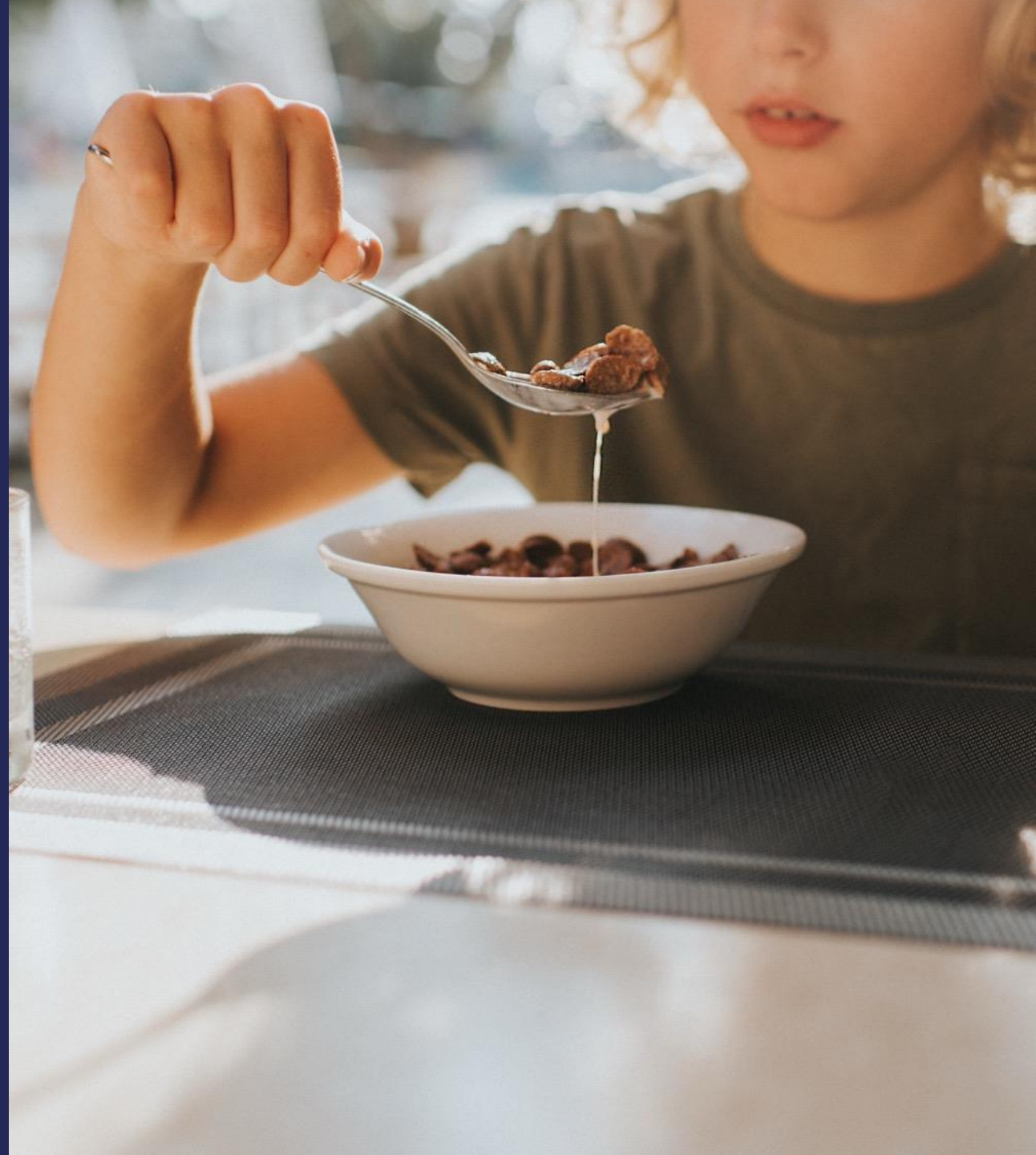


Using nutrition software to crack the reformulation equation: an introduction

Dave King, Nutricalc
Harriet Heath, FDF Scotland



Free support for Scottish SMEs

Launched in 2019 to support SMEs in Scotland to reformulate commonly consumed products, for maximum impact on dietary health

