REFORMULATION FOR HEALTH
Guidance for SMEs
WHY UK FOOD AND DRINK MANUFACTURING MATTERS

WE INVEST £1bn IN INNOVATION EACH YEAR

WE BUY TWO-THIRDS OF WHAT BRITISH FARMERS PRODUCE

WE INVEST £1bn IN INNOVATION EACH YEAR

THE PROPORTION OF INCOME SPENT ON FOOD REDUCED FROM 50% 100 YEARS AGO TO AROUND 10% TODAY

96% OF OUR BUSINESSES ARE MEDIUM TO MICRO-SIZED

Why UK Food and Drink Manufacturing Matters

In Scotland, poor diet and excessive consumption of food and drink can lead directly to high rates of preventable disease. The most recent figures show that we are still consuming too much sugar, salt and saturated fat when compared to the Scottish Dietary Goals*. Serious action has to be taken across a number of fronts to tackle this issue if we want our country to become healthier and more prosperous.

While there is a role for government, its agencies, third sector and consumers, there is a growing understanding of the important role that the food industry can play in addressing our poor dietary health. Earlier this year, I launched Supporting Healthy Choices, a voluntary framework that invites the food industry to work in partnership with government in Scotland. The document sets out 17 commitments for all parties, including government, that will begin to make the necessary shift in our diet.

One of these commitments is around the reformulation of products. The industry has provided excellent examples of innovation in this area, notably in the systematic reduction and removal of trans fats and in the reduction of salt in order to meet targets set by the Food Standards Agency.

Many of the larger companies have made significant progress in this area and we continue to encourage them to do more as per the commitments in Supporting Healthy Choices.

In the spirit of our aspiration to become a Good Food Nation, we should celebrate such success. Reformulation is, however, not just for the large multinationals. It is equally as important that the small and medium-sized businesses, many of them home grown, are also driving the reformulation agenda forward.

This document is an example of what can be achieved when industry and government work together. It is an important milestone in a collaboration between the Scottish Government and the Scottish Food and Drink Federation in a three-year programme that has provided support to small and medium-sized companies on reformulation.

The booklet shows how small and medium-sized businesses have made changes to their production processes and the impact of these changes. It demonstrates also that although the companies themselves may be small, their influence over the sector and impact on consumers can be great.

I hope that what you read in these pages will inspire further innovation in reformulation. There is much more work to be done but together we can play our part to make Scotland a healthier nation.

* See page 32

FOREWORD

MAUREEN WATT MSP
Minister for Public Health, Scottish Government

In Scotland, poor diet and excessive consumption of food and drink can lead directly to high rates of preventable disease. The most recent figures show that we are still consuming too much sugar, salt and saturated fat when compared to the Scottish Dietary Goals*. Serious action has to be taken across a number of fronts to tackle this issue if we want our country to become healthier and more prosperous.

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Scotland’s food and drink manufacturing industry is a real success story, directly employing 50,000 people, contributing £9bn to the economy and enhancing Scotland’s reputation abroad through the quality products that are enjoyed all over the world.

As the UK and Scotland’s largest manufacturing sector, our industry is acutely aware of its responsibilities in helping to tackle public health challenges, including malnutrition and obesity. For more than a decade the UK’s larger food and drink producers have been evolving their ranges to reduce calories, salt and saturates and add nutrients such as fibre to reformulate old favourites and create healthier options. This work is on-going and is complemented by efforts to drive behaviour change and inform consumer choice through the provision of clear on-pack nutrition information and promotion of balanced diets and active lifestyle health messages.

Through the Obesity Action Plan in Scotland and the Public Health Responsibility Deal in England, the food and drink industry has collaborated with health professionals, consumer organisations and government to take a targeted approach on health. Partners in these initiatives have taken action to increase the healthiness of products, encourage healthier workplace environments and tackle physical inactivity.

Against this back-drop, the Scottish Food and Drink Federation (SFDF), the independent voice of food and drink manufacturers in Scotland, saw a need to help smaller businesses play their part, but also to access the opportunities in the growing market for healthier products.

Since 2011, SFDF has been working with small and medium-sized enterprises (SMEs) in Scotland to help them improve the healthiness of their products under our Scottish Government-funded Reformulation Programme. SMEs, which typically do not have a significant technical new product development resource or in house reformulation experience, have received free, tailored reformulation advice.

