

WELCOME...



FDF FIBRE FEBRUARY WEBINAR

‘Bridging the fibre gap with
innovation and communication
from concept to launch’

24 February 2022

FDF Action on Fibre



Fiyin Makinwa

Diet and Health Executive
FDF



What is fibre?

- Group of substances that cannot be completely broken down
- Different types of fibre have different characteristics
- Fibre can be found in various foods including; fruits and vegetables, cereal and cereal products, nuts and seeds and legumes



Why is fibre so important?

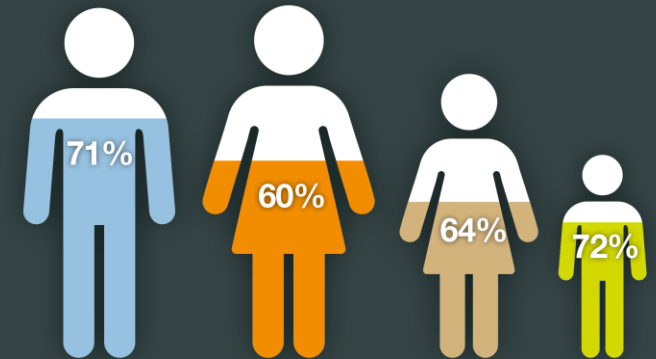


Better digestive health

Lower risk of

- Cardiovascular disease
- Type 2 diabetes
- Certain types of cancer

On average men and women consume **71%** and **60%** of the recommended amount of fibre, respectively. Children consume only **64%** (11 - 18 years) and **72%** (4 - 10 years) of the recommended amount.



