

# Reformulating Scotland's Food & Drink

Food & Drink Federation Scotland:  
September 2020

Hosted by: Joanne Burns

Presenters: David Craig  
Clair Prior

# Today's Presenters



**Joanne Burns**

Reformulation Manager  
**FDF Scotland**



**David Craig**

Director  
**Levercliff**



**Clair Prior**

Insights Manager  
**Levercliff**

# Why Should Businesses Reformulate Their Products?

**Health & Wellbeing**  
**Rise of Lifestyle Diseases**

**One fifth** of all adults  
worldwide will be **obese**  
**by 2025**

Consumer concerns about  
**Sugar and Salt** quantities  
in food in particular

**69% of Consumers think**  
**Food Manufactures have**  
**a responsibility** to make  
unhealthy food healthy

# Scotland's Health: Most Scottish people consider their health to be good



**71%**  
of adults, in 2018, described their health as 'good' or 'very good', the lowest recorded since 2008.



**94%**  
of children described their health as 'good' or 'very good', with little change from previous years.

Adults who assessed their general health to be 'good' or 'very good' varied by age:



**85%**  
aged 16-24

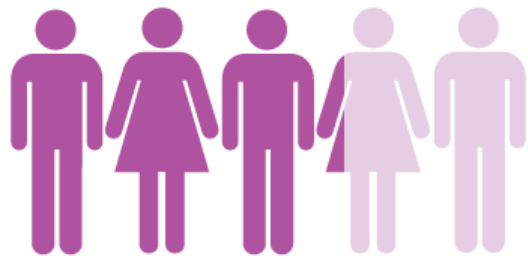


**68%**  
aged 45-64

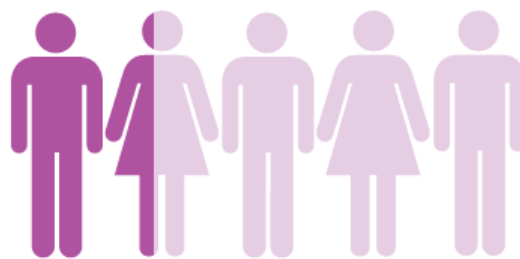


**57%**  
aged 75+

# Scotland's Health: However, the majority are also overweight

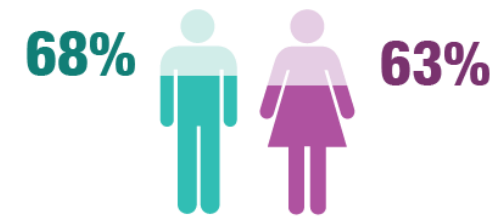


In 2018, **two thirds**  
(65%) of adults were  
overweight, including...



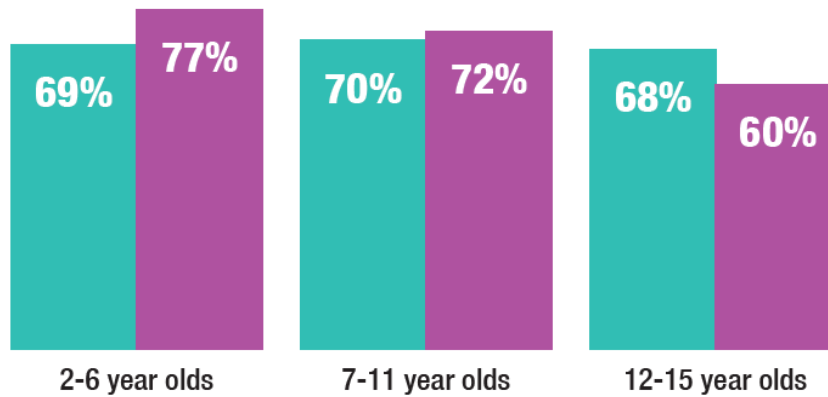
**28%**  
who were obese,  
with both these  
trends remaining  
stable since 2008.

A greater proportion of men  
were overweight or obese  
than women.



■ Boys  
■ Girls

The proportion of children in the  
healthy weight range decreased  
by age; this pattern was more  
pronounced for girls.

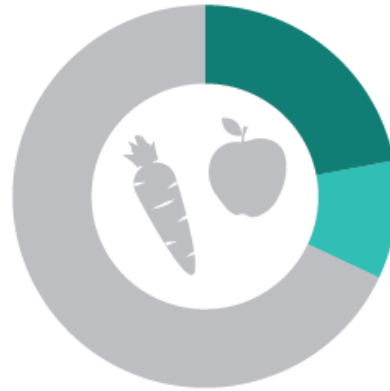


BMI increased significantly with age for both men and women.

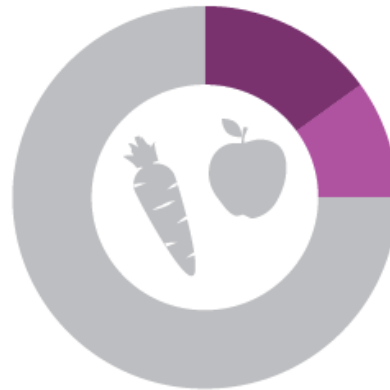


# Scotland's Health: And vegetable consumption is low

In 2018, **22% of adults** met the 5-a-day recommendation, which is fairly consistent with results since 2003. **10%** did not consume any fruit or vegetables on previous day.



**15% of children** met the 5-a-day recommendation. **10%** of children did not consume any fruit or vegetables on previous day.

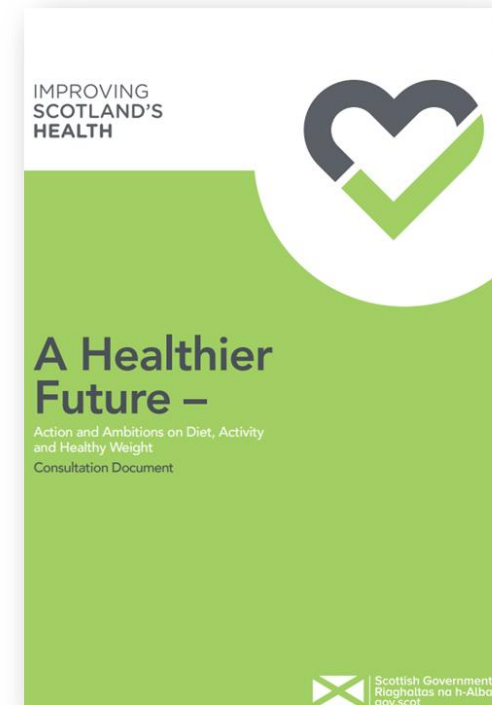


Average consumption of fruit and vegetables has also remained fairly constant since 2008.



# The Program

- Funded by Scottish Government through the **A Healthier Future** strategy
- To support SMEs in Scotland to reformulate commonly consumed products for maximum impact on dietary health.
- Based on the Scottish Dietary goals
- 95% of food and drink businesses in Scotland are SMEs
- Open to all not just FDFS membership
- **Connector function:** Free bespoke advice & support, links with funding and innovation specialists.





# Whole food system approach

Ingredient > Producers > Wholesalers > Procurement > Retail/Food Service > Consumer





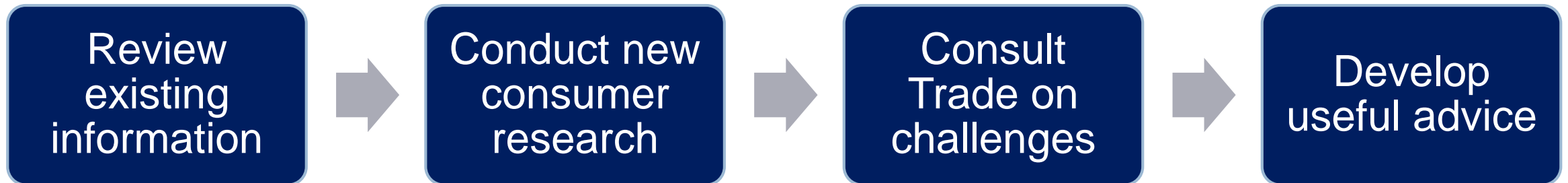
# The Challenge...

## Practical challenges & considerations

- Why should I change?
- What is in it for me?
- Where do I start?
- Who will help me?
- How do I do it?



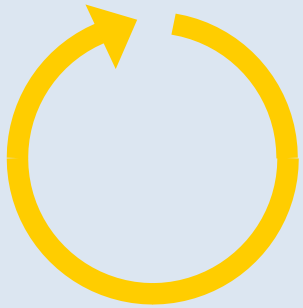
# What we've been working on



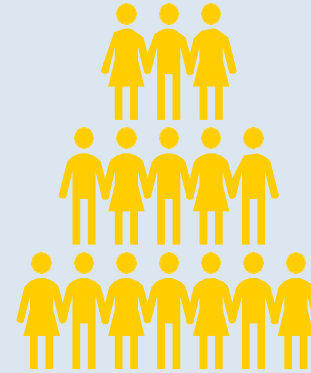
# Consumer Attitudes

What do they think about reformulating products?