Reformulation for Health: Guidance for SMEs is the legacy of this work which provides information and guidance for food and drink producers that want to find out how reformulation could help their customers as well as their business. It brings to life some of the successes achieved through reformulation, alongside signposting to other sources of practical advice and guidance.

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The launch in June 2014 of Supporting Healthy Choices - a framework for voluntary action, developed jointly by the Scottish Government and the Food Standards Agency in Scotland, has created a platform for companies and other partners to take specific voluntary action to create a healthier food environment for consumers.

We hope that SMEs will benefit from the advice and case studies in this guide and that it will encourage them to reformulate their products.

These are just some of the tools that individual companies are using to help reduce calorie intakes.

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<tr>
<th>Activity to inform and educate</th>
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FOREWORD

DR COLETTE BACKWELL
Director, SFDF

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WHY REFORMULATE?

The case for reformulation

Making products that are lower in salt, saturates or energy, or fortified with nutrients such as added fibre or iron, not only improves the healthiness of the product, it also brings with it business benefits. The ageing population (both in the UK and worldwide), as well as the health agendas increasingly being promoted in the Western world, are seen by many as likely drivers of increased demand for healthier products. Like many of the larger food and drink businesses operating in the UK, small and medium enterprises (SMEs) should also appreciate the potential of recipe reformulation to improve diets and to create business opportunities.

It is recognised that while many larger businesses have spent years reformulating for health and in some cases are reaching the limits of what can technically be achieved, many SMEs still have real potential to reformulate.

SFDF’s Reformulation Programme

Since the launch of SFDF’s Scottish Government (Health) funded Reformulation Programme, we have engaged with more than 50 food companies and helped them to review their recipes and production methods to identify potential opportunities to reformulate for health. Even producers who regard their generations-old recipes as their unique selling proposition have found opportunities to make small changes without losing product quality and, importantly, customers. Full consideration must be given to the planning, trialling and evaluation of any reformulation strategy to help companies identify and manage risks with confidence.

SHOPPERS’ CONSUMPTION DECISIONS...

...INCREASINGLY DRIVEN BY HEALTH

In 2011, food and drink sector leaders ranked the growing market for health and wellness as the anticipated top driver of future growth.

Source: FDF commissioned Grant Thornton research, 2011

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A beginner’s guide to recipe reformulation

The following five-step guide provides a starting point to help food and drink manufacturers considering reformulation, building on the lessons learned from the SFDF Programme.

01 ACCESS FREE GUIDANCE

There is a wealth of information online and you can also contact your ingredient and seasoning suppliers for advice.

02 DECIDE WHICH PRODUCTS TO START WITH

Changes to your top sellers which account for 80% of your sales – typically 20% of your product line – will have the biggest impact on health. Benchmark the nutritional content of these products against similar products on sale to determine whether they are in line with or out of step with the market. If it is a salt you want to reduce, check to see if there are Food Standards Agency in Scotland Salt Targets for the product you are reformulating. Ask those in your customer services team whether they regularly receive feedback that a product is too salty, sweet or calorific.

03 DEVELOP A PLAN FOR EACH PRODUCT

Establish the viability of reformulating a product by capturing the details of its manufacturing process, including its component weights, and baking and cooking times. If possible review the nutritional content of the recipes using a proprietary nutritional calculating software package or use an external laboratory to carry out actual product analysis. Using a software option allows a number of recipe variations to be calculated at minimum cost, and with no waste of products. Estimating the nutritional content of the recipes using a proprietary nutritional calculating software package or an external laboratory to carry out actual product analysis.

04 TAKE A STEP-BY-STEP APPROACH

Plan for small incremental changes to recipes, gaining customer feedback at every stage, to give the best chance of maintaining consumer acceptability for your reformulated products. Carrying out small scale testing via trial with regular customers or in store tastings is an effective means of compiling feedback. There are many organisations throughout the UK that can carry out independent consumer testing such as Leatherhead, Campden BRI and academic institutions such as Queen Margaret University and the Rowett Institute of Nutrition and Health. Also, when reformulating it is important to bear in mind technical functions. By simply removing ingredients, significant changes may occur, including impacts on shelf life and production methods and it may be that preservative changes need to be made to keep the reformulated product safe.