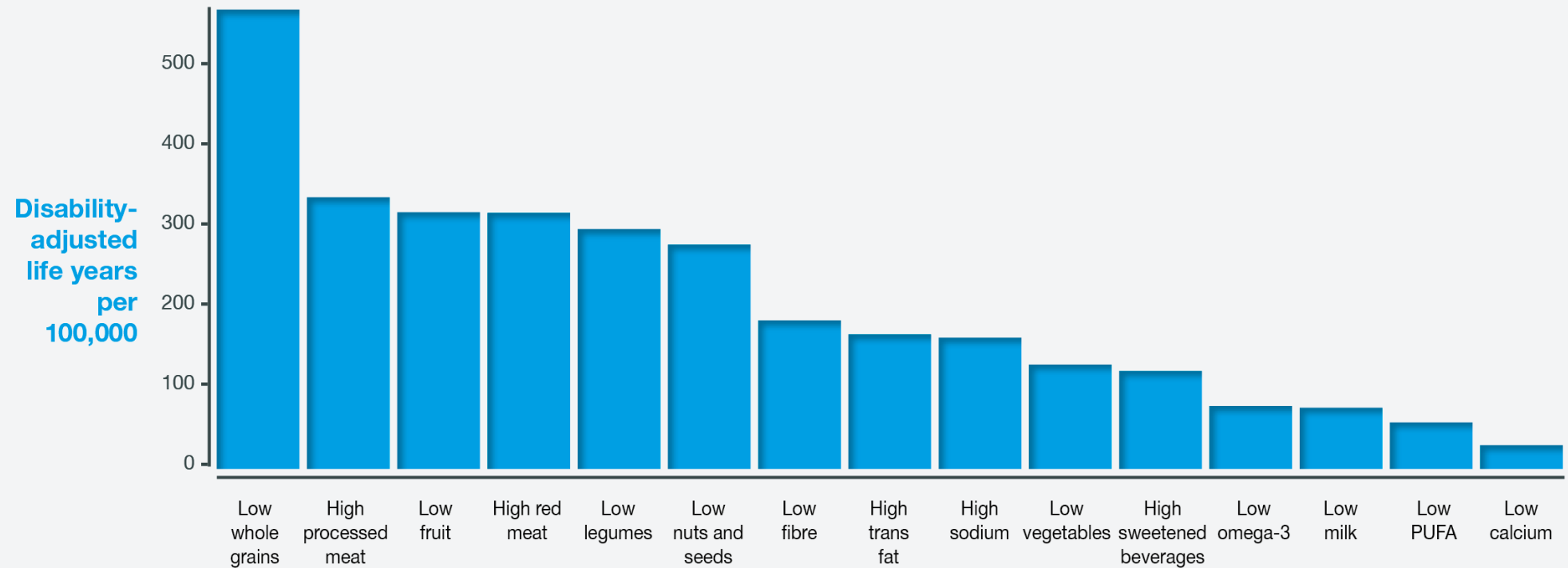
Consumer polling on fibre

- 1 in 3 people know the recommended daily amount of fibre adults is 30g.
- 70% of people did not know if they meet the recommendation.
- Most people knew common sources of fibre (e.g. wholemeal bread) but there were also misconceptions e.g. 1 in 10 people thought eggs contain fibre.
- Most people were aware that a diet high in fibre could improve digestive health (60%) but less were aware of the additional benefits such as reducing risk of type 2 diabetes (25%).
- 1 in 3 people said they had not heard about the benefits of fibre.



Background

The Impact of Dietary Risk Factors in the UK



United Kingdom, both sexes, 2019

FDF Action on Fibre Commitment



Member companies signed up to this commitment are working to help ‘**bridge the gap**’ between fibre intakes and the dietary recommendation. This will be achieved by **making higher fibre diets more appealing, normal and easy for the population**. This is in the context of a healthy, balanced diet and in line with the Eatwell Guide and dietary recommendations.



FDF Action on Fibre Framework



Bring new higher fibre products and innovations to the market



Increase the fibre content of current products through reformulation

Use the power of marketing to shift consumers to higher fibre options



Use labelling to identify higher fibre options

Provide on pack messaging, recipe suggestions and meal kit ideas that increase fibre



Support annual events promoting fibre

Engage stakeholders on the importance of fibre



Encourage food service suppliers to provide higher fibre options

Encourage higher fibre foods in the workplace



Members can create their own pledge



FDF Action on Fibre



TATE & LYLE



Action on Fibre Activities

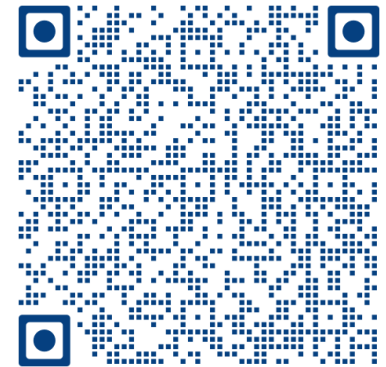


- | | |
|--------------|---|
| 7 Sept 2021 | Focus on fibre podcast |
| 13 Sept 2021 | Celebrating Food and Nutrition Week and launch of Action on Fibre |
| 29 Sept 2021 | Focus on fibre webinar |
| 8 Nov 2021 | Sugar Awareness Week – focus on the role of increasing fibre |
| 16 Nov 2021 | International Whole Grain Day |
| Feb 2022 | Fibre February |
| Jun 2022 | British Nutrition Foundation Healthy Eating Week |



Thank you for listening!

Fiyin Makinwa
Diet and Health Executive
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Fibre in Bread: Innovation & Communication