Clair Prior



Online Quantitative  
Survey

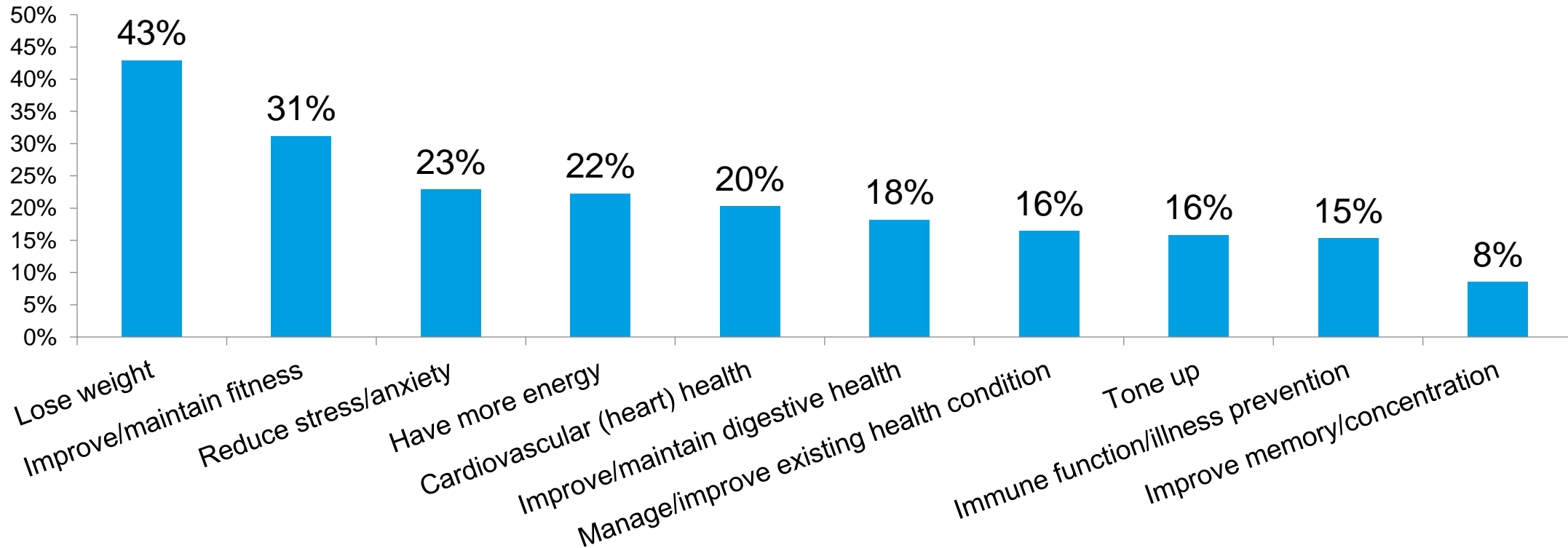


Sample Size

**1012**

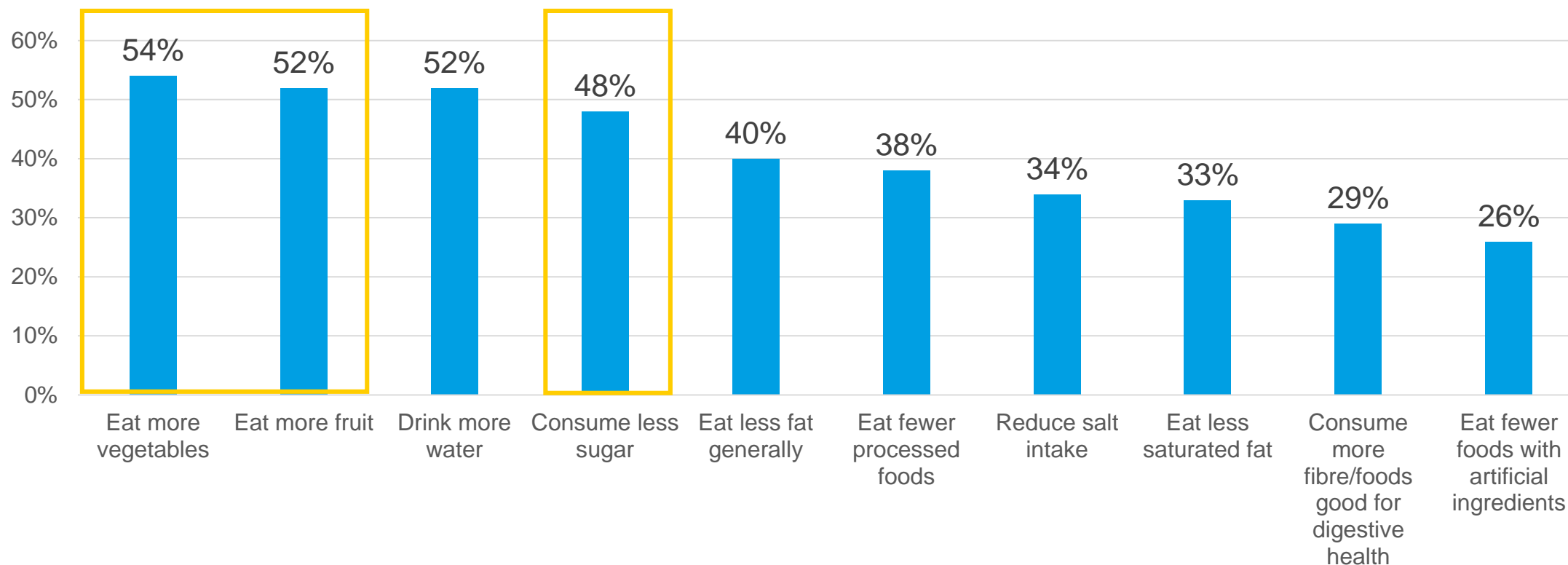
Across a **representative sample** of Scottish adults  
(Gender, Age, Social Grade, Region)

# Top 10 Health Goals



Most Scottish adults have some sort of health goal, only 11% do not.  
Losing weight and improving/maintaining fitness are the top 2 health goals.

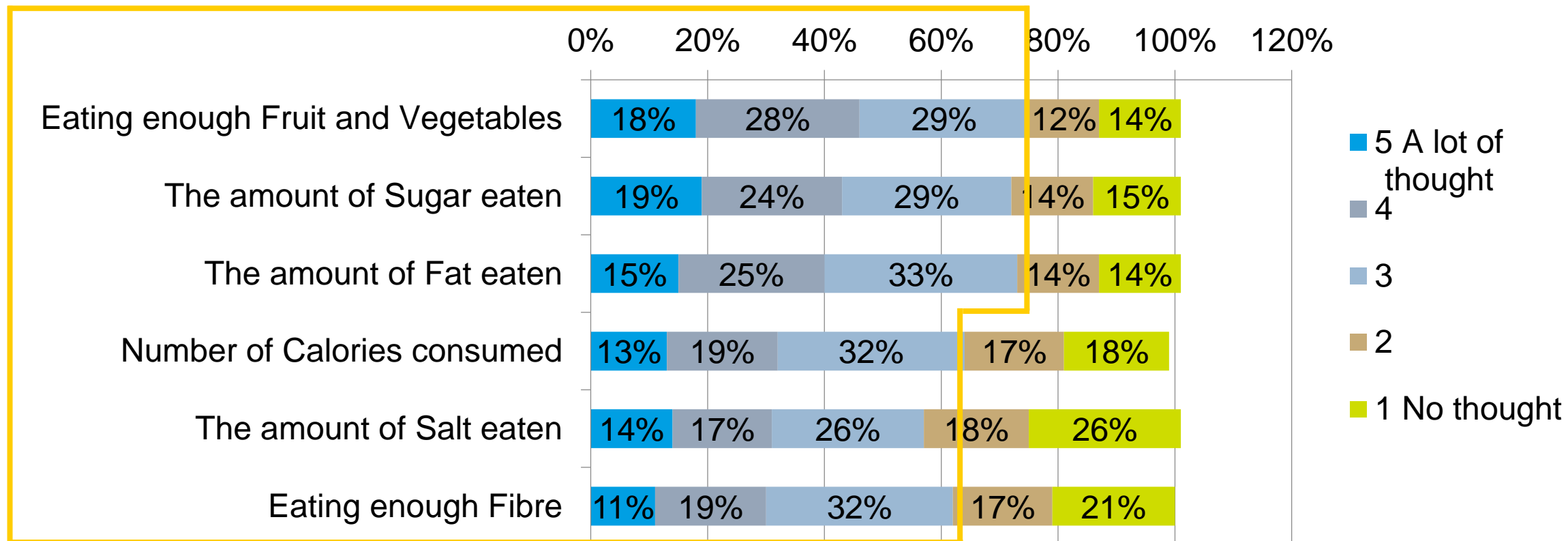
# Top 10, Ways Trying to Eat/Drink More Healthily



Similarly most Scottish adults are trying to do something to eat more healthily. Eating more fruit & vegetables and consuming less sugar are most strived for.

