, our members are leading the way. We are also committed to continue working in genuine partnership with Government and others to deliver long-term solutions that will improve the health of the nation. We feel these are all important ingredients for any successful public health strategy. Or to put it another way... this is our recipe for change.

Melanie Leech is Director General of the Food and Drink Federation. For more information visit www.fdf.org.uk

Working in partnership

By Tim Smith

Food Standards Agency

At the Food Standards Agency we recognise the challenge that reducing the amount of salt, saturated fat and added sugar presents to the food industry. However, reducing the levels of these nutrients in processed foods is vital if we are to provide consumers with healthier choices and tackle the growing tide of diet-related disease.

Working in partnership with food businesses on product reformulation since 2003, we have taken a voluntary approach, establishing constructive working relationships with the retail, manufacturing and catering sectors.

Our approach has been informed by extensive discussions with food and drink producers and their trade bodies to understand the legal, technical and consumer acceptability challenges faced. It allows industry to respond flexibly, encourages innovation and takes account of the different business models, product portfolios, ingredients and processes involved. We encourage businesses to reformulate as part of their usual programme of product review and development.

The benefits of a voluntary approach are

clear from the progress made by industry in the complex area of salt reduction. All sectors of the food industry - retailers, manufacturers, trade associations, caterers and their suppliers – have responded positively to, and continue to be engaged with, the Agency's calls to reduce salt in foods. Salt intakes have so far fallen by 0.9g, which is estimated to prevent around 6,000 premature deaths each year. It is encouraging that action to reduce the average amount of salt we are eating on a daily basis is having a positive impact. But while the results so far are positive, recent surveys by Which? and Consensus Action on Salt and Health show there is still plenty to do.

Following this success, we are now working in partnership with food businesses to reduce saturated fat, added sugar and consider portion sizes. We know that supermarkets and manufacturers have already made progress in this area so that there is an increasing range of lower saturated fat foods available and we'd like to see more of this. We have again engaged with industry to understand the complex issues involved and develop voluntary recommendations accordingly.

In the last 18 months, we've also seen good progress by the catering sector to improve the nutritional content of food eaten out of the home. So far the Agency has secured commitments from the UK's

biggest contract caterers and suppliers and major high street chains.

Many retailers and manufacturers have made real strides in reformulating their products and I would like to pay credit to those who have done this. We know that some have gone further and faster than their peers. We know it can be done and I want to encourage all companies to do more, especially in their most popular products. Some areas of industry have achieved more than many thought possible when we began this groundbreaking work.

By putting consumer health first, and embracing the challenges, UK manufacturers and retailers are now leading the field and setting trends which others around the world are following. It is essential we continue to work together to increase the variety of healthier foods available.

Tim Smith is Chief Executive of the Food Standards Agency. For more information on its work on reformulation visit www.food.gov.uk



Health is good business

Dr Susan Jebb

MRC Human Nutrition Research

Food and drink in Britain today is more varied and readily available than ever before. In theory, it is easier to choose a healthier diet, yet diet-related diseases continue to impose a heavy toll – on individuals and their families, on business (through lost productivity) and the state, especially the health care system.

In Britain diet-related disease is dominated by the consequences of over-consumption – too many calories, too much fat, sugar and salt. Yet in sub-groups of the population classical nutrition deficiencies diseases persist, together with more subtle effects of sub-optimal intake. The scale of diet-related ill-health is too great, the problem too complex, to leave the responsibility entirely for consumers to always make the healthy choice and thus to drive change across the food industry. The industry itself must take responsibility too and lead the change towards a healthier diet.

The UK is a world leader in nutrition research aimed at improving health and reducing the burden of diet-related illness. The need for basic, strategic and applied nutrition research has never been stronger MRC Human Nutrition Research exists to develop the evidence underpinning

public health nutrition strategies, working in collaboration with national and international partners on matters of mutual interest and with shared benefits. Our research focus reflects the major public health nutrition priorities, working across the life-course and with an emphasis on vulnerable groups. Our collaboration with others, including policymakers, industry, health professionals and the third sector ensures that the emerging science can be rapidly translated into policy and practice.

In recent years these strengths in nutrition science, combined with the greater prominence given to food issues in Government, have encouraged the UK food industry to take a leading role globally in product reformulation and innovation. Real progress has been made on reducing trans fatty acids and salt, with work to reduce saturated fat following on. Through this endeavour, together with major improvements in the clarity and prominence of nutritional information through front-of-pack labelling, consumers are able to make an informed choice.

But it is increasingly evident that a broader approach is needed to transform the eating habits of the nation. The focus needs to move beyond the composition of individual products to encompass the wider food environment, including the marketing and promotion of foods, and to address the social and cultural norms which underpin consumer behaviour. This is not solely the responsibility of the food

industry – but the industry is an essential partner. Convenience foods, which fit with busy lives, need to be transformed to deliver on health goals too. There needs to be a new focus on calories, through appropriate portion sizes. Promotions need to be shifted to help people segue into healthier options, not reinforce purchases of less healthier foods. Nutrition messaging needs to be aligned to give clear consistent information, supported by robust, evidence-based health claims.

The food industry thrives on a rich knowledge of its consumers and surveys show that the public aspire to a healthier diet but find it difficult to achieve. Far from being 'bad for business', the opportunities to be gained from supporting consumers to meet their aspirations are considerable. Health is good for business.

Dr Susan Jebb OBE is Head of Nutrition and Health Research at the MRC Human Nutrition Research. This article was written with her colleague Claire MacEvilly. For more information visit www.mrc-hnr.cam.ac.uk



There are no simple changes

Dr Steven Walker

Campden BRI

As leaders in the field of food science and technology, all of us at Campden BRI know that seemingly simple changes to recipes can have significant consequences for product safety, quality and manufacturing. Product reformulation has to anticipate and allow for these changes. It demands of manufacturers and their advisers a full understanding of the science of the product and the technology of its production. Anything less than this can pose serious risks.

Salt, for example, has a preservative effect: at appropriate levels it can prevent or reduce the growth of problem microorganisms. Sophisticated computer models can predict the effect on shelflife of changing salt levels. By reducing the salt in ham from 3.7% to 1.9%, for example, the time taken for an observable increase in the level of *Clostridium* botulinum falls from 22 to 9 days. So, if salt is taken out some other strategy for product preservation and safety assurance is needed. In other instances, changes may reduce the 'use by' date, thereby increasing costs and potentially increasing wastage.