Common Challenges

Access to innovative ingredients

Time & resource

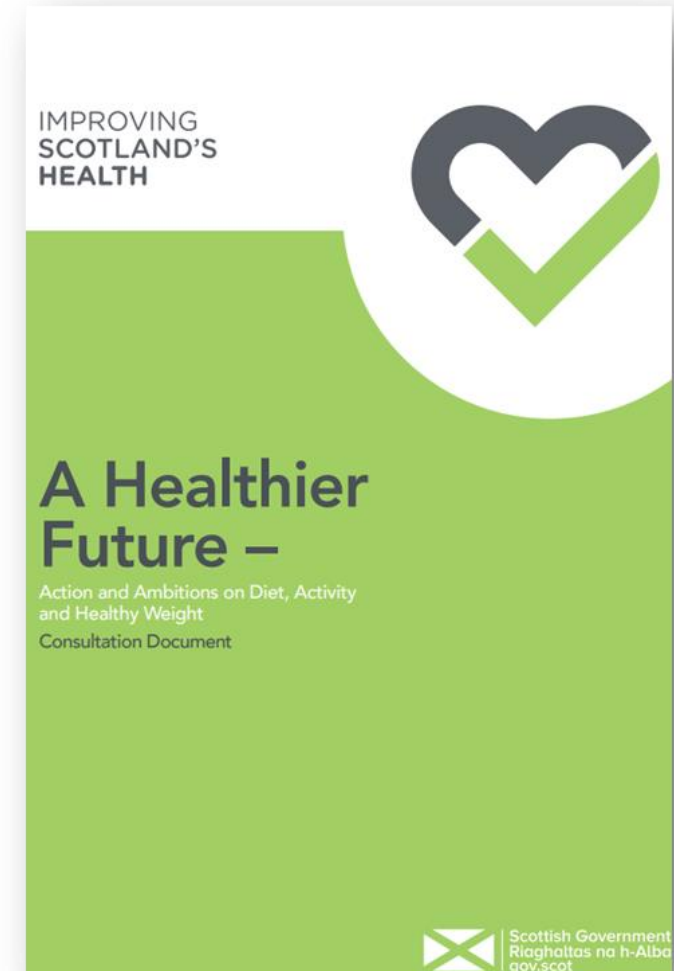
Knowledge and skills

Understanding relevant targets

Cost

Where to go for help

Sensory analysis



Reduce fat



Reduce calories/
portion size



Reduce salt



Reduce sugar



Increase fibre



Increase fruit
& vegetables



Replace ingredients
with healthier
alternatives



Improve
consumer
information

Drivers for change

HFSS NPM
restrictions

Salt
Reduction
targets 2024

Calorie
reduction
programme

Mandatory
calorie
labelling

Front of Pack
labelling

Health
Claims

Improve
health of
product

Customer
request

Retailer
request



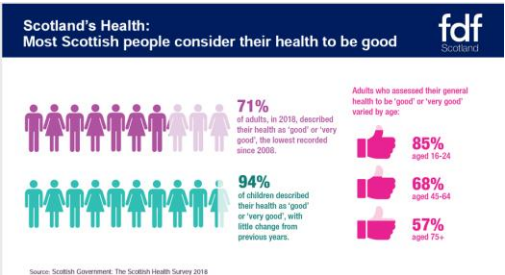
FDF HFSS Toolkit

Reformulation Toolkit

Free to access resources

Resources

- Reformulation for health resources
- Podcasts
- Webinars
- 2024 salt and calorie targets
- Advice Tool
- Reformulation guides
- FDF Scotland Research
- IGD reformulation guidance
- Guide: Spotlight on sugars



Fat Reduction

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



Reformulation for Health

Reformulation Support

A guide to sensory analysis for SMEs



food & drink federation Scotland

Facts on UK nutrition targets: Butchery

Public Health England have published UK wide guideline targets and upper limits for calorie and salt content in many products, with the aim that these are achieved by 2024.

Calorie targets

A target of 20% calorie reduction has been set for pastry products, including pies, pasties, sausage rolls and quiches.

Target: 430kcal/portion
Maximum: 670kcal/portion
Click [here](#) for full information.

Salt targets

Targets per 100g of product are set out below, for both sodium and salt (Sodium x 2.5 = Salt).