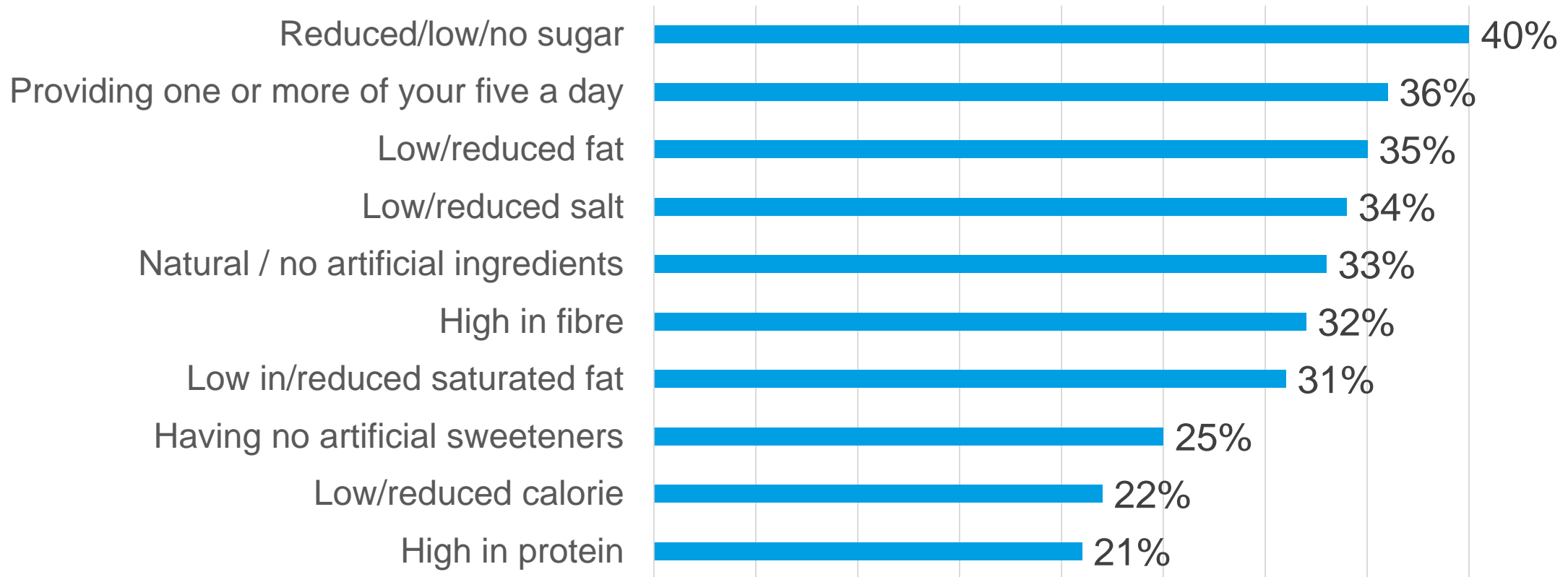


# Thought Given to the Following on a Daily Basis



Few are giving no thought to the amount they are eating of these foods or nutrients.

# Top 10, Types of Food & Drink Products Actively Looked For/Purchased



A significant proportion are actively looking for food & drink products to support their goals.

# Changes in Amounts Purchased vs. a Few Years Ago, Selected Categories



## Confectionery



## Ready Meals & Pizza



## Savoury snacks/crisps



## Sweet Bakery



## Pastry based meat pies, quiches & pasties

### More

21%

17%

20%

19%

12%

### Less

14%

16%

14%

21%

20%

### The Same

65%

67%

66%

61%

67%

For most categories the amount purchased remains unaltered significantly.

# Do Scottish Consumers Think They Are Eating the Right Amount of Salt, Sugar, Fat & Calories?

	Salt	Sugar	Fat	Calories
Less than guidelines	30%	35%	24%	14%
Equal to guidelines	44%	32%	47%	50%
More than guidelines	17%	26%	20%	26%
Don't know	9%	7%	9%	10%

Most Scottish adults feel they personally are eating less than or equal to the recommended guidelines for salt, sugar, fat & calories.

# Do Scottish Consumers Think They Are Eating the Right Amount of Fruit & Vegetables and Fibre?

	Fruit & Veg	Fibre
Less than guidelines	25%	17%
Equal to guidelines	41%	51%
More than guidelines	29%	20%
Don't know	5%	11%

Similarly, the majority feel they are eating equal to or more than the recommended amount of fruit & vegetables and fibre.

# Attitudes to Diet – Summary

**Many Scottish adults want to or are actively trying to improve their diet.**

**There is a disconnect between goals & reality. The majority of Scottish adults are not eating according to dietary guidelines.**

**A key barrier is awareness of own diet. Most Scottish adults think that they eat according to dietary guidelines on salt, sugar, fat, calories, fruit & vegetables and fibre.**

**Only a minority have made significant changes to what they eat. This supports the need for reformulation.**



# Consumer Profiles

Understanding who we're reformulating for

David Craig

# Who are we Reformulating for?

12%



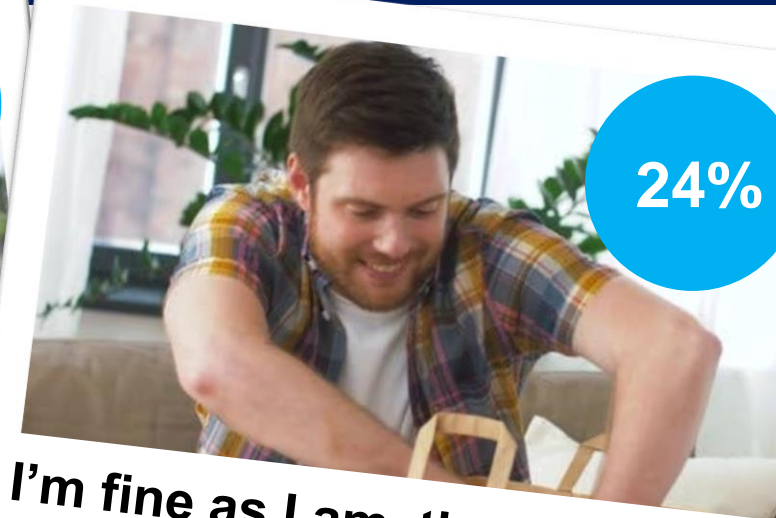
**The trying but need help-ers**

32%



**The Confident Eaters**

24%



**I'm fine as I am, thanks**

15%



**The Hesitants**

18%



**I'm making a change**



# The trying but need help-ers

12%



# The trying but need help-ers



## Profile

Male	47%
Female	53%
18-34	23%
35-44	19%
45-54	24%
55-64	21%
65+	14%
ABC1	61%
C2DE	39%
Children in home	32%

Recognise diet is not perfect

Support Government action to improve the healthiness of food products

Support reformulation

Want to lose weight

Support reformulation as will benefit society & themselves

Buying confectionery, prepared meals/pizza, savoury snacks, cooked meats & bakery more frequently than average.

Actively look for low/reduced sugar products

Recognise they are buying more sweet products than they were (e.g. confectionery)

Give most thought to the amount of sugar and fruit & vegetables they are eating

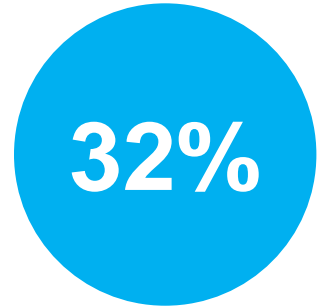
# The Confident Eaters



32%



# The Confident Eaters



Believe own diet is good	Support Government action to improve the healthiness of food products	Support reformulation
Support reformulation as will benefit the nation's health	Trying to improve/maintain good diet e.g. trying to eat more fibre and fruit & veg, less sugar, fat, salt, and processed foods	Actively looking for products that offer these nutritional benefits.
Significantly more likely than average to be thinking about the nutrition of what they are eating on a daily basis	Buying confectionery, sweet bakery, savoury snacks (crisps) and prepared meals/pizza less often than average.	Above average awareness of initiatives to make food healthier

## Profile

Male	53%
Female	47%
18-34	17%
35-44	16%
45-54	17%
55-64	20%
65+	29%
ABC1	62%
C2DE	38%
Children in home	29%



# I'm fine as I am, thanks

24%



# I'm fine as I am, thanks



## Profile

Male	57%
Female	43%
18-34	22%
35-44	13%
45-54	18%
55-64	22%
65+	24%
ABC1	43%
C2DE	57%
Children in home	32%

Varied perceptions of own diet

Do not support Government action to improve the healthiness of food products

Majority feel brands should do nothing to support healthy eating

Believe it is up to the individual to choose what they eat

Less likely than the average to be making active steps to make their diet healthier

Less likely to look for products with positive nutritional claims e.g. low sugar or high fibre

Few if any personal health goals

Less likely than average to be think about the nutritional content of the food they are eating on a daily basis