Whilst very useful, this 'predictive' approach is not by itself sufficient. It would

usually be followed with experimental assessment, in which reformulated prototypes are 'challenged' with the micro-organism of concern under appropriate conditions to assess actual microbial growth. The planning, execution and interpretation of such trials demand significant scientific and technical expertise.

Whilst fat does not have a preservation effect, its replacement with a substitute can affect the water available to microorganisms (water activity) which can be important in preservation. Other ingredients influence product pH, which also helps control microbial growth in many products.

Product safety is assured through the process of HACCP (Hazard Analysis Critical Control Point), which helps ensure that hazards are controlled. Any change to a product's formulation or process requires a thorough review of the HACCP plan – to ensure that safety is not inadvertently compromised. This again demands scientific, technical and operational expertise.

Reformulations can also have consequences for the mechanics of processing. While bread is not particularly high in salt, it is part of our staple diet and so contributes to dietary salt intake. However, reducing salt not only influences bread flavour, texture and appearance, but can significantly increase dough

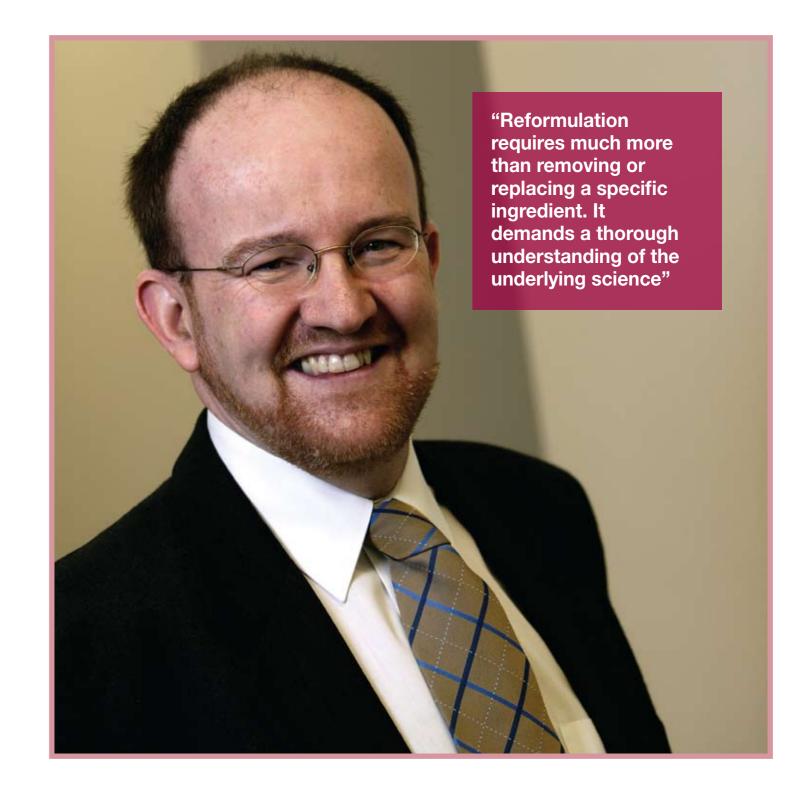
stickiness. This poses potentially major complications for the equipment used in dough production.

Maintaining product quality is another important aspect of reformulation. Some 10 years ago research demonstrated significant consumer resistance to lower fat bakery products: they were felt to be of poorer quality, were more expensive and the achievable fat reduction was small. It has taken extensive formulation trials, in which fat was replaced with starch for example, to establish ways of producing appealing cakes with significantly less fat and calories.

When products have been reformulated, care has to be taken with product labelling, to ensure compliance (for instance with nutrition claims regulations) and to avoid consumer confusion (for example, by not updating cooking instructions).

In short, reformulation almost always requires much more than removing a specific ingredient or replacing it with a substitute. It demands a thorough understanding of the underlying science and technology, and can require significant research and development to avoid compromising product safety and quality.

Dr Steven J. Walker is Director General of Campden BRI. For more information visit www.campden.co.uk



Consumers are well served

David Jago

Mintel

The food and health issue remains at the forefront of public debate in the UK – rarely can there have been a time when the national diet was under such intense scrutiny. Healthy eating has moved firmly from cranky faddism into the mainstream, with a plethora of low calorie, low fat, low salt, additive free and 'better-for-you' initiatives jostling for space on supermarket shelves. In such a competitive climate, no manufacturer can afford to be off-message and many smaller suppliers have found healthy market niches.

Increasingly, UK consumers are acting on this imperative. In just five areas reviewed by Mintel (dairy, baked goods, soft drinks, confectionery, and crisps and snacks), healthy eating options are now worth around £7bn and retail sales of these healthier options have been growing at twice the rate of the categories as a whole. Total sales are in the region of £8bn when you include sales of reduced fat and reduced calorie foods in other categories.

The food industry itself – both manufacturers and retailers – has come under severe criticism for its alleged role in encouraging poor eating habits. But most UK food suppliers now have healthy options and many have revamped entire

product ranges. In the 18-month period since January 2008, there have been more than 700 reformulated food and drink products launched in the UK – more than in any other European market. Over a third of these were in meals, processed meat, fish and side dishes; 14% were in sauces and seasonings; 11% in bakery; and 11% were in non-alcoholic drinks. But examples can be seen in every aisle of the supermarket.

Food manufacturers, brand owners and private label operators reformulate products for a variety of reasons – health is clearly the key factor, with the very visible activity around reducing fat, calories, sugar and salt. Another important focus recently has been the removal of artificial additives, which the consumer increasingly sees as part of the total 'wellbeing' picture. Of the 700-plus reformulations in the UK, 43% were labelled 'no additives/ preservatives' - a substantially higher level than in Continental Europe (26%). Others also reformulate from the point of view of further improving the quality of products, including an emphasis on local or Britishsupplied ingredients, as well as ethical sourcing.

Reformulation is happening across the range, at every price point. In retail, for example, you are as likely to see basic value lines being reformulated as you are premium own label ranges.