05 COMMUNICATE

Once consumer testing is successful, you could advertise the changes made to your customer base. Use your healthy reformulation work and commitment to healthier products as a selling point when approaching retailers for a listing; most major retailers highly rank the importance of health in their decision making. If you’re selling direct to consumers think about promoting front of pack nutrition labelling if you don’t already, so people can quickly see your product’s nutrition. Look into whether you can make a Nutrition Claim* in marketing materials or on pack, e.g. does your product now meet the requirements set out in legislation to claim ‘reduced salt’ or ‘light’.

* See page 32
Supporting Healthy Choices*: a framework for voluntary action, sets out the Scottish Government’s and the Food Standards Agency in Scotland’s (FSAS) ambition to work collaboratively with partners to improve Scotland’s diet and tackle health inequalities. Partners, including the Scottish Government, FSAS, the food and drink industry, including retailers, manufacturers and out of home catering businesses, the NHS, local authorities and consumers, are invited to work with government by implementing a range of voluntary commitments which reflect the action believed to be necessary to rebalance diets in Scotland.

Consuming excess calories, through fats and sugars contributes to our increasing levels of overweight and obesity. Diets high in salt increase the risk of high blood pressure which can lead to additional risk of heart attack and stroke. The aim of Supporting Healthy Choices is to shift the balance of food and drink available towards products that support healthier diets and achievement of the Scottish Dietary Goals*.

* See page 32

More detailed versions of all these case studies can be found on our website: sfdf.org.uk/sfdf/priorities_reformulation.aspx
Although people refer to ‘salt reduction’ it is actually a sodium reduction which gives the health benefit. If you want to reduce sodium think about all of the sources in your recipe, which might include eggs, dried fruit, nuts and raising agents e.g. sodium bicarbonate.

If there are different components to your product think about each of them separately, for example you may be able to use a little less icing or lower the fat content of a filling more easily than changing the recipe of a cake or biscuit.
Established in 1966, Reid's of Caithness is a local baker and biscuit manufacturer based in Thurso, Caithness. Their products are sold to a loyal customer base from their one shop but also through a range of distributors in the UK and export markets.

- The company has reduced the salt content in the Oatie biscuit range by 30%.
- The biscuits are now compliant with Food Standards Agency in Scotland (FSSAS) 2012 Salt Target of 0.68g salt /270mg sodium or less per 150g of finished product.
- Reid’s new hope is to carry out further reductions on other products to bring them in line with the FSSAS Salt Targets.

The process of reviewing the biscuit recipes highlighted the opportunity to re-balance the recipes resulting in a reduction in the baking powder used, which in turn led to a reduction in sodium. Since the recipe has been amended, sales of the Oatie biscuit range have remained strong. The company feels they have gained a competitive edge in the market by being able to appeal to health conscious customers. Reid’s will continue making recipe changes to improve the healthiness of our products and appeal to their conscious customers.

Reid’s will continue making recipe changes to bring them in line with the FSSAS Salt Targets.

The company supplies a wide range of bakery products such as bread and rolls, savoury products and confectionery items.

- Reid’s has succeeded in a 20% salt reduction and 5% sugar reduction in the ‘Thin’ oatcake product and a 20% salt reduction in the ‘Thin’ Oatcake product, which contains no added sugar.
- Both oatcake products now meet the FSSAS 2012 Salt Targets.

The recipes for both the ‘Thin’ and ‘Thick’ oatcakes form the base recipe for the flavoured oatcakes; therefore this change has been applied across the entire oatcake range. An opportunity was found to reduce the sugar content of the ‘Thin’ oatcake product to maintain the product’s overall flavour profile, which has reduced costs. Sales data and consumer feedback show that Stockan’s customers continue to enjoy these reformulated products.

The company’s best sellers, which are the ‘Thick’ and ‘Thin’ oatcakes, were targeted in order to achieve the greatest customer benefit. The project was not a complete re-design of the product from raw materials and processes to changing product presentation in store. After several product tests targeting potential customers and comparing the original version to the new one, the results revealed a strong preference for the new chocolate éclair. The new éclair is now available across all Bayne’s retail shops and delivering increased sales.

The nutritional content of all top-selling products were reviewed to establish where reformulation could provide significant impact. A reformulation programme was put in place for a number of products, including a reduction of sugar in the round shortbread base, creating a product which contains fewer calories.

Positive feedback from customers established that no significant taste differences were observed which has encouraged the company to replace the old recipe with the reformulated one. Due to this successful reformulation, the new shortbread base recipe will be used in other shortbread products going forward.