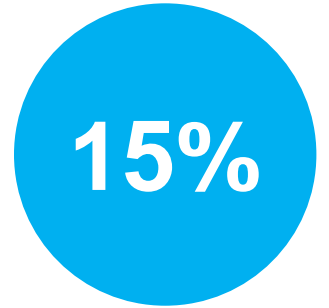
Buying many food products more frequently than average e.g. confectionery, meals/pizza, meats

# The Hesitants



15%

# The Hesitants



Varied perceptions of own diet	Mixed views on the role of brands & the Government in supporting healthy eating	Generally support the Scottish Government's role in encouraging food businesses to make foods healthier
Main reason for supporting is to improve the health of society	But ultimately believe it is up to the individual what they choose to eat.	Less likely to look for products with positive nutritional claims e.g. low sugar or high fibre
Less likely than the average to be making active steps to make their own diet healthier	Lower than average awareness of initiatives to support healthy eating	Buying prepared meals/pizza, processed meats and vegetarian savouries less frequently than average

## Profile

Male	56%
Female	44%
18-34	26%
35-44	18%
45-54	14%
55-64	21%
65+	22%
ABC1	55%
C2DE	45%
Children in home	36%



# I'm making a change



18%

# I'm making a change



Varied perceptions of own diet	Agree in principle with Government action improve the healthiness of food products	Support action to encourage better diet and healthy eating
However, would prefer new products than changing existing (reformulation or reduced portion size)	Improving/maintaining fitness more important than average	Trying to improve/maintain good diet e.g. trying to eat more fibre and fruit & veg, less sugar, fat, salt, and processed foods
Actively looking for products that offer these nutritional benefits	Most households with children believe that their children are eating within dietary guidelines	Comparatively high awareness of initiatives to make diets healthier

Profile	
Male	44%
Female	56%
18-34	33%
35-44	16%
45-54	15%
55-64	17%
65+	20%
ABC1	56%
C2DE	44%
Children in home	41%

# Which consumer is most likely to be yours?

12%



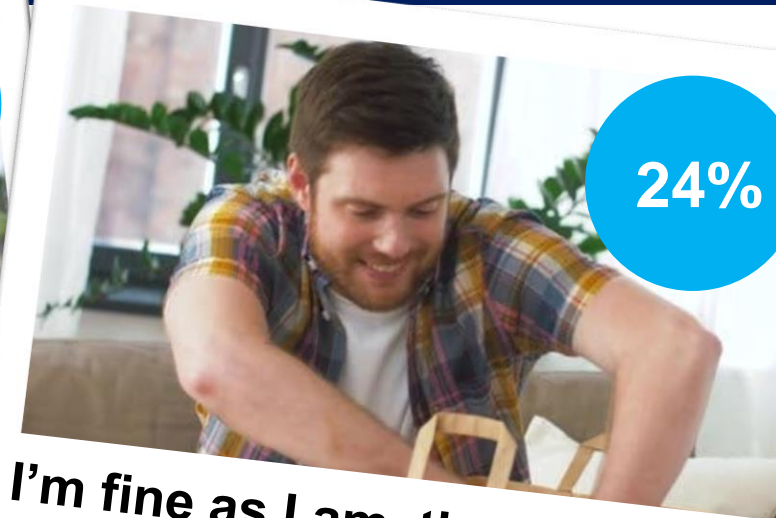
**The trying but need help-ers**

32%



**The Confident Eaters**

24%



**I'm fine as I am, thanks**

15%



**The Hesitants**

18%



**I'm making a change**



# And what was Industry saying?

What were our knowledge gaps?

David Craig

# Profile of Businesses

A wide range of businesses responded to the survey:

## Where Products are Sold

Scotland	41
Rest of the UK	26
Ireland	11
Mainland Europe	13
Rest of the World	15

## Turnover

£99k or less	2
£100k to £499k	9
£500k to £999k	5
£1m to £4m	8
£5m or more	16
Prefer not to say	2

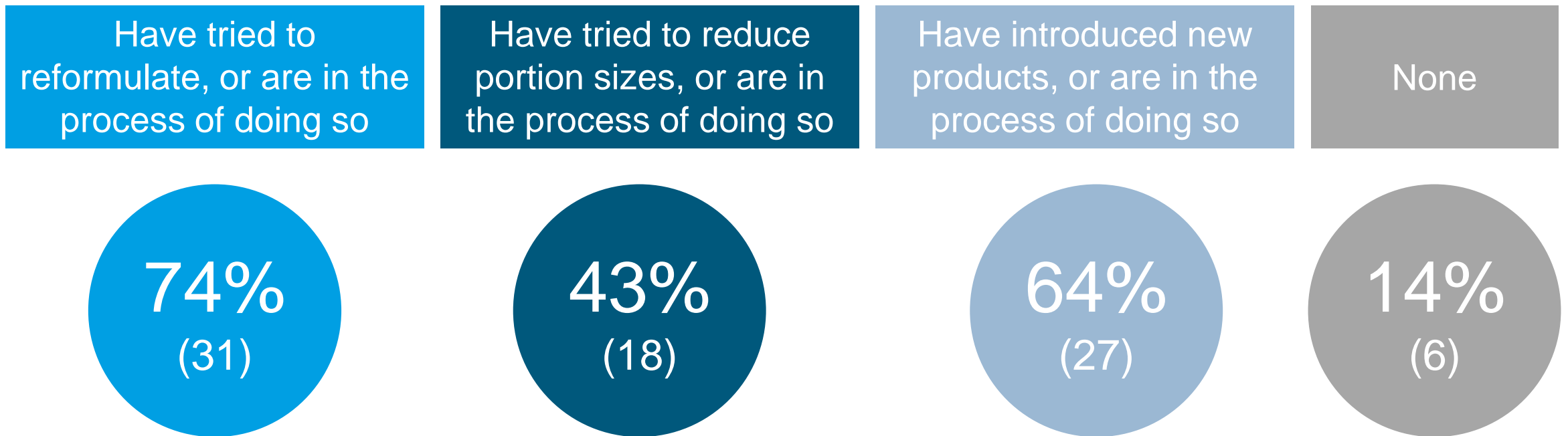
## Food Categories

Savoury & sweet bakery	12	Cheese	4
Biscuits & cereal bars	6	Ice-cream	3
Pastry based meat pies, quiches, flans, rolls & pasties	14	Dairy based chilled desserts	2
Pastry based vegetarian & vegan savouries	3	Confectionery	4
Cooked & cured meat & meat snacks	8	Ambient savoury snacks (e.g. crisps, savoury biscuits)	5
Fresh meat	7	Pizza & prepared meals	6
Other (Non pastry based vegan ready to eat meals, plant-based meat, jam & chutney, sandwiches)			4

# There are success stories

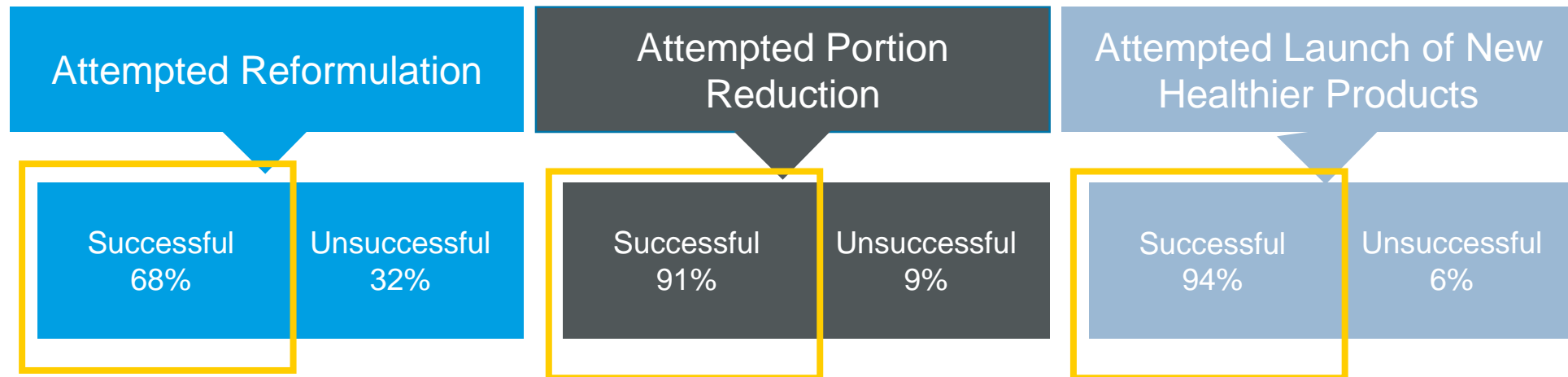
The research suggests that the majority of companies are taking some action to make their products healthier.

Reformulation is the most frequent route.



# Many who have tried, have succeeded

And for most part, this has been successful.