And all this activity has become a vital part

of the marketing mix for the brands that retailers sell.

In the snacks market, for instance, Walkers has reformulated its crisps and repositioned Wotsits as an oven baked snack now containing 25% less fat than in 2005. United Biscuits has reformulated its McVitie's biscuits to contain 50% less saturated fat while maintaining the same great taste. And in the soft drinks market Coca-Cola has reformulated Fanta, which is now made with real fruit juice, contains 30% less sugar and is free from artificial flavours and colours.

Such widespread activity indicates that there is no shortage of healthier options, which means the future of 'better-for-you' foods now lies as much in the hands of the consumer as it does with the food industry.

David Jago is Director of Insight & Innovation at Mintel. For more information go to www.mintel.com





apetito

As a company delivering meals to all sectors of the community, apetito believes food should be at its best at the point of service. The company has always had a strong focus on nutrition and has been dedicated to an ongoing and evolving programme of product reformulation since 2005.

Providing meals for vulnerable markets, such as healthcare and the elderly, means that both the nutrition content of meals and great taste are paramount. Key projects to date include the elimination of hydrogenated vegetable oils and monosodium glutamate from all meals, and now 80% of individual meals sold meet the company's moderate salt criteria and comply with the Food Standards Agency's quidelines.

The great challenge for apetito lies in retaining flavour profiles, gaining acceptance from high expectation consumers and pleasing the palate of an older clientele raised on saltier dishes. This is overcome by dedicated chefs and technologists in the product development team, together with extensive consumer panelling.

Approximately £600,000 has been spent on reformulation over four years. apetito has a

policy of avoiding the use of any unnecessary additives and preservatives, and to help strengthen and continuously improve its product offering, has recently invested in a dedicated reformulation technologist with the ambitious target of removing all artificial colours and flavours by 2011.

All of apetito's main meals are suitable for diabetics. It caters for a wide range of special diets, such as gluten free, high fibre and lower fat. apetito also provides a wide choice of texture modified products. Offering total transparency, all product information is also available online for customers to view. apetito's Select range was launched under the Wiltshire Farm Foods brand in 2008, and is completely free from artificial colours and flavours.

Foodforthought

- apetito's ongoing and evolving reformulation programme has been in place since 2005
- The result is 80% of individual meals sold meet moderate salt criteria. apetito avoids the use of any unnecessary additives and preservatives
- In just two years apetito aims to remove all artificial colours and flavours
- apetito's key challenge was to discover the right mix of alternate seasonings to gain the acceptance of its elderly market, achieved through extensive trialling and consumer panelling
- To date, the programme has cost approximately £600,000

Inmyopinion

"We are on a journey to ensure our customers always receive food that is of the best quality, in terms of taste, appearance, and nutritive value. But our journey does not stop here and we have committed ourselves to an ongoing development programme to continuously review products, to satisfy our customer needs"

Paul Freeston, Chief Executive, apetito

Baxters Food Group



Since 2000, Baxters Food Group has undertaken an extensive reformulation programme to ensure its soups meet or exceed salt targets set by the Food Standards Agency.

Salt is often raised as a concern in the soup category and Baxters has worked hard to reduce the salt content of its entire range. As salt enhances taste, the challenge has been to reduce the salt content without compromising flavour or resorting to the use of additives and alienating consumers.

Baxters, therefore, committed to a gradual salt reduction programme over a period of eight years. Today, the average amount of salt used in Baxters soup is approximately half of what it was. The whole range now comfortably meets the Food Standards Agency's 2010 targets for salt in soup and

is well placed to meet the proposed 2012 targets.

As well as reducing salt, Baxters has sought to minimise the use of additives in its soups. For example, ordinary table salt contains an additive to help it flow. By replacing this with sea salt, this additive has been removed.

Baxters soups are now free from all artificial colours and flavourings. The only preservatives used in its soups are from cured meats, such as bacon.

The increased consumer awareness of salt and additives has also been central to Baxters' new product development programme. The Healthy Choice range of soups was specifically designed to ensure that each serving provides at least one of the recommended five daily portions of vegetables; is a source of protein and fibre; is low in fat; is free from any artificial additives; and, of course, meets the Food Standards Agency's salt targets.

Foodforthought

- Baxters' reformulation programme has been in place since 2001
- The average salt content of Baxters soups is now approximately 50% that of 2001, equating to 190 tonnes of salt per year
- All Baxters soups are free from artificial colours and flavours, any preservatives come from cured meats used as ingredients
- As salt enhances taste
 the challenge has been to
 reduce salt content without
 compromising flavour or
 using additives
- The Healthy Choice range reflects Baxters' commitment to developing healthier products

Britvic Soft Drinks



With a portfolio including some of the UK's favourite brands such as Robinsons, Tango, Pepsi – which Britvic bottles in the UK for PepsiCo – and the Britvic brand, Britvic Soft Drinks is one of the two leading soft drink businesses in Great Britain producing 1.6 billion litres per year.

Britvic has been engaged for some time in various health and wellbeing initiatives, including the development of an extensive array of no-added sugar varieties and more natural products through new aseptic technology in its Rugby factory. Britvic has also embarked on a programme of existing-product reformulation to reduce sugar levels.

Reducing the sugar levels in some soft drinks is a particular challenge as consumers often welcome the texture and taste sensation offered by sugar. Britvic has, however,

successfully reduced the sugar content in a number of its products whilst maintaining or in some cases improving taste and consumer acceptability.

A good example of this is J_20 , Britvic's successful adult juice drink, which has been reformulated to achieve on average an 11% reduction in total sugars without adding sweeteners. The reduction was achieved by adjusting the pH, texture and flavour balance of the product, leading to positive consumer taste tests.

Regular Tango has also benefited from a 30% reduction in sugar levels to 4.4g per 100ml while the UK's leading kids' soft drink, Fruit Shoot, now contains 12% less sugar, as well as a low sugar variant, a pure juice (Fruit Shoot 100%) and a flavoured water (Fruit Shoot $H_{2}O$).

Britvic has an ongoing reformulation programme to ensure its products provide great taste, enjoyment and refreshment, which fit easily into a healthy, balanced diet. Britvic is committed to providing consumers with a range of soft drink choices and will continue to adapt its portfolio to meet changing consumer needs.