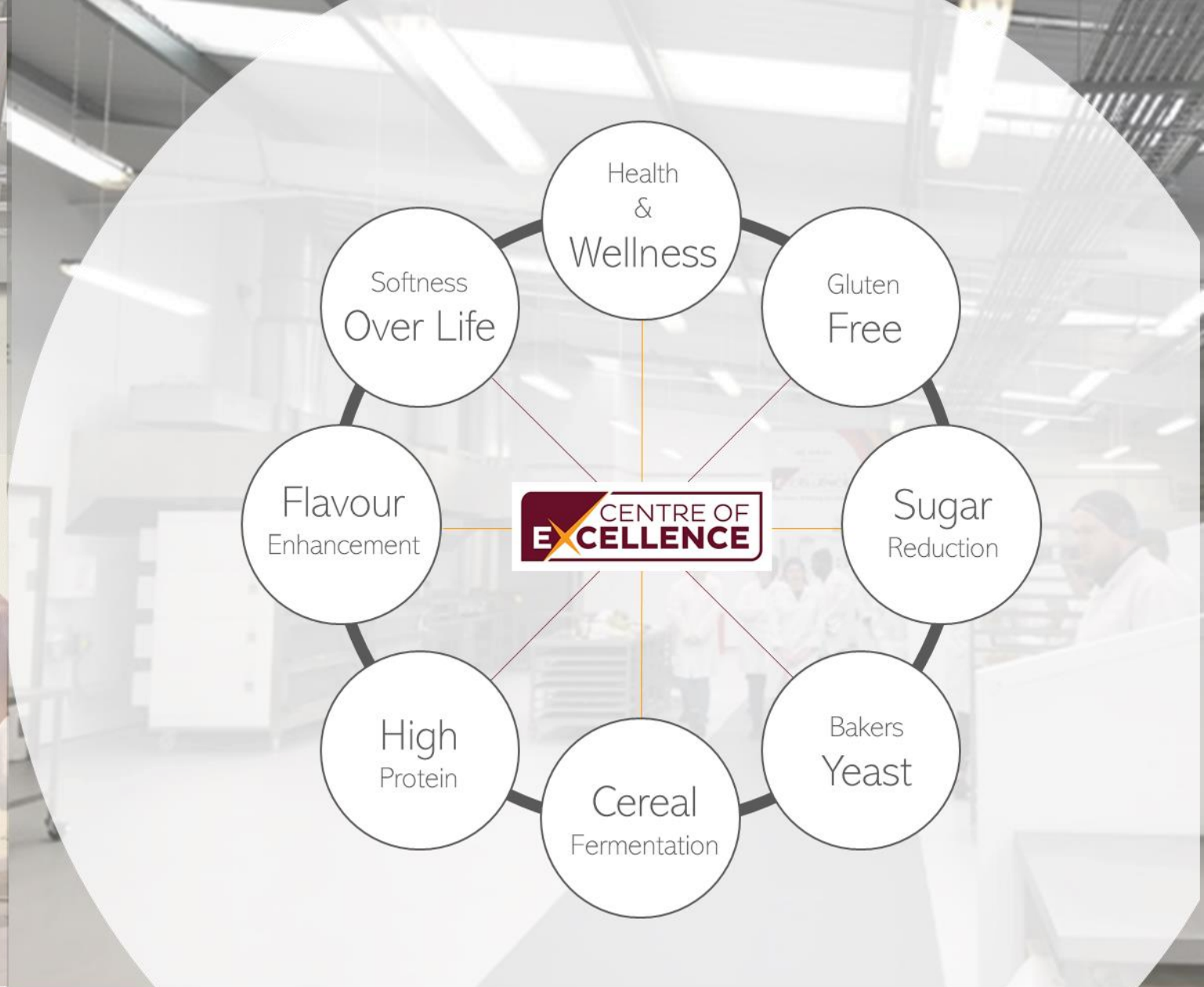
Vicky McColl

Field Development Manager –
Nutrition & Insights

AB Mauri UK & Ireland

AGENDA

1. Introduction to AB Mauri
 - Action On Fibre
2. Fibre Application in Bread
 - Sources
 - Challenges
 - Solutions
3. Innovation Case Study
4. B2B Communication





Pledges

1. Launch 4 new innovations
2. Support 2 annual events
3. 10 internal health messages
4. Provide reformulation support
5. Time and resource in academic research
6. Product focus with a customer
7. Sponsor a student competition

Fibre Sources

- Wholegrains
- Seeds
- Pulses
- Flours
- Flour fractions
- Special milling fractions
- Extracted fibres
- Functional fibres