# Taste and Cost are key

## Top 3 challenges in reformulating

Achieving  
comparable  
taste  
**65%**

Cost of  
alternative  
ingredients  
**58%**

Achieving  
comparable  
mouthfeel/  
Texture  
**52%**

## Top 3 things consumers judge reformulation on

Taste

Price

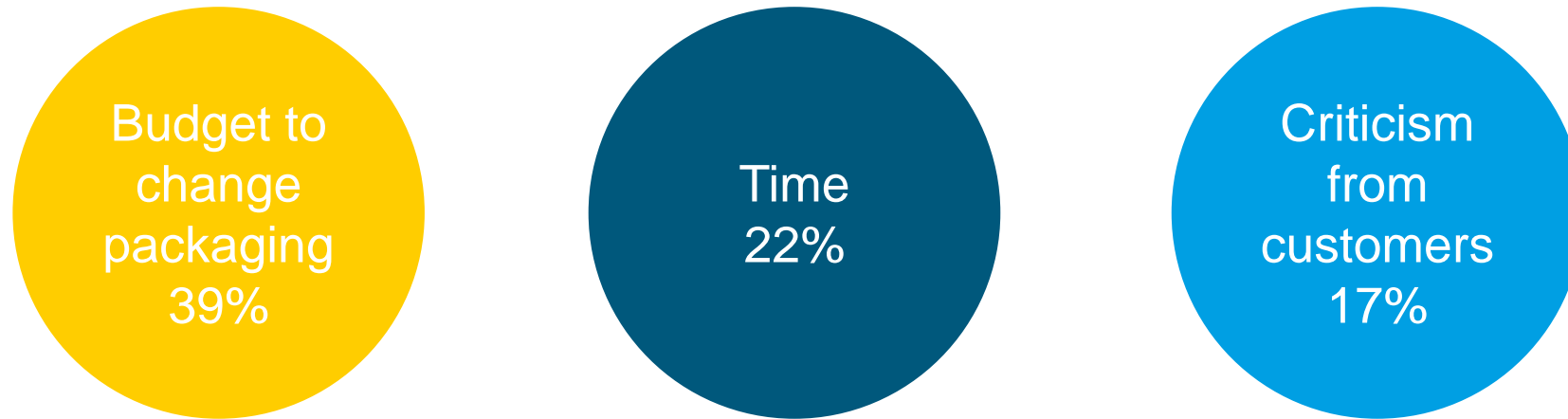
Healthiness of  
alternative  
ingredients

Taste and cost of ingredients are the biggest barriers to reformulating....also the top 2 considerations for consumers.

Highlighting potentially where businesses may need most support.

# Packaging stock is a barrier

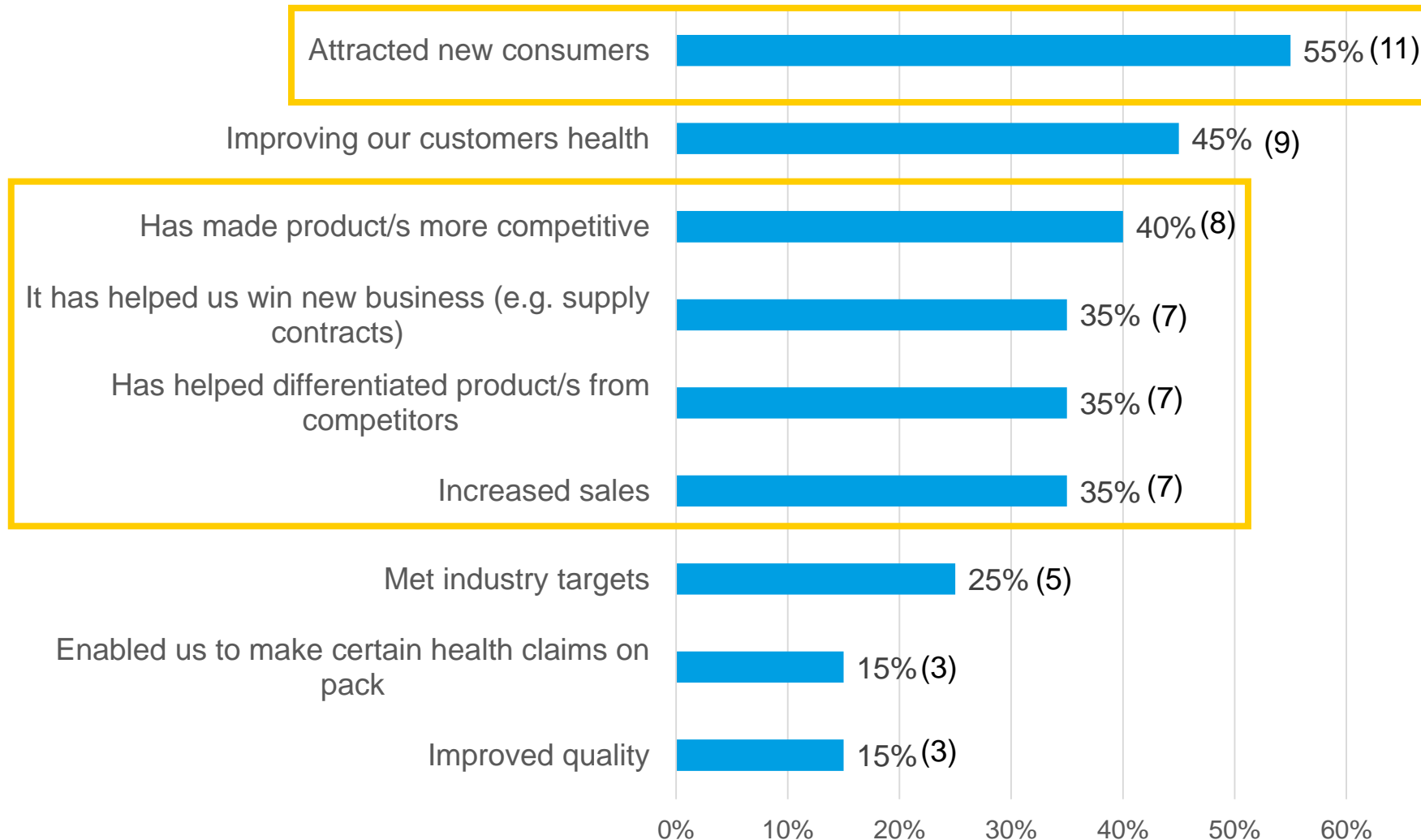
## Top 3 challenges reducing portion size



To help companies reduce portion sizes, support may be needed to change packaging.

# There are commercial benefits

## Key benefits of reformulating or reducing portion size



(Number of respondents)

Businesses successfully reformulating or reducing portion sizes have seen commercial gains



# Additional Help and Advice to Reformulate

What external help	Total	Currently trying	Unsuccessful	Successful
Food technologist	9	5	1	4
Consultant	7	2	1	4
FDF advice	4	2	1	1
Another business that had successfully reformulated/reduced portion sizes	2	1	0	1
Other (local council, marketing consultancy/opportunity and Ingredients suppliers)	3	2	0	1
None	15	4	5	8

Many businesses are not seeking advice:

- 5 out of the 7 suppliers who were unsuccessful did not seek any external advice.

- 8 out of the 15 suppliers who were successful

# Company size is not necessarily a barrier

**Number of companies successfully or unsuccessfully reformulating within the survey by turnover**

	Reformulated	
Turnover	Successfully	Unsuccessfully
£99k or less	1	0
£100k to £499k	4	1
£500k to £999k	2	1
£1m to £4m	2	3
£5m or more	6	2

# What have businesses done?

Reformulated	Number of Mentions
Reduced salt	8
Reduced sugar	6
Reduced fat	5
Other (e.g. switched to no palm oil, introduced GF)	4
Added fibre	2
Reduced calories	2
Added veg	1

# Launching new healthier products

Nearly two-thirds of companies had introduced new healthier products, with a high degree of success

Developed and launched new healthier product/s to add to existing range

Currently trying to do so  
12 (29%)

Have tried  
17 (40%)