Foodforthought

- Reformulation has been a priority at Britvic since 2006
- The challenge has been to reduce the sugar level of products whilst maintaining the taste and texture
- The company has made significant investment in its reformulation programme
- Britvic's successful adult juice drink J₂0 now has on average 11% less sugar and no added sweeteners
- Reformulation projects take between six and 12 months to complete, from design and testing to production

Inmyopinion

"Taste is paramount for Baxters, so we had to consider carefully how to go about reformulation without compromising that principle. We believe the results speak for themselves, as our soups still reflect Baxters passion to produce the best tasting products using only the finest ingredients... and now they are even healthier!"

Nic Wheater, Innovation and Special Projects Director, Baxters Food Group

Inmyopinion

"Britvic is committed to responding to changing consumer needs through innovation and reformulation across our portfolio – the broadest of any soft drinks company in the UK – while offering great choices in taste and hydration both at home and on the go" Susan Turner, Head of Corporate Affairs, Britvic Soft Drinks

Kellogg's



Kellogg's has been providing nutritious foods for consumers for over 100 years and remains ever more committed to its founder's principle of "providing quality foods for a healthier world". A key element of the commitment is to offer a wide range of products which meet consumers' ever changing needs and tastes, alongside that of nutritional science. Innovation and renovation drive the broad portfolio represented by 46 ready to eat cereal products and 46 snack foods.

Breakfast cereals contribute less than 5% of total salt in the diet¹ and only 2.7% of salt purchased in the UK². Despite the low contribution, Kellogg's has had an active salt reduction campaign in place since 1998 and during 11 years of the programme has helped the category to reduce the salt content of breakfast cereals by 44%.

Reductions have been significant. For example there has been a 50% salt reduction in All Bran and Bran Flakes, a 47% reduction in Special K and a 25% reduction in its flagship brand, Kellogg's Corn Flakes. All reductions are subject to rigorous consumer testing to ensure acceptability. The success of the programme is reflected in the company sales with brands such as Special K continuing to grow.

Kelloggs was the first cereal company to include nutrition information on its packs back in the 1930s and was the first food manufacturer to voluntarily introduce Guideline Daily Amount (GDA) information on the front of pack in 2005. The GDA label enables consumers to clearly see the level of salt and other nutrients that are contained in a suggested portion, compare different products in the cereal aisle, and help keep track of salt intake against the GDA of 6g.

- 1. Henderson L & Gregory J (2003) The National Diet and Nutrition Survey: adults aged 19-64 years
- 2.TNS Worldpanel Nutrition Service

Foodforthought

- Kellogg's has had an active salt reduction programme in place since 1998
- In the past 11 years Kellogg's has helped the category to achieve a 44% reduction in the salt in breakfast cereals
- A key challenge is to continue salt reduction whilst maintaining consumer acceptance
- The company has invested significant resource to the project
- Kelloggs was the first cereal company to include nutrition information on its packs back in the 1930s and was the first food manufacturer to voluntarily introduce Guideline Daily Amount (GDA) information on the front of pack in 2005

Kingsmill



As part of the Federation of Bakers, Kingsmill has been committed to reducing salt levels since 2004. Salt levels have been reduced gradually and without any salt replacers, so as to minimise the flavour impact for consumers. Since 2004 an estimated 60 tonnes of salt has been removed from the Kingsmill range.

Bread is one of life's staple foods, eaten by most people every day. It's a good source of carbohydrate and fibre, it is low in fat and sugar, and is a key source of vitamins and minerals in the UK diet; the one area of concern has been the salt level.

Salt has an important role to play in bread making – one of the key challenges for manufacturers is that salt helps to control fermentation, so when the level is reduced it causes problems that can impact on product quality. The Food Standards Agency is

working closely with the baking industry to examine the role of salt in bread, in order to find ways to optimise the baking process and minimise the impact on the finished bread.

The investment for all of the work on Kingsmill has been substantial in terms of ingredient costs, research and implementation, as well as continued laboratory testing for the 11 bakeries around the country.

Kingsmill's priority is to continue to provide great tasting, quality products for consumers. Salt reduction is a key project for the business. However, it is also looking for other ways to communicate its products' nutritional goodness to consumers. Kingsmill 50/50, made with wholegrains, is just one example of the way in which the company is providing a range of breads to suit consumer needs.

Foodforthought

- The reformulation programme has been in place since 2004
- An estimated 60 tonnes of salt has been removed from the Kingsmill range
- The company puts consumer needs at the heart of all of its development. Reducing levels of salt gradually has minimised the flavour changes, helping consumers adjust to the lower levels
- Salt is fundamental to bread making, so reducing salt affects both the process and the quality of the finished bread
- Investment to implement salt reduction has been substantial in terms of ingredient costs, research and implementation

Inmyopinion

"As part of our commitment, Kingsmill has been working for five years on gradually reducing salt levels, ensuring we don't unduly affect consumers' palates. We have made significant reductions in the amount of salt we use, helping consumers to make a healthier choice, while retaining our reputation for producing the highest-quality products"

Mark Fairweather, Chief Executive Officer, Kingsmill

Inmyopinion

"Kellogg's constantly reviews external science and uses this insight to constantly improve our cereals and snacks. Salt has been something we have driven down, but equally we have invested a significant amount of time and money in bringing new nutritional science to the category alongside the vitamins, minerals and fibre consumers have come to expect from our products" Alyson Greenhalgh-Ball, Head of Nutrition, Kellogg's



Kraft Foods

People take an ever-greater interest in their health, particularly in what they eat. But many find it difficult to make big changes to their lifestyles. Kraft Foods believes it can help in three ways: by offering a choice of products to meet different tastes, occasions and nutrition goals; by providing easy to understand nutrition information to help people make decisions based on facts; and by working with others to promote consistent messages about healthy lifestyles.

When developing products, Kraft Foods look through consumers' eyes to find fresh ideas to make great-tasting foods that fit within healthy lifestyles. People in the UK want to limit fat, salt and sugar intake, look for a range of convenient choices and will not sacrifice delicious taste for health.

Reformulation has been an important part of Kraft Foods' plans for many years. The company does what it can to reduce salt and fat and offer lower calorie options.