Type	Description	Target Salt (g)	Target Sodium (mg)	Maximum Salt (g)	Maximum Sodium (mg)
Bacon	hand/other cured meats	2.58	1030		
		1.63	650		
Sausages	fresh, chilled, frozen	1.06	420	1.53	1525
	cooked & sausage meat products	1.3	520	1.53	600
Meat pies	dakka/mutton, pork pies, sausage rolls	0.93	370	1.08	430
	Coronation & meat based pasties	0.9	360	0.9	360
Cooked minced meat	Other meat based pastry products	0.6	240	0.71	285
	Whole muscle	0.68	270		
Cooked minced meat	Reformed whole muscle	0.9	360		
	Commercial / chopped reformed meat	1.35	540		
Burgers & Grill meals		0.68	270	0.88	350
	Frankfurters, hotdogs & burgers				
Frankfurters	Canned	1.5	520	1.75	700
	Chilled	1.5	600	1.88	750

Click [here](#) for full information.

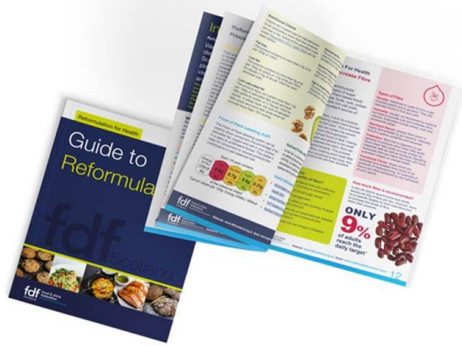
FDF Salt reduction supplier database

Reformulation is a growing priority for manufacturers navigating market trends, as health grows as a priority in consumer purchasing. Nutritional guidance and legislation are also driving reformulation, including the following frameworks focused on salt reduction:

- 2024 salt reduction targets
- View full document
- View our customer charts
- Formulation restrictions for products deemed high in Fat, Sugar and Salt (FOS)
- Guidelines for salt reduction

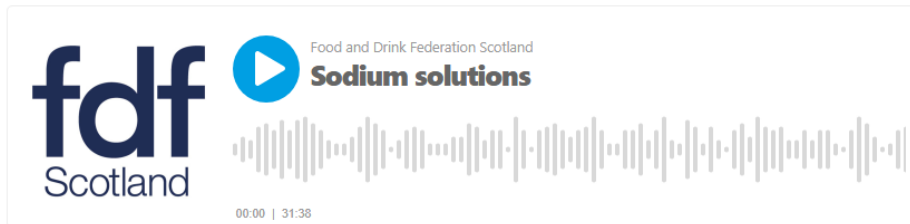
The Food and Drink Federation Scotland Reformulation for Health's programme has developed this database to help food and drink manufacturers source ingredients that can be used to achieve sodium reduction. The list acts as a signposting resource only, and quality checks remain the responsibility of the manufacturer prior to use. If you produce or supply a product that you would like included in this resource, or if you would like to update any of the information, please contact reformulation@fdfscotland.org.uk

Supplier	Brand	Product description	Page
Blondie Food Group	Blondie Salt	Low sodium salt	1
Foodstuffs by Unilever	NSF 14	Natural Flavouring	2
Heinz Group	Saltwell	Low sodium sea salt	3
J.P. Hume Technologies Ltd	J.P. Hume Technologies	Natural Flavouring	4
Orange Foods Ltd	LSalt	Low sodium salt blend	5
Knifflinger Ltd	Salt of the Earth	Unsalted salt	6
Mora & Sorensen	Mora SeaSalt	SeaSalt	7
Pharos salt	Saltwell	Low sodium salt blend	8
Sevenson & Co	Sevenson	SeaSalt	9



Podcasts

- Sodium solutions
- A spotlight on sugars
- Focus on Fibre
- The process of reformulating food and drink
- How bakers can make their products healthier
- Consumer and business attitudes to reformulation
- How butchers can make their products healthier
- How the food industry can help consumers make healthier choices



LISTEN ON



SHARE EPISODE



Webinars

- Consumer and business attitudes to reformulation
- Sugar Reduction in Bakery Products
- Salt Reduction in Pastry Products
- Sodium Reduction Solutions
- Focus on Fibre

Webinars

Click through to view recordings of our previous webinars, featuring a range of industry experts:

- **Focus on fibre**
- **Consumer and business attitudes to reformulation**

Listen to our **Sodium reduction solutions webinar** which took place on the 17th March to learn about salt's place in public health, and methods of salt reduction using alternative ingredients.