Chalmers Bakery is a traditional Scottish bakery based in Aberdeeneth, established in 1956. The business manufactures and sells a range of traditional bakery products such as breads, savouries and cakes in 12 shops and via wholesale.

- The round shortbread base has been reformulated resulting in 17% reduction of sugar content and reducing the calcium content of the recipe.
- This recipe is used for empire biscuits which are one of Chalmers’ best-selling confectionery products.

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Stockan’s, a Stromness-based manufacturer, is best known for its oatcake range and is one of the best-selling brands in this product category. The products are sold widely throughout Scotland and the rest of the UK.

- The company’s best sellers, which are the ‘Thin’ and ‘Thick’ oatcakes, were targeted in order to achieve the greatest customer benefit.
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Reid’s will continue making recipe changes to bring them in line with the FSSAS Salt Targets.
If you focus on reformulating something which is a basic part of lots of products, like a pastry shell, then one reformulation will give a positive change across your range.

Listening to your customer feedback might help you decide which product to focus on.

TOP TIPS:
Chalmers Bakery is a traditional Scottish bakery based in Aberdeenshire, established in 1864. The business manufactures and sells a range of traditional bakery products such as breads, savouries and cakes in 12 shops and via wholesale.

The nutritional content of all the top-selling products at Chalmers was reviewed to establish where reformulation could provide a significant health impact. As a result, a programme was put in place for a number of products, including the pastry shells and puff pastry to reduce salt and fat to improve their nutritional value.

Following positive feedback from customers, the company has replaced both the old pastry recipes and the pastry shells used in a number of savoury pie range which account for 10% of the company’s sales. The pie won the Commitment to Health Award at the Scotmilk Milk Industry Awards 2014. Chalmers is also exploring other opportunities to use the new reformulated ones. These recipes will be used in the whole savoury pie range which has been well-received by customers. The pie won the Commitment to Healthy Eating Award at the Scottish Food Forum Innovation Awards 2014.

Chalmers created a new pie shell pastry for the base of the new Mediterranean vegetable pie using a vegetable oil based shortening instead of animal fat to reduce saturated fat. Building on the success of the reformulated pie shell recipe used for meat pies, a further 17% fat reduction and a 19% reduction in saturated fat was achieved.

The new vegetable pie is now available in all 12 of Chalmers’ shops and has been well-received by customers. The recipe change has the potential to have an impact on consumer health as 4,000 steak pies are sold each week.

A salt reduction programme was developed for 20 top-selling products including oatcakes, biscuits and savouries, equating to 80% of the company’s sales. The steak pie recipe was the first product to be reformulated following customer feedback that it had a strong salty taste.

The method used to make the pies is to cover the steak with water and stew for a set period of time and the stock created is then used as the base for the gravy. As the quantity of stock generated varied, it was difficult to work out the amount of gravy mix to use which often led to customer complaints about the saltiness of the pie. A simple chart is now used to show how much gravy mix to use relative to the volume of stock. The company has experienced an increase in sales of this product since the reformulation, with 20,000 family size pies being sold annually.

Working with the Reformulation Programme has significantly improved our understanding of the ingredients in our products. This insight and understanding has not only helped us make our products healthier, it has also ultimately helped save wastage, improve quality and enhance product and business profitability.

Cameron Skinner
Skinner of Kippen

Skinner of Kippen is a family butchers based in the rural village of Kippen. The business is run by owner and third generation family member Cameron Skinner.

• Skinner of Kippen has reduced the salt content in the gravy of their steak pies by 50%.
• A new gravy mix has also been provided by the Dakomen Group which has helped to reduce the salt content.
• The recipe and process has been reviewed and revised to achieve the outcome over a two year period.

Maclean’s Highland Bakery is a craft bakery business based in Forres, Moray. The business manufactures and sells a full range of bakery products, including bread, oatcakes, biscuits and cakes. They sell these products in their five retail shops and via wholesale.

56% SALT REDUCTION IN PASTRY SHELLS
17% SALT AND FAT REDUCTION IN PUFF PASTRY
NEW VEGETABLE PIE CONTAINS 68% LESS FAT THAN TRADITIONAL SCOTCH PIE

“Working with the Reformulation Programme has significantly improved our understanding of the ingredients in our products. This insight and understanding has not only helped us make our products healthier, it has also ultimately helped save wastage, improve quality and enhance product and business profitability.”