Light Philadelphia now outsells the regular variety, Philadelphia Splendips provide a satisfying snack with less than 150 calories and Philadelphia Mini-tubs come in single serve packs.

Kraft Foods has reduced salt by more than 30% across the Dairylea range since 2002 and continues to search for further improvements. Since 2006 salt and fat have been reduced in Dairylea Light Slices by 18% and 14% respectively. Dairylea Light Spread has just 7% fat and the classic Dairylea triangle comes in a 17.5g serving to help portion control.

These changes are reflected in other parts of the world. For example, in the US the company has reduced sodium in many of products with an average reduction of 14% across its range.

Foodforthought

- Dairylea's reformulation programme began in 2002
- Salt has been reduced by one third across the Dairylea range and Kraft continues to search for further improvements
- This work is part of a global push on health with more than 5,000 'better for you' options available across the world
- The company's key challenge is to improve nutrition without compromising taste or safety
- Kraft has invested well over \$20m in worldwide research and development over several years to reduce sodium in its products

Inmyopinion

"We want to offer people food choices that fit their lives. Our reformulation work aims to meet the challenge to improve nutrition without compromising on the quality and taste people expect from their favourite brands"

Nick Bunker, VP and Managing Director, Kraft Foods UK & Ireland

Mars Food UK



Mars Food UK has had great success with its health and nutrition programme, which aims to improve the nutritional content of its products whilst maintaining the great taste that consumers expect. A commitment to continual review of the portfolio ensures the delivery of products that contribute to a healthy, enjoyable and balanced lifestyle. The commitment is exemplified in progress made in reducing salt levels in sauces and rice whilst ensuring no compromise on taste.

An intensive programme was initiated in January 2007 involving a combined team – from science and nutrition, product development and marketing – with the aim of achieving the guideline targets for salt reduction set by the Food Standards Agency across the portfolio.

With more than 100 recipes across three

brands, it was a huge challenge to manage a programme of recipe reformulation aligned with a programme of label changes. In order to ensure there was no compromise on taste, all reformulated recipes were 'taste tested' by an expert panel before quantitative research was carried out and final sign-off given by the marketing team.

To date, Mars Food UK has achieved a salt reduction of up to 35% across Dolmio, Uncle Ben's and Seeds of Change sauces. Over the past two years, more than £10 million has been invested in consumer communications to support the integrity of the portfolio.

Ultimately for Mars, this work is an ongoing commitment to consumers, rather than a one-off project. Continuous improvement programmes are in place to overcome remaining technological challenges and provide consumers with the recipes they trust.

All of Mars' food products are free from artificial colours and flavours and, as a leading food manufacturer the company is committed to providing nutritional information to help consumers make informed choices. This includes clear nutrition signposting using Guideline Daily Amounts on the front of pack.

Foodforthought

- An intensive reformulation programme began in 2007
- To date a reduction of up to 35% in salt has been achieved across Dolmio, Uncle Ben's and Seeds of Change sauces
- A key challenge was to manage a complex project of reformulation and labelling changes, while ensuring information provided was clear and easy to navigate
- All reformulated recipes have to pass 'taste tests' by a panel of experts before receiving sign off
- Above and beyond implementation costs, £10m has been invested in consumer communications to support the integrity of the food portfolio

McCain



McCain takes the nutritional content of its products very seriously and for many years has been making sure its products are as healthy as they can be, in particular striving to make ongoing reductions in saturated fat and added salt.

The company has achieved its position as the UK's number one provider of frozen chips and potato products by constantly innovating to provide high quality products, making sure its consumers enjoy potatoes' natural, nutritious and great taste. A dedicated innovations department in Scarborough ensures that where product reformulation options are possible, or indeed needed, opportunities are pursued.

Back in the 1980s, McCain developed 5% Fat Oven Chips, which offer a healthy alternative to one of the nation's favourite foods. Simply prepared – using potatoes that are washed, peeled, cut, cooked and then frozen – they contain no added salt and are naturally low in saturated fat.

Building on this, last year the entire potato products range converted to using sunflower oil in preparation – a healthier option. This change has decreased saturated fat levels by over 70%, meaning an average level of 0.8% saturated fat across the retail and foodservice ranges. McCain has also introduced new, more efficient production techniques, such as dedicated oil recovery systems, which draw surface oil away from the product through specially designed conveyor belts.

McCain continues to work with public sector partners to identify ways to decrease added salt levels, seeking reformulations which do not affect the quality of the finished product and allow for changing consumer tastes. Efforts to date have reduced potato products' added salt levels by more than 20% and McCain is committed to engaging in a rolling programme of adjustment.

Foodforthought

- McCain takes the nutritional content of its products very seriously and for many years has been making sure its products are as healthy as they can be
- Added salt levels have been reduced by more than 20% and saturated fat levels by more than 70%
- In addition to consumer research, McCain works with public sector partners, including the FSA, constantly to address reformulation
- A dedicated innovations department has been created to focus on product reformulation opportunities
- Saturated fat levels have been reduced thanks to investment in oils and production techniques

Inmyopinion

"At Mars Food UK we are proud of the progress we have made to reduce levels of salt in the diet. While delivering the great taste that our consumers expect of our brands, we are continuing to invest significant resources in our health and nutrition programme to meet the demands of our consumers and deliver products that contribute to a healthy, enjoyable and balanced lifestyle" Rob Hughes, Managing Director, Mars Food UK

Inmyopinion

"McCain Foods (GB) is proud to produce high quality products which allow our consumers to enjoy the natural, nutritious and great taste of potatoes as part of a healthy, balanced diet. We will continue to innovate to ensure our products are as healthy as they can be, in particular striving to make ongoing reductions in saturated fat and added salt"

Bill Bartlett, Corporate Affairs Director, McCain



Macphie of Glenbervie

Macphie of Glenbervie has a long-standing history of innovation and always looks for opportunities to enhance its product range to better meet consumers' needs, particularly in health and nutrition.

In 2004, Macphie food scientists analysed the composition of its branded portfolio, which amounts to more than 350 products. A reformulation programme was introduced to improve the nutritional profile of its diverse range of cake and confectionery mixes, cream alternatives, sauces, desserts and savoury snacks. Benchmarks were set to incrementally remove fat, salt and additives without affecting taste.