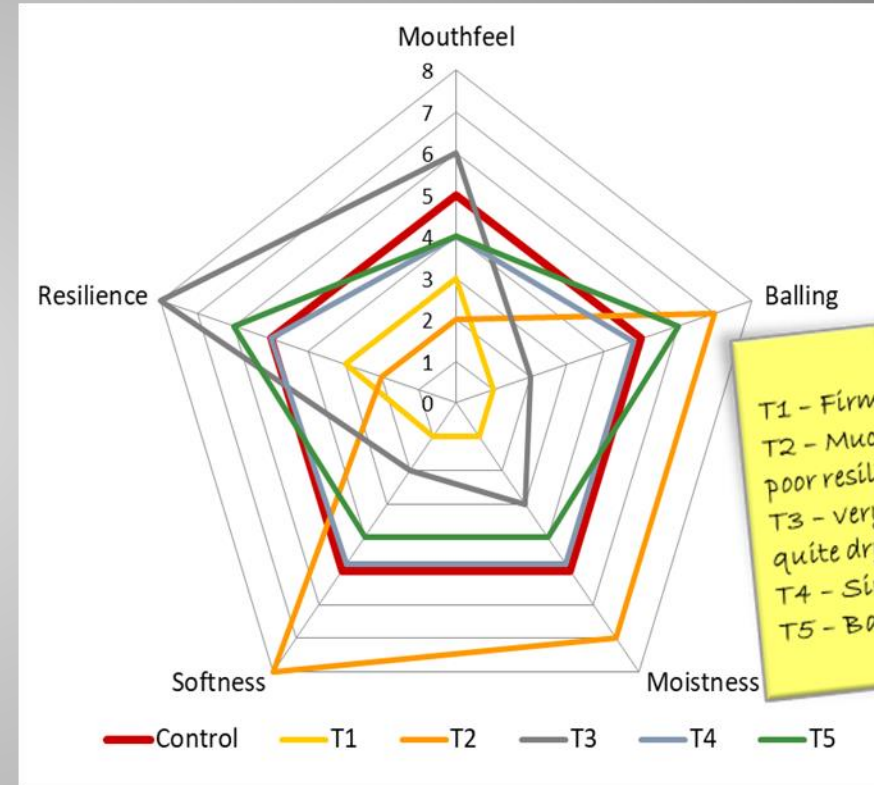


Challenges

Fibre can cause changes in dough viscosity & rheology and interfere with the protein structure which leads to poor gas retention



Fibre can hold onto water during baking, this extra water is 'available' and can lead to reduced mould free shelf life



Solutions

1. Choosing the right fibre



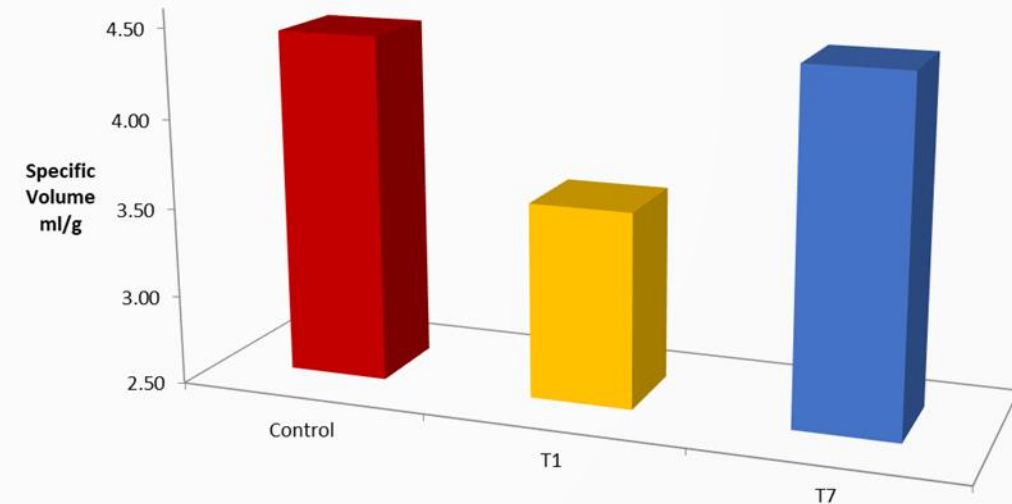
3. Skills and knowledge to rebalance the recipe

2. Ingredients to manipulate effects from the fibre

Conditioners

Flours/Starch

Preservatives



Case Study





Communication

AB | MAURI

AB Mauri UK & Ireland



AB Mauri UK & Ireland

Thank You!

Vicky McColl

Development Manager – Nutrition & Insights

www.cereform.co.uk



Ab Mauri UK & Ireland

Communicating Fibre messages to consumers



Professor Louise Dye

Professor of Nutrition and
Behaviour,
University of Leeds



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Communicating Fibre messages to consumers