Cameron Skinner

Find out more about Maclean’s Highland Bakery on their website: macleansbakery.com

Find out more about Skinner of Kippen on their website: extraordinarysausagecompany.com
Benchmarking the nutritional values of your product against major brands and retailers will help you see if your products are very different to your competitors.

Often it’s good to make small, step-by-step changes so there is not one big, noticeable change.

TOP TIPS:
**MACLEAN’S HIGHLAND BAKERY**

Maclean’s Highland Bakery is a craft bakery business based in Forres, Moray. The business manufactures and sells a range of bakery products including bread, oatcakes, biscuits and cakes at five retail shops and via wholesale.

• The week in date has resulted in a 25% salt reduction for certain fermented products. Following SDFD’s recommendations, the company enlisted the help of specialist bakery ingredients supplier Puratos to help reformulate and introduce a new recipe. After several trial recipes, Maclean’s identified a recipe solution that would enable salt reductions across many bread products. These positive changes to the recipes have been achieved without any loss of quality or sales.

• The nutritional levels of the buttery range were compared against benchmark data which identified an opportunity to reduce the salt content. Maclean’s was keen to improve the healthiness of the range whilst maintaining a good level of taste. To enable this to happen, it was recommended that they use a low salt sour dough to give background authentic dough taste notes, which is similar to what is currently used in other bread and fermented products to enhance flavour. This salt reduction was achieved with no negative impact on the product taste and with continued high sales results.

**STUART’S OF BUCKHAVEN**

R T Stuart Ltd (otherwise known as Stuart’s of Buckhaven), is a manufacturer and retailer specialising in bakery and butchery products. Stuart’s has 16 bakeries shops and three butchery outlets in the Buckhaven area of Fife. In addition to sales in these shops, the company’s products are sold widely via wholesale.

• The recipe for the popular Morning Roll has had a salt reduction of 14% to date.

• This product is the company’s top-selling product, of which 40,000 units are sold per week.

Stuart’s of Buckhaven bakery items are all produced from scratch in a purpose built manufacturing facility at Methil. This means that changes to recipes can be made without having to refer to an external ingredients supplier. To date, Stuart’s has completed part of the reformulation process for the morning roll using an SDFD implemented salt reduction programme, bringing the content of sodium down by 14%. The company will look at implementing further changes to this recipe to meet Food Standards Agency in Scotland (FSSAS) Salt Targets.

Stuart’s has made these positive changes without any negative feedback and increased sales. Due to this success they are looking at implementing changes to improve the healthiness of other core products in the range.

**CHALMERS BAKERY**

Chalmers Bakery is a traditional Scottish bakery based in Aberdeenshire, established in 1956. The business manufactures and sells a range of traditional bakery products such as breads, savouries and cakes in 12 shops and via wholesale.

• The buttery, which is the company’s best-selling product, has been reformulated.

• The work to date has resulted in a reduction of 10% in salt and 21% in fat content.

Butteries are popular in North East Scotland and are traditionally high in salt and fat. Since the buttery is the best-selling product, the improved healthiness of it will have a significant impact on consumers. The ingredients of the buttery were reviewed to create a healthier product which has 21% less fat and 10% less salt. Positive feedback has shown that Chalmers’ customers continue to enjoy the product and this has encouraged the company to use the new reformulated recipe. Further stepped reductions will be gradually applied to allow customers to adapt to the changes.

**Scotland is renowned throughout the world as a land of food and drink products of high quality and provenance. The food industry in Scotland is largely made up of many small family businesses like MacLean’s Highland Bakery. Embrazing and implementing changes that have been recommended through SDFD’s Reformulation Programme has allowed us to compete successfully with larger players who are already reformatulating products for health. We have been proud to take this proactive approach which helps our business thrive as well as taking important steps that are good for the health of the nation.”**

Lewis Maclean, Maclean’s Highland Bakery
“Although we work with large manufacturers, we recognise that many independent butchers and bakers also use our products. We feel it is important to make our product and ingredient knowledge available to smaller businesses to keep up with the larger players in the market.”

Mike Sellers and Kenny Young, Cardowan Creameries Limited
LEADING SEASONING PRODUCERS CREATE LOWER SALT SAUSAGE SEASONINGS

Hundreds of butchers across Scotland now have easy access to lower salt seasonings which will help them to make their products healthier. SFDP's Reformulation Programme worked with four of the main seasoning companies in the UK, Dalesman, Dalziel, Kerry and Scobie & Junor, to create new seasonings for the butchery trade achieving significant results.