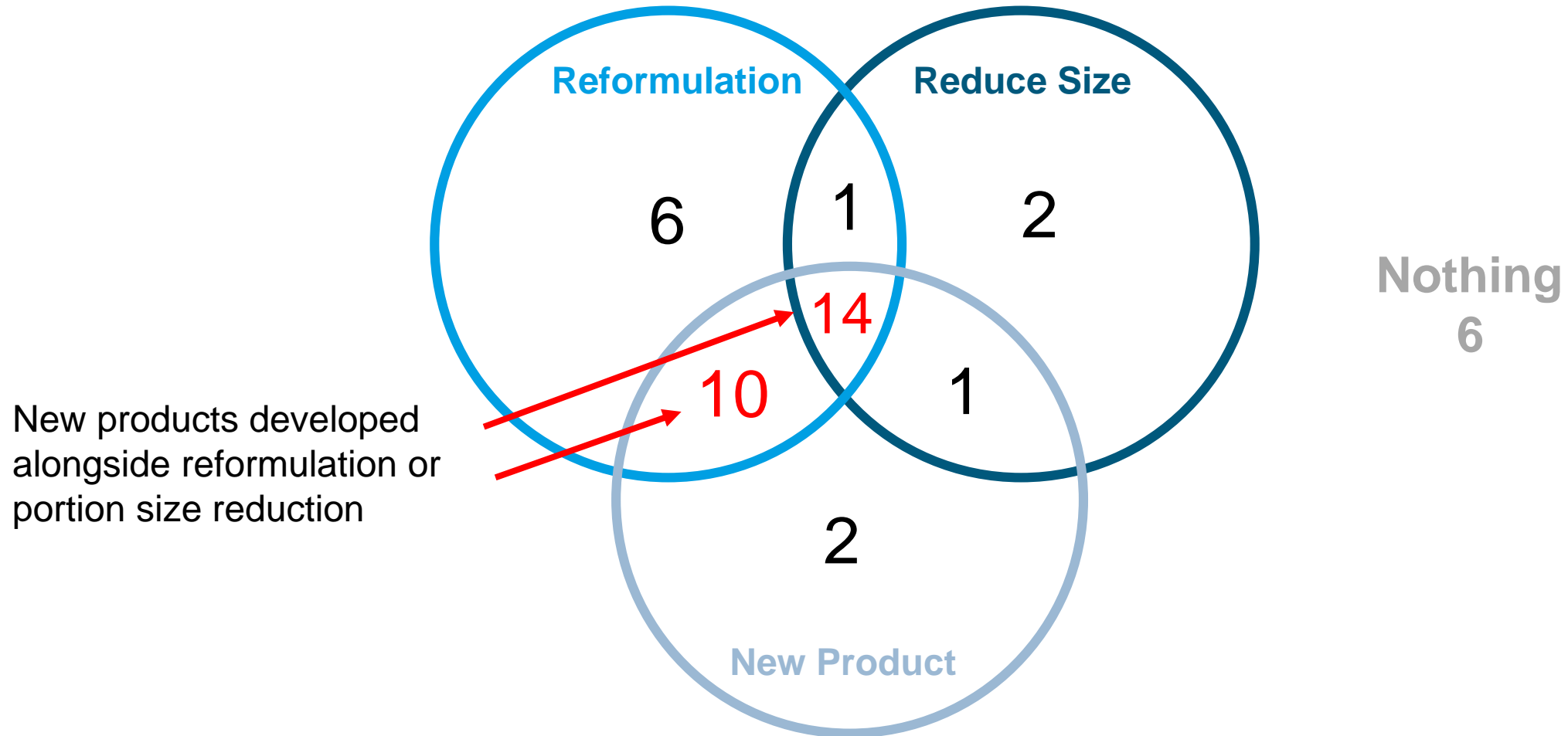
Not tried  
15 (36%)

Successful  
94% (16)

Unsuccessful  
6% (1)

# Attempts to Make Products Healthier

Notably, this tends to be done alongside reformulation or portion reduction of existing products rather than in isolation.



# Feedback from End Consumer

Customer feedback has also generally been positive

Launched reformulated or reduced size products to  
make products healthier (number of businesses)



# Advice for Companies Looking to Reformulate

Businesses who had already successfully reformulated gave the following positive advice:

‘Companies should always be striving to innovate and produce better quality products in terms of health while trying to maintain the taste and texture that attracts customers to these products. It is the responsibility of suppliers to make relevant trade offs between taste/texture and health as some consumers may not have the relevant knowledge or age to make decisions in their best interest usually in relation to health’.

*Plant based meat producer*

‘As we created our products in the first place to be about health we were fine, but when trying to reduce the costs to create broader appeal this is difficult’.

*Dairy producer*

‘Keep trying ... do it very very slowly over a longer period of time people’s tastes should change if they are regular customers. But for those irregular customers they may notice the difference and can cause difficulties by putting comments on social media’.

*Meat/meat products producer*

‘Ask for help’.

*Meat/meat products producer*

‘Involve customers and listen to their feedback’

*Pizza, ready meal pastry-based products producer*

‘Keep trying’.

*Pizza or prepared meals producer*

‘Give it a try, and ask customers what they want’

*Meat/meat products producer*

‘Takes a lot of time to perfect’.

*Ice-cream producer*

‘Ensure the product still appeals to its core customer’

*Bakery*



# Helping you build a plan

Introducing our new Diagnostic Tool

<https://survey.cmix.com/FD7BEB27/G10DF6LT/en-US>

# Visit the link on our website



# Select your product area(s)



**fdf** food & drink  
federation  
passionate about food & drink  
Scotland

**What type of foods are you looking to make healthier?**

- ☒ Savoury & sweet bakery (excluding meat products)
- ☐ Biscuits & Cereal Bars
- ☒ Pastry based meat pies, quiches/flans, rolls & pasties
- ☒ Pastry based vegetarian & vegan savouries
- ☐ Cooked & cured meat & meat snacks
- ☐ Fresh meat (e.g. mince, sausages, BBQ meat or breaded chicken)
- ☐ Cheese
- ☐ Ice-cream
- ☐ Dairy based chilled desserts (e.g. yoghurt/fromage frais)
- ☐ Confectionery (e.g. sweets, chocolate, fudge/toffee)
- ☐ Ambient savoury snacks (e.g. crisps, savoury biscuits)
- ☐ Pizza & prepared (ready to eat or heat at home)

# Think about how you could reformulate

Which aspects of these products would you be interested in reformulating to make them healthier?

	Savoury & sweet bakery (excluding meat products)	Pastry based meat pies, quiches/flans, rolls & pasties	Pastry based vegetarian & vegan savouries
Reduce fat content	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Reduce sugar content	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduce salt content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increase fibre content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increase fruit or vegetable content	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Reduce calories	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Reduce portion size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# And consider specific nutrients/areas

**fdf** food & drink  
federation  
passionate about food & drink  
Scotland

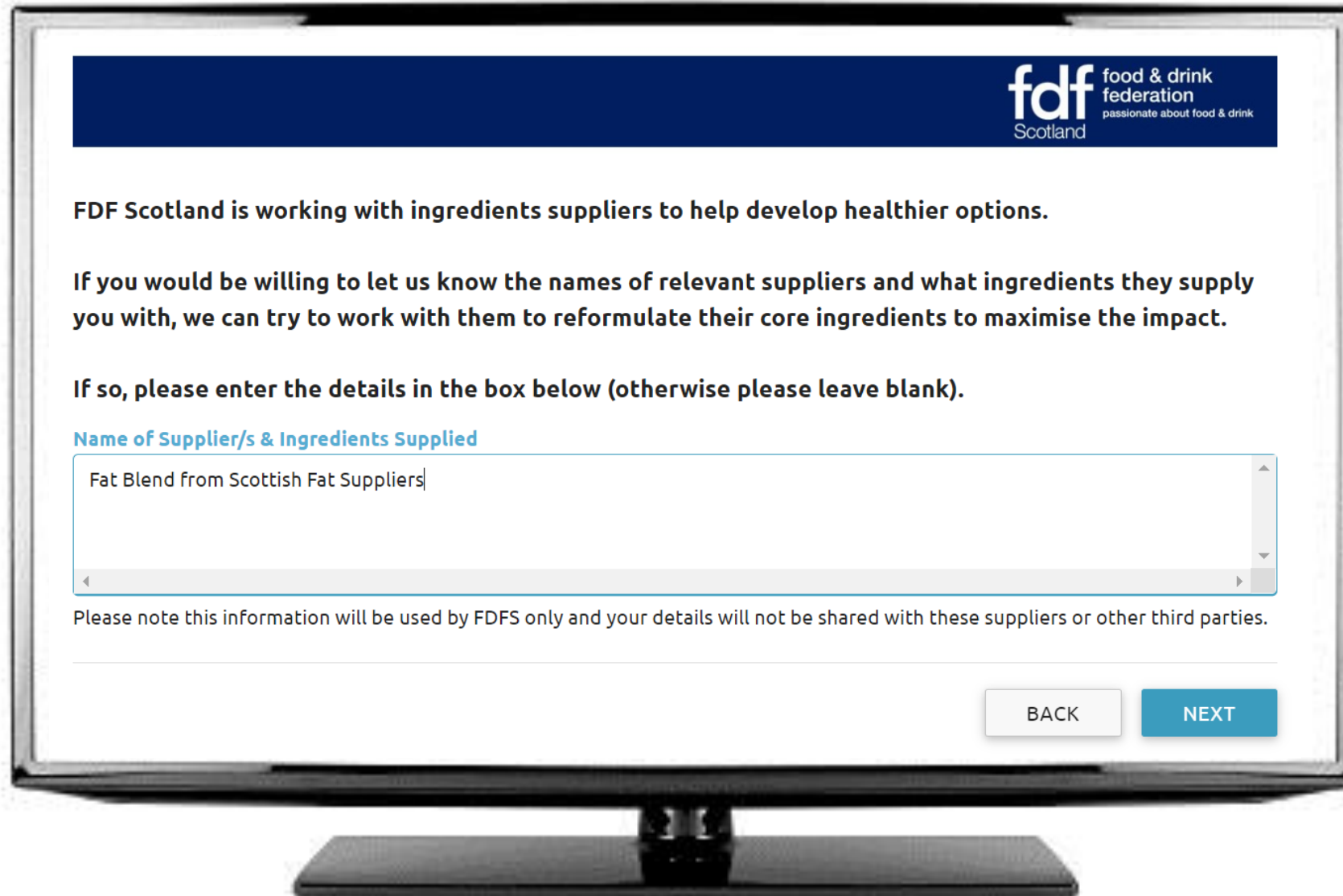
Is your ability to reformulate partly or fully dependent on any ready-made ingredients you may buy? E.g. pastry, chocolate, rusk.