Louise Dye

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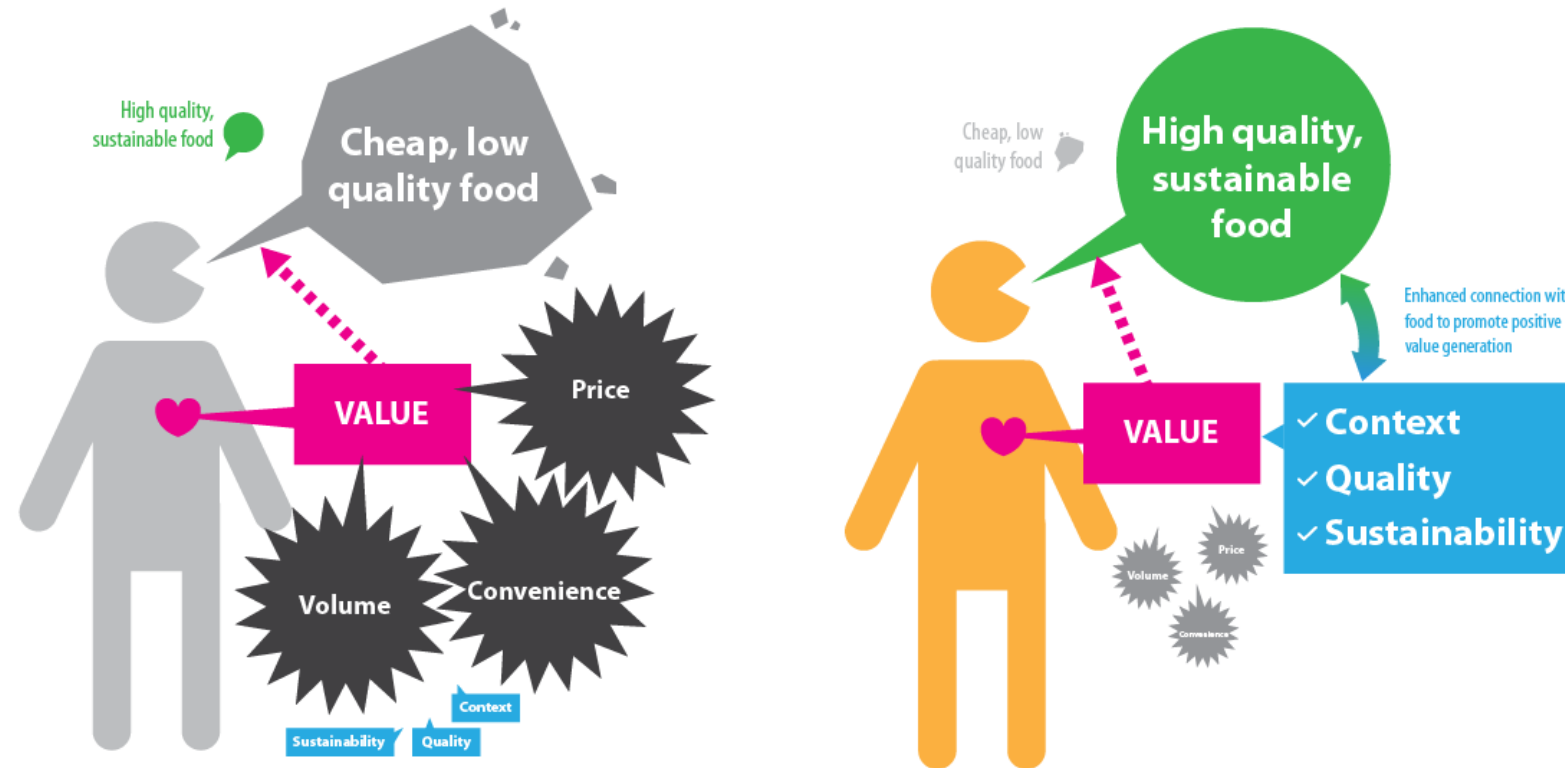
- Examine the potential for fibre interventions to improve health and wellbeing
- Who is most likely to comply & how do we increase this – messaging/campaigns
- Consider what strategies are useful in achieving compliance with interventions



What do consumers say they want vs what they buy



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- **Benefits of a high fibre diet**
- **Why are fibre intakes low when health messages are clear?**
- **Intention-behaviour gap**
- **Marketing & Miscommunication**
- **Barriers to increased fibre intake**
- **Effective messaging & Strategies to increase fibre intake**