Be sure to sign up to our newsletter below, to receive alerts of our future events.

Reformul8 Partnership

Who is it aimed at?

- ✓ Ingredient manufacturers and suppliers
- ✓ Food and drink manufacturers
- ✓ Wholesalers, retailers and caterers
- ✓ Stakeholders and Academia

By working together and supporting each link in the chain, Scotland can lead the way in reformulation and health innovation.

What are the benefits?

- ✓ Through collaboration show a demonstrable improvement in the nutritional profile of Scottish products
- ✓ Ensure local supply chains are healthier to support the growing demand for healthier products
- ✓ Support the food industry in Scotland to highlight reformulated products
- ✓ Your organisation will be promoted on the partnership platform and network with other partnership organisations
- ✓ Full support of FDF Scotland's dedicated Reformulation for Health team who will help you achieve your commitment

Reformul8 Partnership

Helping Scottish food businesses **Reformul8** for a healthier future



Scotland's whole food system working together for a healthier future.

Sign up at Reformul8 Partnership

For more information visit www.fdfscotland.org.uk

Helping food businesses
for a healthier future

REFORMUL8

fdf food & drink
Scotland federation
passionate about food & drink



Scotland's whole food
system working together
for a healthier future



Student placements

16 student placements facilitated

Student Placements

We work with Scottish academia to place final year students within food manufacturers in Scotland. As well as supporting reformulation projects, the initiative is developing a talent pipeline of food technologists and innovators.

“ I feel very much inspired by the placement, giving me a strong desire and determination to help improve public health. I am very grateful for the opportunity that I have been given as this is not something that I considered prior to my placement as a Food Science student.

Externally funded projects

Funding for manufacturers to invest in reformulation

Reformul8 Challenge Fund

£159k of funding for 4 funds by Scotland Food & Drink recovery plan

Healthier Product Innovation Fund

£80k from Scotland Food & Drink recovery plan

Healthier Bakery Fund

£50k from Food Standards Scotland

Healthier Food Service Fund

£50k from FSS

Reformul8 Challenge Fund 5

funded by Scotland Food & Drink, and Food Standards Scotland



Case studies

What does it all add up to?

Billions of calories and tonnes of salt removed from Scotland's everyday foods

- 880 million calorie reduction from pie brand
- 35% fat reduction in food service cheesecake
- 25% reduction in empire biscuit portion size
- 40% reduced sodium salt product developed
- 109 million calory reduction in ready meals
- 100% fibre increase in white bread rolls
- 30% fat reduction in black pudding
- Higher fibre and lower fat butteries
- HFSS compliant caramel sauce
- 9 tonne salt removal from pie shells (equivalent to 9 family cars)

Reformulation for Health

Improving the health of Scotland's products and people



Reformulation@fdfscotland.org.uk



TraceGains NutriCalc

Streamlined, Precision Recipe
Reformulation In-House

NutriCalc[®]
NUTRITION CALCULATION



ABOUT TRACEGAINS **NUTRICALC**

The New Standard for Product Development

NutriCalc® – a trusted name in nutrition calculation for over 30 years – now operates both as a standalone solution and as part of the broader TraceGains ecosystem, delivering **unmatched efficiency and accuracy** for the food and beverage industry.

Acquired by **TraceGains** in 2024, NutriCalc builds on its legacy as a market leader in nutrition analysis software, while benefiting from **integration into the world's leading networked food and beverage software platform.**



ABOUT TRACEGAINS

Founded in 2008, TraceGains is **revolutionising the exchange of information across the supply chain.**



Global Operating Centers and Customer Support

140+

Experienced F&B Staff

40%

Annual Growth

250 YRS

Supply Chain Experience Across Leadership Team

100K+

Supplier Locations

635K+

Items & Ingredients

167+

Supplier Countries

1.8m+

Completed Standard Online Forms

9.8m+

Supplier, Item & Ingredient Documents



TRACEGAINS PRODUCT SUITE



SOURCE + DEVELOPMENT



VALIDATE + MANAGE



PRODUCE + SCALE



FOUNDATIONS:

TraceGains Network

Data Standardization

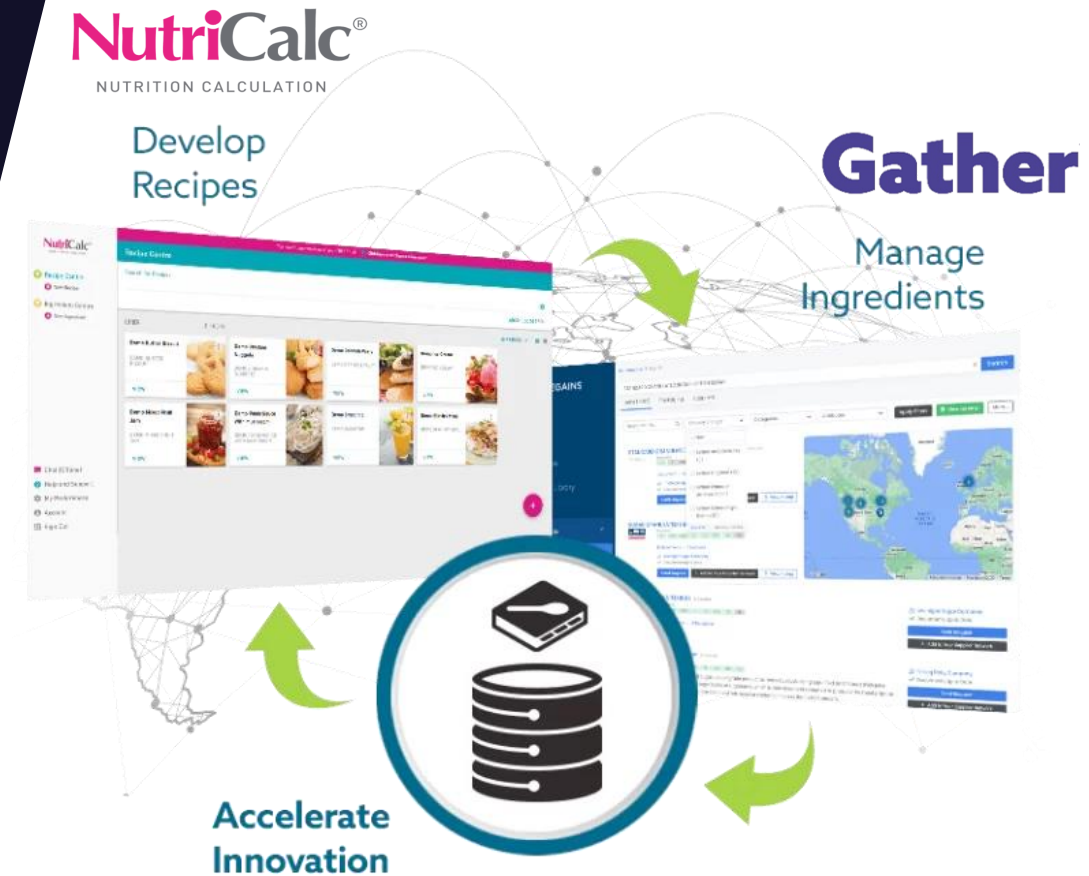
Secure Architecture

Rich Automation

Enterprise Integration

TRACEGAINS GATHER®

- Free to use with **NutriCalc** to accelerate NPD
- Source all your recipes' ingredients & related documentation – saves time
- Ranked, trusted suppliers
- Compare specs using standard forms
- Promote your own products to potential buyers



ABOUT NUTRICALC

Setting the Industry Standing for Over 30 Years

- Developed by experienced Food Scientist & Food Lab Tests Manager
- Time saving solution to generate nutrition results quicker than lab testing
- Industry standard calculation software, with highest nutrition accuracy



ABOUT NUTRICALC

Accelerate Your Recipe Reformulation & Innovation

- Cutting-edge online NPD / reformulation solution
- Drive precision reformulation in-house and achieve HFSS compliance with unrivalled speed
- Instantly generate detailed nutrient profiles and HFSS scores to fine-tune saturated fat, sugar and salt levels