	Yes	No	Don't know
Savoury & sweet bakery (excluding meat products)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pastry based meat pies, quiches/flans, rolls & pasties	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pastry based vegetarian & vegan savouries	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

BACK

NEXT

# And tell us about key suppliers



**fdf** food & drink  
federation  
Scotland passionate about food & drink

**FDF Scotland is working with ingredients suppliers to help develop healthier options.**

**If you would be willing to let us know the names of relevant suppliers and what ingredients they supply you with, we can try to work with them to reformulate their core ingredients to maximise the impact.**

**If so, please enter the details in the box below (otherwise please leave blank).**

**Name of Supplier/s & Ingredients Supplied**

Fat Blend from Scottish Fat Suppliers

Please note this information will be used by FDFS only and your details will not be shared with these suppliers or other third parties.

BACK NEXT

# Tell us what progress you've made

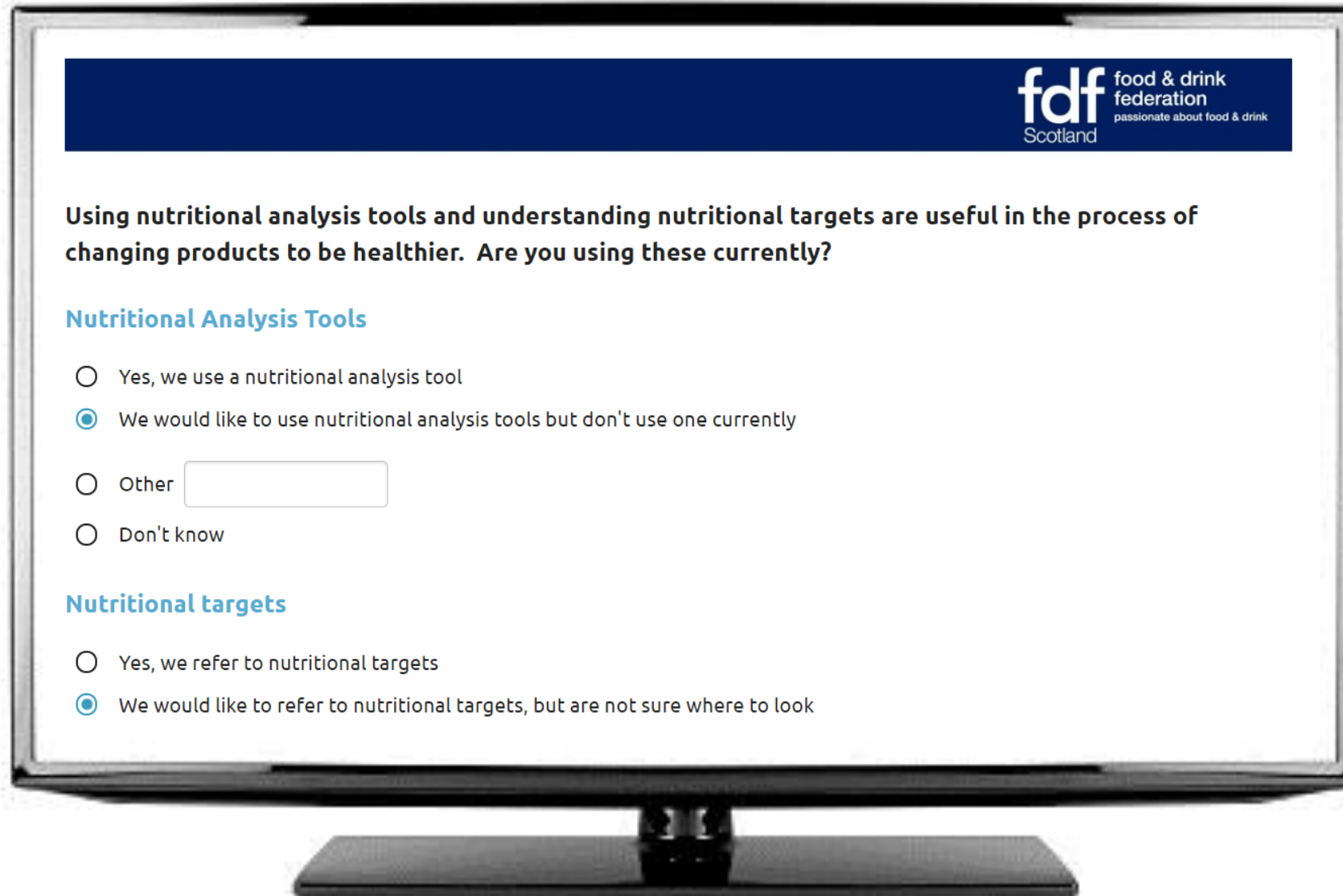
**fdf** food & drink  
federation  
passionate about food & drink  
Scotland

**Have you already attempted to reformulate or reduce the portion size of these products?**

	Savoury & sweet bakery (excluding meat products)	Pastry based meat pies, quiches/flans, rolls & pasties	Pastry based vegetarian & vegan savouries
Currently trying to reformulate	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Currently trying to reduce the portion size	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tried to reformulate but were unsuccessful	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Tried to reduce portion size but were unsuccessful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
None of these	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/> <input type="text"/>	<input type="radio"/> <input type="text"/>	<input type="radio"/> <input type="text"/>



# And whether we can help with analysis



**fdf** food & drink  
Scotland federation  
passionate about food & drink

**Using nutritional analysis tools and understanding nutritional targets are useful in the process of changing products to be healthier. Are you using these currently?**

**Nutritional Analysis Tools**

☐ Yes, we use a nutritional analysis tool

☒ We would like to use nutritional analysis tools but don't use one currently

☐ Other

☐ Don't know

**Nutritional targets**

☐ Yes, we refer to nutritional targets

☒ We would like to refer to nutritional targets, but are not sure where to look

# Helping you access funding



**fdf** food & drink  
Scotland federation  
passionate about food & drink

**Have you accessed or explored funding to support reformulation for health?**

- ☐ Yes, we have already gained funding to help us reformulate
- ☐ We are in the process of gaining funding
- ☒ No, but we would be interested in finding out more about the support available
- ☐ Not interested
- ☐ Other, please specify

**If you have already accessed funding, please could you let us know where you received this from?**

# And contacting you afterwards

**FDF Scotland would like to contact you to discuss the next steps in your journey in reformulating or reducing portion sizes for health. To do this, we would be grateful if you could provide your contact details below.**

Your details will be used by FDF Scotland for this sole purpose and will not be used by any third parties.

**Name\***

David Craig

**Company name\***

David's Pie Company

**Email\***

david@davidspiecompany.web

**Contact telephone number**

\*Required

**Does your company operate in Scotland? E.g. sell products.**

☐ Yes - Operate in Scotland

☐ Other, please specify

# At the end, we'll provide you with a customised suite of advice, based on your needs



Thank you for completing the Reformulation for Health advice tool. Please find below a selection of resources to provide guidance in reformulating or reducing portion size. This is provided as part of FDF Scotland's Reformulation for Health programme, further details of which can be found on FDF Scotland's [website](#).

For businesses operating in Scotland, Joanne Burns (FDF Scotland's Reformulation Project Manager), will be in contact to discuss and develop your reformulation action plan. Joanne's contact details can also be found at the bottom of this page.

For businesses that currently do not operate in Scotland please still use these guides to help start your reformulation journey.

Please click on each title to access the guides.

## **Reformulation Programme Overview**

Scottish Food companies are being encouraged to make their products healthier. The goal is to make small changes to everyday products which results in a big shift in overall health.

# At the end, we'll provide you with a customised suite of advice, based on your needs

Please click on each title to access the guides.

## **Reformulation Programme Overview**

Scottish Food companies are being encouraged to make their products healthier. The goal is to make small changes to everyday products which results in a big shift in overall health.

## **Fat Reduction - Savoury Bakery, Sweet Bakery, Biscuits & Cereal Bars**

Fats are important in the structure, taste, texture and appearance of bakery products, however too much fat can contribute to poor health which can increase the risk of heart disease and stroke. This guide provides an introduction as to how fat reduction can be achieved in bakery products.

## **Fat Reduction - Meat Products, Meat Pastries & Butchery**

Fats are important in the structure, taste, texture and appearance of meat products, pastries and butchery products, however too much fat can contribute to poor health which can increase the risk of heart disease and stroke. This guide provides an introduction as to how fat reduction can be achieved in meat products, pastries and butchery products.

## **Fat Reduction - Snacks & Prepared Foods**

Fats are important in the structure, taste, texture and appearance of snacks and prepared food products, however too much fat can contribute to poor health which can increase the risk of heart disease and stroke.