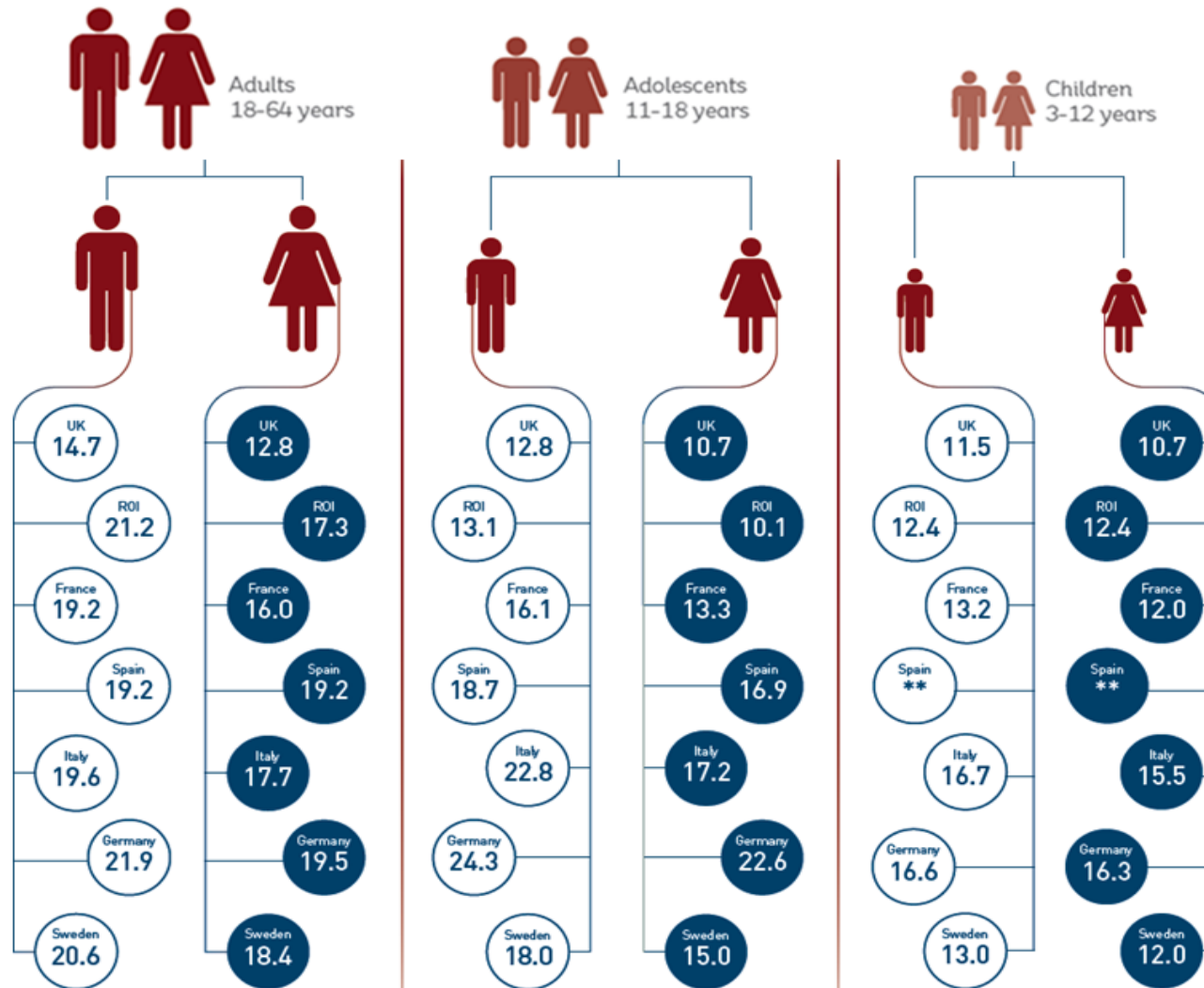


Fibre intake in Europe



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Daily fibre Intakes by country, gender and age (g/day)¹



European Food Safety Authority fibre guidelines recommend a fibre intake of 25g per day
AOAC = 30g

Fibre intakes are low across all population groups in Europe.

Suggestion to increase recommended intake?