ABOUT NUTRICALC

NPD / Reformulation – reach recipe nutrition targets with ease

RECIPE

DETAILS

NUTRITION

REPORTS

>

Energy

kcal

286

100

>

Energy

kJ

1212

424

>

Protein

g

4.5

1.6

>

Fat

g

2.9

1.0

▼

Saturates

g

1.6

0.6

Stout, Guinness

0.00

0.00

Molasses

0.00

0.00

Butter, Unsalted

1.37

0.48

Flour, Wheat, White, Plain, Soft

0.17

0.06

Baking Powder

0.00

0.00

Cinnamon, Ground

0.00

0.00

per 100g

per 35g

RECIPE

DETAILS

NUTRITION

REPORTS

Nutrition

per 100g

per 35g

Energy

1212kJ/286kcal

424kJ/100kcal

Fat

2.9g

1.0g

of which Saturates

1.6g

0.6g

Carbohydrate

58g

20g

of which Sugars

29g

10g

Protein

4.5g

1.6g

Salt

0.34g

0.12g

Ingredient Declaration

Wheat

flour [With Added Calcium, Iron, Niacin, Thiamin]

[Milk]

, Stout

[Barley]

, Raisins

[Sulphites]

, Brown Sugar, Honey, Butter

[Milk]

, Molasses

[Sulphites]

, Baking Powder

[Wheat]

, Cinnamon, Nutmeg, Ginger

Allergens

Contains Gluten

Contains Wheat

Contains Barley

Contains Milk

Contains Sulphites

Suitable for Vegetarians

Front of Pack

Energy

424kJ

100kcal

5%

Fat

1.0g

1%

Saturates

0.6g

3%

Sugars

10g

11%

Salt

0.12g

2%

A 35g serving contains

of an adult's reference intake

Typical values per 100g: 1212kJ/286kcal

ABOUT NUTRICALC

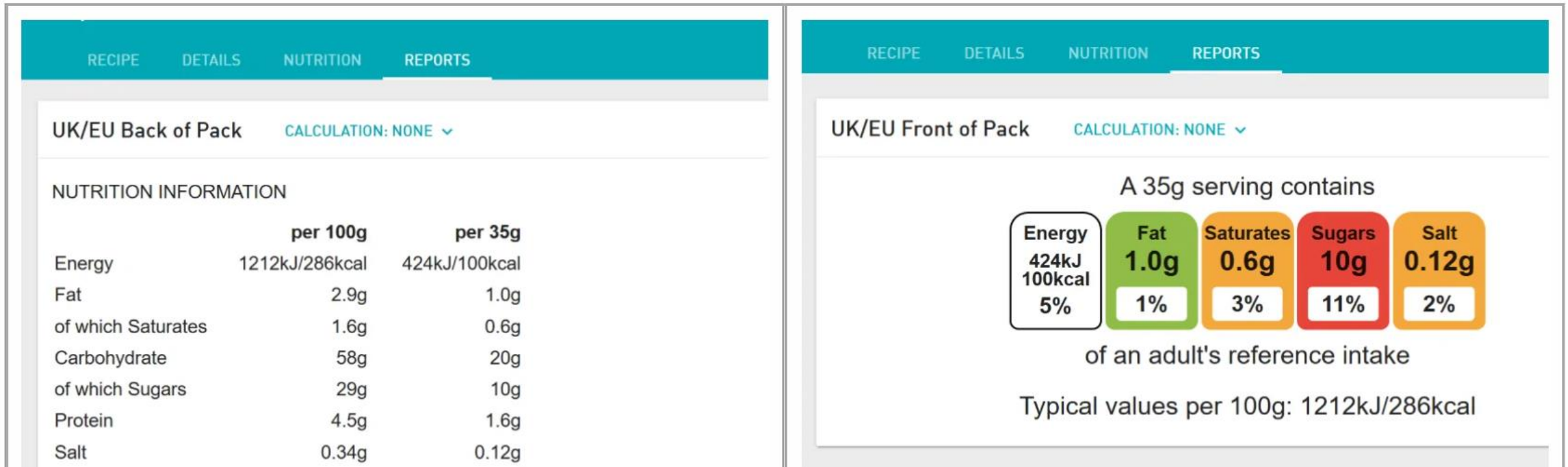
HFSS – score existing recipes and reformulate to comply