# With detailed advice on different areas

**fdf** food & drink federation  
resources about food & drink  
Scotland

## Salt Reduction

The UK food industry is a global leader in reformulating the salt content of products. However, the average UK adult still consumes a third more salt than the maximum recommended by the government.

Too much salt in our diet can lead to issues including water retention, raised blood pressure, increased risk of heart attack, kidney disease and stroke.



**fdf** food & drink federation  
resources about food & drink  
Scotland

## Sugar Reduction

Almost 90% of the Scottish population is eating too much sugar and on average, consumers are eating more than twice the government recommendation. Sugar contains 4 kcals per gram and no nutritional value.

Eating too much sugar can cause weight gain and is associated with tooth decay and poor dental health. Reducing the sugar content in foods is a key goal of the reformulation program.




**fdf** food & drink federation  
resources about food & drink  
Scotland

## Fat Reduction

Fats are important in the structure, taste, texture and appearance of bakery products.

All types of fat are high in energy. A gram of fat, saturated or unsaturated, provides 9 kcal of energy compared with 4 kcal for carbohydrate and protein. Unused energy is stored in the body as fat, in the form of triglycerides. An excess of energy may lead to an individual becoming overweight or obese. Therefore, too much fat can contribute to poor health which can increase the risk of heart disease and stroke.




**fdf** food & drink federation  
resources about food & drink  
Scotland

## Increasing Fibre

In the UK, most people don't eat enough fibre. The average adult intakes around 18g/day, which is 12g less than the government's daily recommendation. Many consumers don't know how much fibre they should be eating or where to find it, despite health benefits being well documented.

Benefits include a reduced risk of chronic diseases like cardiovascular disease, type two diabetes and bowel cancer.



**fdf** food & drink federation  
resources about food & drink  
Scotland

## Increasing Fruit & Vegetables

For shoppers looking to follow a healthy diet, eating more fruit and vegetables is the top priority.

Types of diet are also contributing to the growing plant-based trend. For example flexitarians account for 14% of the population and vegetarianism and veganism are also becoming more mainstream.

There are significant health benefits to getting at least five portions of fruit and vegetables every day. They are a good source of vitamins and minerals, and are an excellent source of dietary fibre, which can help to maintain a healthy gut.

**An adult portion of fruit or vegetables is 80g**




**fdf** food & drink federation  
resources about food & drink  
Scotland

## Reducing Portion Size and Calories

Reducing portion sizes, even by a small amount, can have a significant impact on overall calorie consumption.

Currently there's no established industry-wide method for setting portion size and there's huge variation across categories and sectors.

**In Scotland it is advised that people reduce their calorie intake by at least 120kcal per day**



**fdf** food & drink federation  
resources about food & drink  
Scotland

## The Business Case for Reformulation

**Introduction**

Scottish Food companies are being encouraged to make their products healthier. The goal is to make small changes to everyday products which result in a big shift in overall health.

Reformulation could consist of:

- **Recipe Changes:** Making products that are lower in salt, fats or sugar, or fortified with nutrients such as added fibre, vegetables or fruit.
- **Portion Size Changes:** Altering the overall portion size to reduce the calorie content.

**Why bother?**

Our research shows that consumers are in favour of reformulation. With many Scottish adults wanting to or actively trying to improve their diet, they expect food manufacturers to be taking the lead, helping them to make healthier choices.

There are business benefits too. Businesses successful in reformulating or reducing portion size have seen commercial gains such as winning new business, attracting new custom and making their products more competitive.

Even producers who consider their traditional recipes as their USP have made small changes without losing product quality or customers.

**How to Approach Reformulation**

Approach	Actions
1. Access free guidance	<ul style="list-style-type: none"><li>• Work with FDF Scotland to build your reformulation plan together. Contact <a href="mailto:info@fdfscotland.co.uk">info@fdfscotland.co.uk</a></li><li>• Contact your ingredients (e.g. seasoning, supplier) and see what support they can offer.</li><li>• Changes to your highest volume products will have the biggest impact on health.</li><li>• Benchmark the nutritional content of product(s) against similar ones to determine whether they are in line with the market.</li><li>• If you want to reduce salt, check to see if there are FSA in Scotland Salt Targets* for the product you are reformulating.</li><li>• Gather feedback, do your customers think any of your product nutrients are out of balance?</li></ul>

**Guidance**

Resources available include the following, for appropriate categories

- Fat Reduction
- Sugar Reduction
- Salt Reduction
- Increasing Fibre
- Increasing Fruit
- Increasing Vegetables
- Reducing Portion Size

**fdf** food & drink federation  
resources about food & drink  
Scotland

# With practical guidance

## Fat Reduction

Fats are important in the structure, taste, texture and appearance of bakery products.

All types of fat are high in energy. A gram of fat, saturated or unsaturated, provides 9 kcal of energy compared with 4 kcal for carbohydrate and protein.

Unused energy is stored in the body as fat, in the form of triglycerides. An excess of energy may lead to an individual becoming overweight or obese. Therefore, too much fat can contribute to poor health which can increase the risk of heart disease and stroke.



## Fat Reduction

(2 of 3)

### What are fats?

Fats are made up of different fatty acids and some are essential for health. They provide energy, important vitamins (e.g. vitamins A and D) and essential fats.

### 3 Main Fat Categories:

1. **Unsaturated** both mono and polyunsaturated fats, when eaten in moderation and used to replace saturated or trans fats, can help to lower cholesterol levels and reduce your risk of heart disease. Omega 3 and 6 are unsaturated fats that the body needs but cannot make.
2. **Saturated** fats are mainly found in animal sources, including meat and dairy, but can also be found in palm oil and coconut oil. Consuming too much of this fat can raise cholesterol and increase the risk of heart disease.
3. **Trans** fats are naturally present in some animal products and can occur during some food processing. Concerns about the impact of trans fats on health has led to many manufacturers and retailers already removing them from their products.

### Fats in the Bakery Sector

Saturated fats are commonly found in cakes, butter, cream filling and pastries. Fats provide many functions such as aeration, shortening, flakiness, moisture retention, glaze, plasticity and heat transfer.

### Targets

Most people in the UK eat too much saturated fat. The UK government recommend that:

- Men should not eat more than 95g of fat per day, of which no more than 30g is saturated fat
- Women should not eat more than 70g a day and less than 20g of saturated fat a day
- Children should have less
- Adults should not have more than circa. 5g of trans fats a day.

## Sector Guidance

- Savoury bakery
- Sweet bakery
- Biscuits
- Cereal bars
- Pastry based vegetarian and vegan savouries
- Ambient savoury snacks

## Fat Reduction

(3 of 3)

### How to Reduce

If you want to reduce the risk of heart disease and ill health, it's best to reduce the overall fat intake and swap saturated fats for unsaturated fats.

Fat can be reduced in bakery products in several ways:

- Slightly reducing the quantity used and swapping the fat used for a healthier version.
- Using a fat replacer, removal of visible fat, emulsifiers, reducing portion size, adjusting cooking temperatures.
- 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 more easily than altering the biscuit recipe

### Help Available

- Contact [Joanne.Burns@fdfscotland.org.uk](mailto:Joanne.Burns@fdfscotland.org.uk) to help build an action plan
- Funding may be available from [www.interface-online.org.uk](http://www.interface-online.org.uk)
- Keep up to date with the latest advice at [www.foodstandards.gov.uk](http://www.foodstandards.gov.uk)
- <https://www.igd.com/charitable-impact/healthy-eating/reformulation/focus-areas/fats>

### Case Study 1: Chalmers Bakery: Puff Pastry



The business manufactures and sells a range of traditional bakery products such as breads, savories and cakes in 12 shops and via wholesale.

The sausage roll puff pastry has been reformulated resulting in 17% overall reduction in fat.

### Case Study 2: Chalmers Bakery: Pie Shell Pastry

Chalmers has created a new Mediterranean vegetable pie, which contains only 3.5 grams fat. They created the new pie shell pastry for the base of the Mediterranean vegetable pie using a vegetable oil-based shortening instead of animal fat to reduce saturated fat. Compared to a typical traditional scotch pie the Mediterranean vegetable pie contains 68% less fat and 71% less saturated fat.

## Help on how to reduce fats

### FAT REPLACERS:

Using unsaturated fats, or alternative fat sources such as blended fats.

### HEALTHIER FAT PRODUCTS:

Reduce and swap saturated fat ingredients for unsaturated products

### REDUCED FAT VERSIONS:

Using reduced fat products in composite products such as healthier cream and butter alternatives

### EMULSIFIER:

Use these to ensure correct texture, structure and preservative qualities. Watch out for changes in shelf-life

# Reformulating Scotland's Food & Drink

Food & Drink Federation Scotland:

September 2020

**Joanne Burns – Food & Drink Federation Scotland**

Joanne.Burns@fdfscotland.org.uk

**David Craig – Levercliff**

david.craig@levercliff.co.uk

**Clair Prior – Levercliff**

clair.prior@levercliff.co.uk