- Dalesman reduced the salt content in a number of its pork and beef sausage seasonings by up to 33%.
- Dalziel reduced the salt content in a number of its pork seasonings by up to 30%.
- Scobie & Junor reduced the salt content in its sausage seasoning ranges by 20%.
- Kerry reduced the salt content in a number of its pork and beef sausage seasonings by 20%.

By using these reduced salt seasonings, these company’s sausage seasonings by 20%.

Hundreds of butchers across Scotland now have easy access to lower salt sausage seasonings by 20%.

TESTIMONIALS

As a result of reformulation trials, we noticed how the reduction of salt in certain recipes altered the taste experience to make the herb and spice flavours more prominent. The opportunity to enhance these flavours while delivering a healthy benefit through reduced salt in recipes was a no-brainer.

Derek Wynne, Scobie & Junor

“Since 1926, Lucas has been a leading supplier to the butchery trade responsible for leading many innovations to our products in an ever changing market place. It is essential we continue making changes and improvements to our seasonings to ensure we are at the leading edge of development and technology for today’s market.”

Judith Johnston, Lucas Ingredients

“By adding value to products and services through education and reformulation, Dalziel continues to build on its reputation as a market leader for raising standards in the UK’s food manufacturing sector. Looking to the future, Dalziel will continue to help provide opportunities for healthier products to our Scottish customer base and ultimately Scottish consumers.”

David Langley, Dalziel

CARDOWAN CREAMERIES LIMITED

Cardowan Creameries Limited is an independent family owned margarine manufacturer based in Glasgow. The business was first incorporated in 1958 and is the only remaining margarine manufacturer in Scotland.

- Cardowan Creameries has developed a new low salt pastry margarine that reduces the salt contribution to the final pastry product by 98%.
- Feedback from customers is that they do not experience any difference in the taste of the new product.

It was discovered that Cardowan Creameries products were being used in other Reformulation Programme recipes under review. Through discussions on reducing fat and saturates in products and component ingredients, it was decided to start work on a lower salt margarine for pastry.

This initiative demonstrates that ingredient manufacturers can positively influence the nutrition content of other businesses’ finished products. The company plan to implement further reductions on these products and are working towards the Food Standards Agency Scotland (FSAS) new 2017 targets where stocks and gravies are included for reporting no difference in taste to the pastry.

Cardowan Creameries will also be encouraging their customers to adopt lower fat and saturated fat vegetable shortenings in place of animal fat versions.

YEUNG’S CHINESE FOODS

Yeung’s Chinese Foods is based in Coatbridge in North Lanarkshire and manufactures a range of ambient packet sauce mixes, soups and gravies. Their products are widely distributed throughout Scotland and the rest of the UK.

- Yeung’s Chinese curry mix now contains 12% less salt.
- The gravy mix has been reformulated and now contains 28% less salt and 33% less sugar (which in turn has reduced the calorie content in this product).

A salt reduction strategy was developed for both the curry and gravy mixes involving a step by step process of reformulation. This approach allowed Yeung’s to assess the impact of the changes both within the factory process and, more importantly, against feedback from customers and consumers.

The curry mix is the company’s best seller of which 1.1 million units are sold per annum. The work to date has been implemented successfully, with positive feedback and increased sales.

The company plan to implement further reductions on these products and are working towards the Food Standards Agency Scotland (FSSA) new 2017 targets where stocks and gravies are included for the first time.
MEAT & BUTCHERY

TOP TIPS:

Talk to your suppliers, they may have an off-the-shelf solution you can use.

Consider all the ingredients in a product to maximise the effect, for example in sausages think about the seasoning and the rusk if lowering salt.
Established in 1908, George Bowman Butchers is a traditional local butchers based in the Leith area of Edinburgh. Bowman Butchers sell typical butcher products but are relatively unique in that they make their own seasonings for some of their products.

- Bowman Butchers has reduced the salt content in their pork sausage and pork and tomato sausage by 21%.
- The company hopes to carry out further reductions to enable the products to meet the Food Standards Agency in Scotland (FSAS) 2012 Salt Targets.