As a manufacturer of food ingredients rather than finished branded products, Macphie faced considerable issues in not only addressing its own food ingredients but also in advising, supporting and collaborating with its customers to ensure that any developments did not affect the finished products.

Extensive development work was carried out, over two years, to remove hydrogenated vegetable oil. Once the technical challenges of stability, product performance and shelf-life were successfully overcome, work started to

progressively reduce salt levels to meet the Food Standards Agency's salt targets.

All reformulated products underwent multiple pilot and factory trials. Stringent testing took place by in-house technical experts, and professional chefs and bakers to make sure that the end results were unaffected. Working in partnership with Food Innovation at Abertay University, new recipes were benchmarked and evaluated for acceptability by consumer sensory tasting panels. For example the new versions of Macphie's Cheddar Cheese Sauce and American Crème Cake Mix now contain 30% less salt.

Macphie is working hard to convert all products to natural flavours and colours, and novel technologies used to reduce or replace saturated fat are under review.

Macphie has an ongoing innovation programme and continues to develop new products that help consumers to choose healthier options. Examples include a low Glycaemic Index (GI) Multi-seed Bread Concentrate, an Oat Bread developed in collaboration with the Rowett Institute of Nutrition and Health to help control diabetes, and a pioneering Barley Bread.

Foodforthought

- The company reformulation programme was initiated in 2004
- To date 250 tonnes of salt and 340 tonnes of fat have been removed from the portfolio
- Over 10% of Macphie's 300-strong workforce is dedicated to consumer research and product development
- The challenge has been to create new recipes that are as appealing as current favourites without compromising on taste, enjoyment, quality or functionality
- Some £3m has been invested to implement the programme

Inmyopinion

"The success of our business depends on meeting customer and consumer needs. As far as addressing the issue of salt, fat and additives reduction we made it a priority to invest in reformulation and innovation programmes to widen consumer choice. However, we will not compromise on the taste, quality or functionality of our food ingredients"

Ronnie Leggett, Commercial Director, Macphie of Glenbervie

Nairns



Nairns has long been at the forefront of the manufacture of biscuits and oatcakes that are better for you. That's why twin targets of lower salt content and 'better for you' fats have been the priority of its product improvement programme.

In 2003 work started on salt reduction in Nairns Rough Oatcakes. High levels of salt were traditionally considered to be a necessity in the production of an oatcake both to achieve taste and texture.

The new product development department initiated an in-depth study of the challenge and using a programme of kitchen and plant trials underpinned by extensive consumer research the company has been able to reduce the salt levels in Nairns Rough Oatcakes by 56%.

To achieve this remarkable result new capital equipment was purchased and new baking profiles were introduced, which have improved the texture, taste and consistency of the product.

Work continues to investigate further reductions in the salt content of the oatcake range.

Nairns has started work on a Knowledge Transfer Partnership project with The Scottish Crop Research Institute to progress work on 'better for you' fats. Since 2006 the project has already shown a 37% reduction of saturated fats in Nairns Rough Oatcakes.

Work is being carried out to understand the relationship of the chemical pathways which cause rancidity in oatcakes so the shelf life of the product can be extended whilst reducing the amount of saturated fat.

The key, however, is to retain the product's quality, taste and texture, for which Nairns is renowned. The company continues to be proactive in the delivery of new recipe formulations to meet the requirements of its discerning customers.

Foodforthought

- The company's salt reduction programme began in 2003
- A 56% reduction in salt has been achieved on the back of new equipment and baking profiles
- A key challenge is to understand the chemical pathways which cause rancidity in oatcakes in order to extend the shelf life whilst reducing the saturated fat
- Work continues to achieve further reductions in salt content of the range
- New manufacturing equipment has been purchased to improve product, taste, texture and consistency

Nestlé



As the world's largest food company, Nestlé is committed to Nutrition, Health and Wellness and believes that research can help make better food so that people can live better lives.

In 2007, hydrogenated vegetable oil was removed from Coffee Mate, resulting in a 21% decrease in saturated fat. In 2008, the sodium in Herta Pork Frankfurters was reduced by 10% and Carnation Evaporated Light and Condensed Light Milks contain 56% and 98% less fat than the standard products.

The Nestlé Research Centre in Lausanne, Switzerland, is one of the world's leading research institutions in food, nutrition and life sciences, employing over 300 scientists. The global Nutrition, Health and Wellness initiatives are also put to the scrutiny of the Nestlé Nutrition Council. Composed of leading scientists and a Nobel Prize winner, the Council's advice helps to shape Nestlé's nutrition strategy and policies globally.

Nestlé knows that consumers are seeking healthy foods that do not compromise on taste. It uses a '60:40+' test, which is designed to see if 60% of consumers prefer the taste of Nestlé products over the leading competitor. The '+' is the nutritional check against internal standards and UK-specific targets for key nutrients such as calories, sugars, fat, saturated fat and trans fats.

The company regularly employs the 60:40+ test to its most successful brands to ensure consumers prefer the products on taste. It also identifies the health benefits of a food or drink to guarantee that taste is combined with good nutrition.

Nestlé products are not just checked against its own, rigorous internal standards. It also benchmarks products against UK-specific nutrient targets, profiles and recommendations. In 2008, Nestlé audited its entire UK brands portfolio and, where appropriate, has identified actions for ongoing improvement.

Foodforthought

- Reformulation policies have been in place at Nestlé since 1999
- Between 2005 and 2007
 12.3% less sugar; 15.6% less
 fat and 13.6% less salt were
 used in UK products
- Nestlé works hard to implement national nutritional reformulation policies while maintaining overall taste
- The 60:40+ test ensures that consumers prefer products on taste whilst maintaining nutrition standards
- Nestlé invests 1.9bn Swiss
 Francs every year in research
 and development more than
 any other food company

Inmyopinion

"Our customers are becoming increasingly sophisticated in their knowledge of what constitutes a healthy and balanced diet. At Nairns our highest priority is to meet their expectations with delicious tasting products"

Mark Laing, Managing Director, Nairns

Inmyopinion

"At Nestlé we take our commitment to reformulation seriously. In many categories we already lead the way offering products with some of the lowest levels of salt, saturated fat and sugar. As a responsible manufacturer we will continue to look for ways to reduce them even further without compromising on the quality and taste that our consumers expect from a Nestlé product"

Paul Grimwood. Chief Executive Officer. Nestlé UK & Ireland

PepsiCo



As the maker of many of the nation's favourite brands, enjoyed by millions of consumers every day, PepsiCo has a real contribution to make in supporting healthier lifestyles. It aims to do this by offering a range of products that are as healthy as possible without compromising on taste.