**Data not available

References: ¹Breakfast Consumption in Europe: Benefits & Trends. The Kellogg Company. Report number: 1, 2014

The cost of low fibre diets in UK



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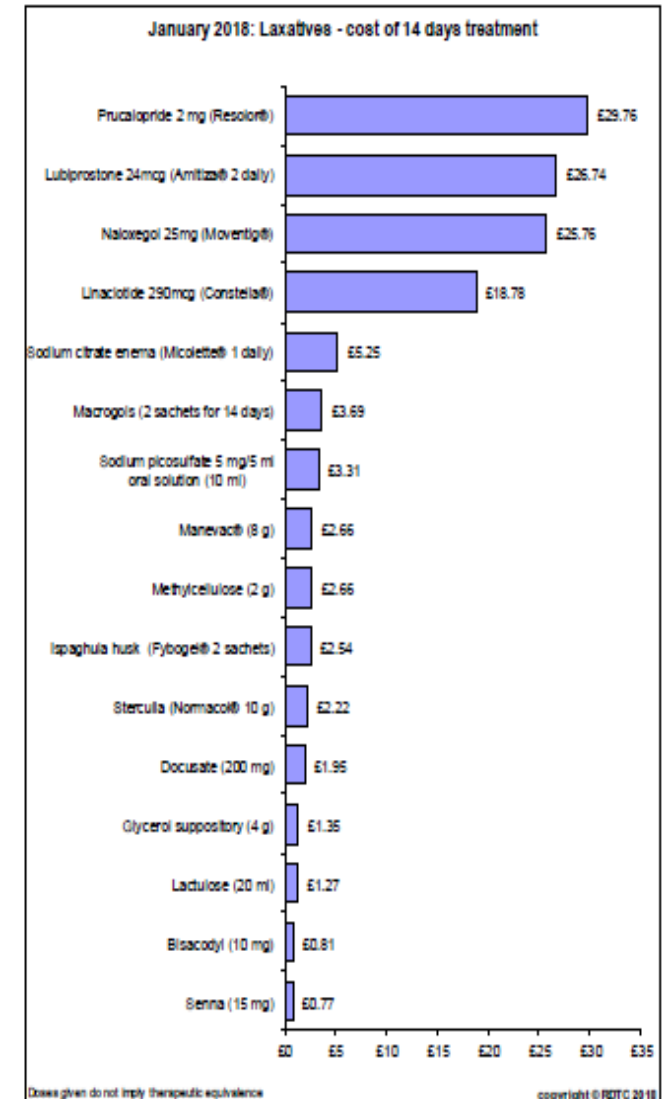
66,287 people in the UK were admitted to hospital with constipation as the main condition in 2014/15, equivalent to 182 people a day.

The total cost to hospitals for treating unplanned admissions due to constipation was **£145 million** in 2014/15.