Before (HFSS)				After (Non-HFSS)			
	Description	Quantity	Points		Description	Quantity	Points
+	Energy (kj)	1212kj	3	+	Energy (kj)	1052kj	3
+	Sugars	29.0g	6	+	Sugars	15.8g	3
+	Saturated Fats	1.6g	1	+	Saturated Fats	1.8g	1
+	Sodium/Salt	135mg	1	+	Sodium/Salt	153mg	1
-	Fruits, vegetables and nuts	23%	0	-	Fruits, vegetables and nuts	25%	0
-	Fibre (AOAC)	2.3g	-2	-	Fibre (AOAC)	2.5g	-2
-	Protein	4.5g	0	-	Protein	4.9g	-3
	Score		9		Score		3



ABOUT NUTRICALC

UK / EU / International compliant labelling with all required nutrition, ingredient and allergen data



ABOUT NUTRICALC

Simple and Transparent

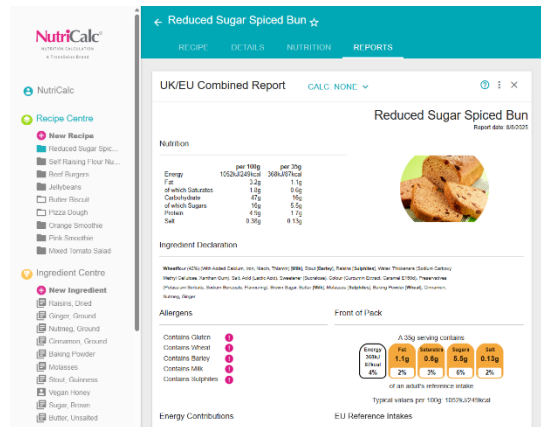
- Scalable – as businesses grow, from food startups up to international FMCG corporations
- Affordable – flexible annual & monthly PAYG pricing plans
- No hidden extras – unlimited recipes, data, labels & support



ABOUT NUTRICALC

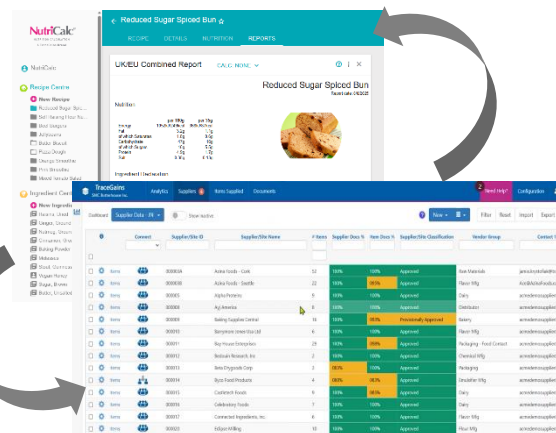
Powering TraceGains Nutrition Calculation and Labelling

Standalone solution
(as used by FDF Scotland)

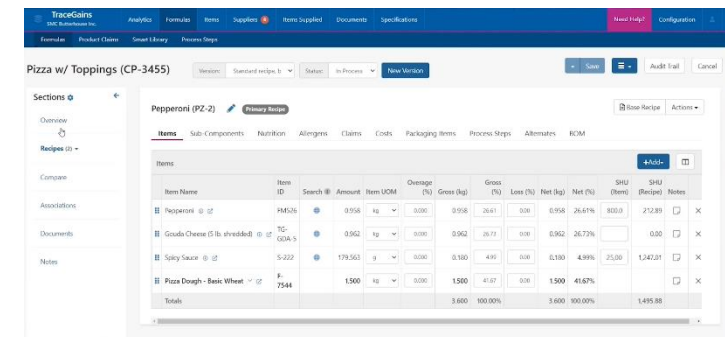


Standalone solution + connected via API to TraceGains'

Supplier Management solution



TG's Formula Management solution -
Powered by NutriCalc -
Integrated with TraceGains' Ecosystem





LIVE DEMO

**Main Features &
Recipe
Reformulation**

THANK YOU

Let's Connect

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T: +44 204 5705415

Start your 7-day NutriCalc free trial at:
nutricalc.co.uk



Join the TraceGains network for free at:
gather.tracegains.com