Reformulation is a key focus of the drive to make the PepsiCo portfolio healthier. This is illustrated by the transformation of one of the company's best loved brands – Walkers.

Since 2003, saturated fat has been reduced by up to 80% and salt by up to 55% in the Walkers range, removing 40,000 tonnes of saturates and 2,400 tonnes of salt from the British diet.

To make these changes, Walkers invested more than £20 million in research and development over six years. A major part

of this investment was spent in building the availability of Sunseed oil, a high oleic sunflower oil, made from a rare breed of seed containing only 10% saturates compared with 45% in traditional crisp cooking oil.

Between 2004 and 2006, the reformulation project focused on Walkers' core range, with the gradual introduction of Sunseed oil and reduction in salt. The next phase, completed in Spring 2007, targeted the remaining products in the portfolio, including Quavers, Monster Munch, Squares and French Fries.

Walkers phased in these changes and undertook major taste testing along the way to ensure that the flavour that made Walkers the nation's favourite remained unchanged. One 34.5g pack of Walkers crisps now typically contains half a gram of salt and 0.9g of saturated fat, less than 8% and 5% of an adult's Guideline Daily Amount.

PepsiCo is committed to building on these achievements and continuing the work to make its portfolio as healthy as possible. As well as reformulating existing products, PepsiCo continues to respond to changing consumer demands and innovate in the development of new, healthier products.

Foodforthought

- The PepsiCo reformulation programme has been in place since 2004
- 40,000 tonnes of saturated fat and 2,400 tonnes of salt have been removed from the Walkers range
- The programme, which is an ongoing initiative, has been in place for 5 years and has translated into 45% of the UK savory snacks market having an improved nutrition profile
- The key challenge has been to implement changes without compromising on taste
- Since 2003, more than £20m has been invested in research and development including the development of Sunseed sunflower oil

Premier Foods



Premier Foods is one of the largest food manufacturers in the UK and Ireland, producing a wide variety of foods under well-known brands such as Hovis, Mr Kipling, Oxo, Sharwood's, Ambrosia and Hartleys.

The company is responding to consumers' desire to eat more healthily by producing cakes with reduced saturated fat and fewer calories which still taste great.

In January 2006 Mr Kipling launched a range of lower fat and calorie cakes called Delightful. Since then it has undertaken extensive development work to reformulate the Delightful range in order to reduce both sugar and saturated fat.

Additionally both calories and fat have significant reductions in the Delightful range, compared to their counterparts in the

standard Mr Kipling range, while still achieving the taste and texture performance expected of Mr Kipling cakes.

In January 2009 Mr Kipling Delightful relaunched with nearly 50% less saturated fat (up to 47% reduction) and sugar (up to 49% reduction). The new range consists of three cake slices – chocolate, apple and country. The product is available in a twin pack format helping consumers easily control their portions without wastage.

Delightful has been a long time in development, because each recipe is considered to be relatively technically advanced. Extensive consumer testing was carried out in order to find the optimum reduction of saturated fat which would still deliver great taste. More than £800,000 has been invested in research and the launch of the new range.

Premier Foods continues to reformulate standard ranges and extend its range of healthier options across the portfolio to help meet consumer dietary and lifestyle needs.

Foodforthought

- Reformulation of Delightful builds on the health and nutrition programme in place at Premier Foods since 2003
- Significant reductions in sugar (up to by 49%) and saturated fat (up to by 47%) have been achieved thanks to the development of Delightful
- The project involved extensive technical assessments of a wide range of fat replacers before focusing on the polydextrose and natural dietary fibre combination
- The project took 18 months to develop
- The overall investment in research and the product launch totalled over £800,000

Inmyopinion

"At PepsiCo, our goal is to support healthier lifestyles by providing a range of great-tasting products that are as healthy as possible. We're very proud of the work we've done to transform the nutritional profile of some of the nation's favourite foods – all without compromising on taste."

Salman Amin, Chief Executive Officer, PepsiCo UK & Ireland

Inmyopinion

"We've seen a growing trend of consumers looking for healthier options but they can be concerned that healthier products mean a taste compromise. Mr Kipling's healthier cake range, Delightful, has been re-developed to be lower in calories and saturated fat, whilst still delivering a great tasting treat"

George Uden, Head of Product Development, Cake Business Unit, Premier Foods



United Biscuits

United Biscuits has made great progress with its health and nutrition programme and is continuing to make improvements to meet consumer needs. Saturated fat was identified as a key target with changes first made on the snacks portfolio as part of a reformulation programme starting in 2005.

All of UB's crisps and snacks have benefited from reductions in saturated fat, whilst maintaining the same great taste. The saturated fat content of Hula Hoops and Skips has been reduced by 80% since 2005; Nik Naks, Wheat Crunchies and Discos all now contain 50% less saturated fat; and the saturated fat content of McCoy's has been reduced by 30% and will have a further reduction in 2009.

After achieving saturated fat reductions in the snacks, work started in September 2005 to discover how saturated fat reductions in biscuits could be achieved.

In November 2008, following three years of work from a multi-functional project team, McVite's Digestives, McVite's Hob Nobs and McVite's Rich Tea were launched with 50% less saturated fat.

Extensive consumer testing was needed to

find the optimum reduction of saturated fat that could still offer the same great taste.

UB invested £6m in changes to ingredients and investment in manufacturing facilities, as well as TV advertising to communicate to consumers the news about the reduced saturated fat of McVitie's biscuits.

UB continues to deliver product improvements in other areas of its portfolio as part of its focus on health and nutrition. For instance: the go ahead! range of biscuits and snacks has grown significantly since its launch in 1996 and plays an important part in the healthier biscuit category, with products such as Raspberry and Cranberry Wholemeal Slices and Strawberry Twist Wholemeal Bakes which are low in fat and a good source of fibre.