Following the review of some of the company’s most popular recipes, it was decided to start reformulation on the sausage range as these are the top selling products and would have the largest impact on consumer health, with many thousands of sausages sold annually. The assistance from SFDF’s Reformulation Programme has helped Bowman Butchers improve the healthiness of their products. They have gained a better understanding of the science behind the processes and other products.

With no negative impact on the sales of this product, the company has also gained a greater insight into the health issues concerning food products which are important to customers.

- The company is currently trialling alternative and lower salt seasoning combinations that will enable their finished products to meet the FSAS 2012 Salt Targets.

Results of a salt reduction programme have been achieved over a two year period for Skinner of Kippen’s premium sausage range - an important growth area for the business. Working with the Reformulation Programme has enabled Skinner of Kippen to improve the consistency of their products, whilst also improving their healthiness. During the process they have gained a better understanding of the science behind the processes and other opportunities available to reformulate their products.

- Skinner of Kippen has reduced the salt content in their sausage range by 45%.
- The sausage range is one of the company’s top sellers, with over 105,000 sausages sold per annum.
- This work has been achieved by using a new lower salt seasoning developed with food ingredients company the Dalesmann Group.
- The sausage range now meets the FSAS 2012 Salt Targets.

“Our aim is to continue to supply the quality and service that our grandfather did when he started the business in 1916. We now provide products for a modern and food-educated customer base UK-wide through a growing internet sales presence. By working with SFDF’s Reformulation Programme we have gained a greater understanding of the make-up and nutrition of our recipes, which will stand us in good stead for the future.”

Graham Murdoch, Murdochs Brothers
SME companies are often too busy with the general operations of their businesses to review their recipes. By hiring an intern it can help kick-start the reformulation process, where students come in and provide their time and enthusiasm.

At the end of 2013, four nutrition students from Robert Gordon University (RGU) completed internships as part of SFDF’s Reformulation Programme. Gillian Campbell was placed as an intern at SFDF for three months. Her role involved contacting Scotland-based butchers to promote the health and commercial benefits of using lower salt seasonings in their products highlighting previous SFDF reformulation work as success stories.

As a result of Gillian’s efforts, hundreds of butchers across Scotland have been educated on, and have access to, reduced salt ingredients which can help their customers to meet the Food Standards Agency in Scotland 2012 Salt Targets.

The other three RGU students were based at companies, where they helped their partner producers to achieve some impressive reformulations.

Karolina Papalexi worked with Chalmers Bakery in Aberdeen for three months to reformulate several of their products, including traditional Scottish food such as butteries and shortbread, as well as puff pastry and pie shells for their meat pies. She also created a new healthy vegetable pie which won the Commitment to Healthy Eating Award at the Grampian Food Forum Innovation Awards 2014.

Ki Wong helped i3s, an Aberdeen-based high-end caterer, over three months to reformulate its sandwich range reducing its fat content, creating a range of ‘lighter’ versions. i3s’s Managing Director, Matthew Tutt, sees real value in this work, both for his customers and business, and is committed to developing other healthier options. For example, i3s recently introduced a salad range.

Ophelie Robertson was based in SM Bayne, a bakery company with over 50 retail shops in Fife, Stirling and the Lothians. During her three month placement Ophelie investigated opportunities for reformulation work for the company’s most popular products. Success was achieved with the chocolate éclair, where she focused on streamlining processes, improving the quality of the raw materials and reducing the portion size of the product.

“...the intern programme greatly benefited both the businesses and the students. The students were given invaluable workplace experience which will help to improve their employability after they graduate and the businesses gained fresh insight from the students’ learnings and knowledge of food and nutrition. It also gave businesses the opportunity to get to know the students and consider them as good fits for future recruitment.”

Brian Ratcliffe, Professor of Nutrition, School of Pharmacy and Life Sciences, RGU

These companies found that the students’ help and enthusiasm enabled them to move forward more quickly with reformulation projects. If you are interested in hiring a student intern contact your local universities to see what opportunities exist.
ADDITIONAL SOURCES OF INFORMATION

ADDITIONAL GUIDANCE ON REFORMULATION

The Institute of Grocery Distribution (IGD) reformulation best practice guide (salt, saturated fat, energy)

The Food and Drink Federation (FDF), British Retail Consortium and Leatherhead Food Research’s Salt Reduction Research Paper (provides an overview of current successful techniques)
tdf.org.uk/resources/salt_reduction_2012.pdf