Foodforthought

- The reformulation of the McVitie's range builds on the saturated fat reduction programme that UB has had in place since 2005
- The project has resulted in a 50% reduction in saturated fat on these iconic brands
- The changes took three years to implement
- Key challenges to overcome included the need to implement significant factory changes and the challenge of creating a new recipe that still met high consumer expectations
- In all, this project has cost
 United Biscuits £6m to
 implement

Inmyopinion

"The reformulation of our well loved McVitie's brand was the latest in a long line of projects that have delivered a significant health benefit for consumers – without any compromise on taste"

Alice Cadman, Head of Strategic Projects, United Biscuits

Unilever



At Unilever, giving consumers a range of options is just as important as reformulating products. This is demonstrated in the Hellman's range, where the Real Mayonnaise contains 80% fat, the light version contains 27% fat and the extra light version just 3% fat.

Even within these options, reformulation has made brands even healthier. For example, Hellmann's Light has 3% less fat and 25% less salt. The Extra Light variant employs a new technology using natural citrus fibre to reduce oil and calorie content whilst maintaining a creamy texture.

Unilever's Vitality mission 'to help people look good, feel good and get more out of life' shows a commitment to growing the business. As one of the world's leading food businesses, the brand portfolio and nutrition expertise makes it well-placed to drive change

in this area. In 2003, Unilever embarked on its Nutrition Enhancement Programme (NEP), which uses internationally-accepted dietary advice, including World Health Organisation maximum levels of trans fats, saturated fats, sugars and salt.

Using a single nutrient profile, the entire food and beverage portfolio of over 22,000 products has been evaluated, giving clear direction for nutritional improvements. Since 2005, reformulation against NEP standards resulted in the removal of 30,000 tonnes of trans fat, 27,000 tonnes of sugars, 12,500 tonnes of saturated fat and 3,500 tonnes of sodium from across the global portfolio.

In the UK, a number of brands have undergone significant reformulation as part of the programme. Salt levels have been reduced on average by 30% since 2003 in all soups and sauces (Knorr, Chicken Tonight, Knorr Ragu and Colman's); the Lipton Ice tea range has 10% less sugar; and I Can't Believe It's Not Butter has 22% less saturated fat and 16% less salt.

Foodforthought

- The Nutrition Enhancement
 Programme has been in
 place since 2003
- The sheer size of the
 Unilever portfolio means the
 programme has taken more
 than 25 nutritionists working
 full time over 3 years
- 30,000 tonnes of trans fat, 27,000 tonnes of sugars, 12,500 tonnes of saturated fat and 3,500 tonnes of sodium have been removed from across the global portfolio
- Internationally accepted dietary advice is used to assess all food and drinks and make improvements where possible
- Significant company resource and investment has been deployed

Young's Seafood



Young's is the largest manufacturer of seafood products in the UK. This includes Chip Shop – the UK's best-selling range of traditional battered fish products.

In 2005, Young's began a reformulation programme to reduce the saturated fat in its products. The initial target was to achieve a significant reduction in the saturated fat level of Chip Shop without compromising the traditional taste and texture which have helped make this range so successful.

A multi-disciplinary team was appointed to look into ways to reduce saturated fat levels and significant recipe and process development work was required. Changes had to be made to the frying oil used to prepare the products so an oil blend with a better nutritional profile was sourced. The coating system and process conditions also

required significant recipe reformulation. Over a two year period, more than 100 trials were conducted, and in 2007 the revised products were ready to be launched. Altogether a range of 21 different products were redeveloped across four processing lines.

Consumers of Young's Chip Shop are very loyal, regular buyers. During the trial period extensive research was carried out to ensure that the reduction in saturated fat would not compromise the product's success. In fact, with the support of a marketing campaign to emphasise the healthier profile of the range the relaunch resulted in a significant uplift in sales.

Since the relaunch in mid 2007, Young's has removed around 500 tonnes of saturated fat from the Chip Shop range. An ongoing saturated fat reduction programme continues to be a priority. In 2009 Young's classic breaded scampi re-launched with a massive 75% reduction in saturated fat and now has just 1.3% fat.

Foodforthought

- The programme began in 2005 and took two years to develop
- The first challenge was to achieve a healthier profile for Chip Shop whilst maintaining all the delicious traditional flavour and texture
- Supported by advertising to emphasise its healthier positioning, sales of Chip Shop have grown by 18% since it was relaunched
- Fat reductions achieved so far include a 40% reduction for Young's Chip Shop and a 75% reduction for Young's Scampi
- Altogether a total of 21 different products have been redeveloped across four processing lines

Inmyopinion

"In setting reformulation targets using the Nutrition Enhancement Programme it is important to recognise that any changes need to be made without compromising product safety and taste. Our dual aim is to make foods healthier and take our consumers with us. It's essential we don't jeopardise their enjoyment of our brands"

Paul Nevett, VP Foods Marketing, Unilever UK & Ireland

Inmyopinion

"Traditional battered fish is not usually regarded as a healthy food, but after two years of hard work we have achieved less than 5% saturated fat for Chip Shop which at last means this delicious traditional dish can enjoyed by everyone as part of a healthy diet" *Charlotte Broughton, Marketing Controller, Young's*

About FDF

The Food and Drink Federation is the voice of the UK food and drink industry, the largest manufacturing sector in the country.

Our sector directly employs almost 440,000 people, and as many as 1.2 million in ancillary services; it accounts for 14% of the UK's total manufacturing sector by value; and it is an invaluable partner to British agriculture, buying two thirds of what farmers produce.

Our membership comprises manufacturers of all sizes as well as trade associations dealing with specific sectors of the industry.

In representing the interests of our members, we are focusing on the following core priorities:

- Food Safety and Science
- Health and Wellbeing
- Sustainability
- Competitiveness

In the area of health and wellbeing, FDF's commitment is long-standing. We unveiled our action plan in 2004 that emphasised our sector's ambition to improve the health of the nation by focusing on the areas where we could make a real difference, such as nutrition labelling, workplace wellbeing and product reformulation. We have made plenty of progress in delivering on these commitments – in fact, the UK is now widely acknowledged to be leading the world in many areas – and our priority now is to continue working with members on our action plan.



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