British Meat Processors Association (BMPA) guidance on salt reduction in meat products for smaller businesses
www.bmpa.uk.com/_attachments/Resources/2665_54.pdf

GOVERNMENT TARGETS

Supporting Healthy Choices: A Framework for Voluntary Action
scotland.gov.uk/Publications/2014/06/8253/0 (see section 7 on Healthier Food and Drink Formulation, section 9 on Supporting Healthy Choices Commitments and section 10 on Population Level Dietary Goals for Scotland 2013)

Food Standards Agency in Scotland Salt Targets
food.gov.uk/scotland/scotnut/salt/saltreduction

(Revised salt targets for 2017 have been developed working closely with industry, NGOs and stakeholders. The 2017 targets recognise the progress that has already been made by the food industry and aim to encourage further reduction)

GUIDANCE ON WHAT NEEDS TO APPEAR ON A LABEL

Changes to labelling requirements through the EU Food Information for Consumers Regulation
food.gov.uk/enforcement/registration/tfr/
food.gov.uk/sites/default/files/tfr-2014-guidance.pdf

Guide to creating a front of pack (FoP) nutrition label
food.gov.uk/scotland/scotnut/signposting

Department of Health guidance on nutrition and health claims on foods

COLLABORATIVE ORGANISATIONS

Interface Food & Drink
Interface Food & Drink is responsible for stimulating growth in the Scottish Food & Drink sector by identifying innovative and collaborative research projects that can be carried out by Scottish Universities.
www.interfacefoodanddrink.org/

Food & Health Innovation Service
Led by Campden BRI, the Food & Health Innovation Service directly supports Scottish food and drink companies seeking to exploit the burgeoning market for healthy food and drink products. Support is available to companies across the food and drink supply chain, to develop leading edge functional foods, and seek to reformulate existing products.
foodhealthinnovation.com/

The Institute of Food Science and Technology (IFST)
IFST list consultants that can come in to help companies.
ifst.org/consultancy-list

If you would like help to determine the nutrition of a product via analysis contact:
Self-employed Nutritionists:
sense-nutrition.org.uk/meetmem.htm
Freelance Dieticians:
freelancedietitians.org/
Thanks are owed to many who have helped deliver this successful reformulation project including government officials, other industry bodies and academia. Thanks are also due to the many different local businesses that make up part of Scotland's thriving food industry, who have proactively engaged to improve the nutritional quality of their products. While some are featured here, others were involved and more details can be found at sfdf.org.uk/sfdf/priorities_reformulation.aspx.

First and foremost, without the funding from Scottish Government this Programme would not have been possible. Thanks to the Food Standards Agency in Scotland who have been a constant source of support and an integral part of the success of the programme.

We are especially grateful for the enthusiasm and teamwork from a range of Scotland’s favourite SMEs who have taken time and effort to sign up to the Programme. These include:

- Eddie Wight of Stockan’s, who was the very first client.
- Cameron Skinner of Skinner of Kippen for being a window into the butchery trade and a champion of reformulation for health.
- Lewis MacLean and Graham Shewan of MacLean’s Highland Bakery for really taking reformulation to the next level.
- Pamela Chalmers of Chalmers Bakery for making numerous reformulation changes and providing a placement opportunity for one of the Robert Gordon University students.
- Gary and Tracy Reid of Reid’s of Caithness for being supporters and advocates of the work.

We would also like to thank all of the other butchers, bakers, seasoning and ingredient businesses and manufacturers who have given up their time to work with the Programme and the countless others that have provided insight into the food industry and health agenda. Special mentions go to:

- Douglas Scott of the Scottish Federation of Meat Traders Association who has provided contacts, advice and support.
- Alan Clarke and all the team at the Scottish Bakers for providing a route into the bakery industry.
- Robert Gordon University for facilitating four nutrition students to take part in internships which have helped some of the clients of the Programme.

Finally, we must thank Chris Peace who worked with us for three years to deliver the case studies which are featured in this guide.
ABOUT SFDF

The Scottish Food & Drink Federation (SFDF) is an industry funded organisation, recognised as the Independent “voice” of food and drink manufacturers in Scotland.

The food and drink sector is the largest manufacturing sector in the country and together we ensure our industry is heard where it matters in the Scottish, UK and the EU contexts; with Government, regulators, key influencers across the food chain, consumers and the media.

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