The prescription cost of laxative costs is

£101 million

(Over the counter costs of laxatives will undoubtedly be higher).²

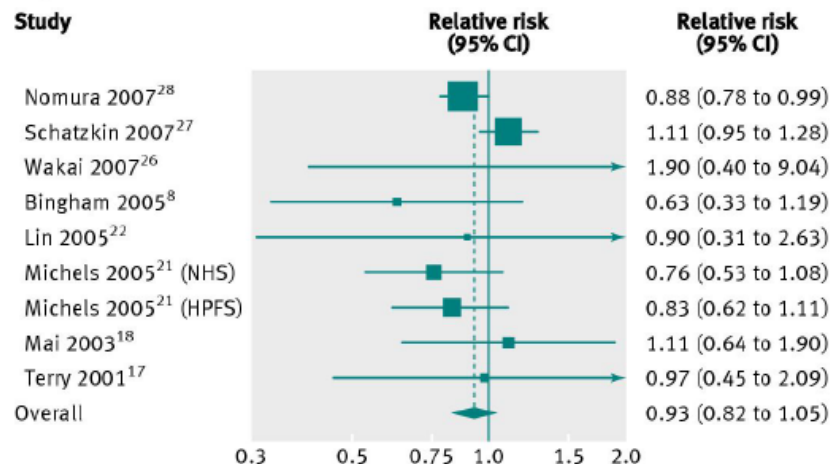


Dietary Fibre and relative risk of colorectal cancer

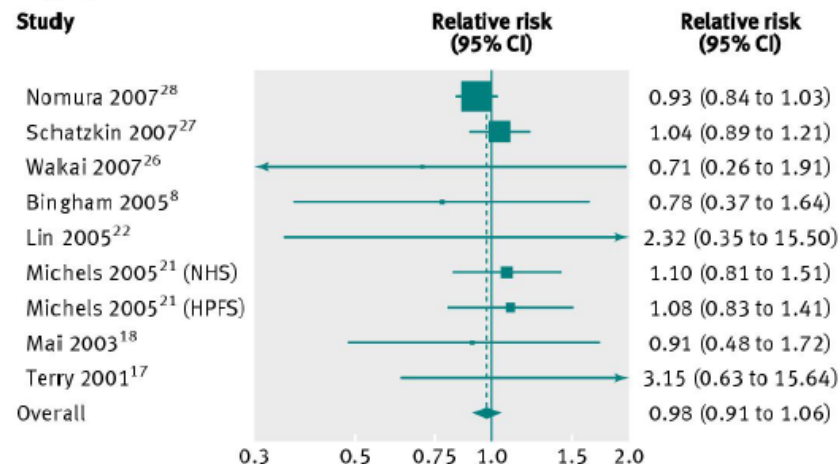


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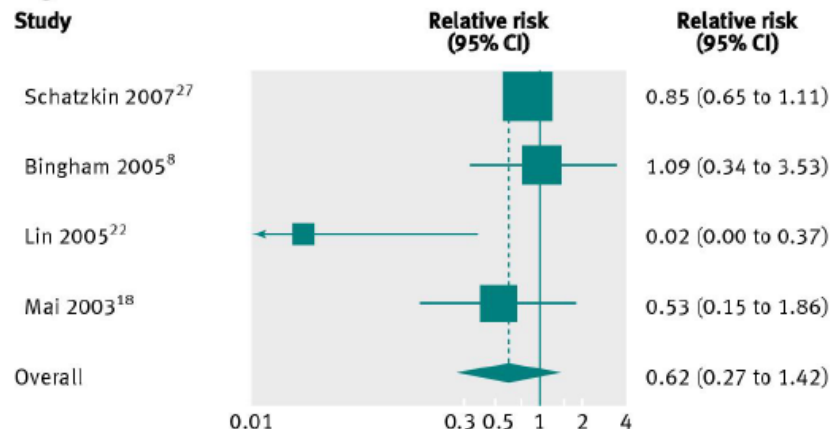
Fruit fibre



Vegetable fibre



Legume fibre



Cereal fibre

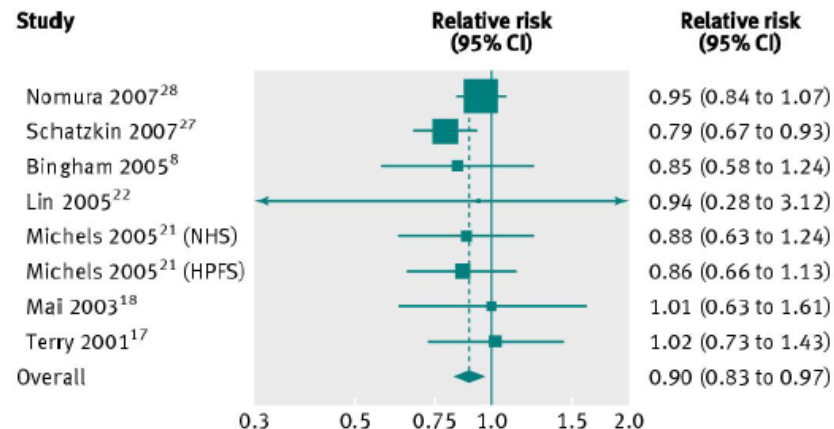


Fig 3 Risk of colorectal cancer according to fibre types. NHS=Nurses' Health Study; HPFS=Health Professionals Follow-up Study
Aune et al., BMJ 2011; 343, d6617

Where are Consumers on Digestive Health?



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10% GP consultations relate to digestive health – tip of the iceberg

Digestive health now risen to third on the list of reasons to buy healthier products

(2020 Kerry Health & Nutrition Institute)

Free From a driving force with 1 in 4 UK consumers reported to buy 'free from' products

(2017 – Kerry Health & Nutrition Institute)

23% UK consumers choose digestive health products to avoid feeling bloated

(Grocer 2016)



Claim	Fibre type
Increases faecal bulk	Wheat bran fibre
	Sugar beet fibre
	Oat Grain fibre
	Barley Grain fibre
Normal Bowel Function	Rye Fbre
Acceleration of intestinal transit	Wheat bran fibre
Maintenance of normal blood LDL cholesterol concentrations	Beta glucans (oats/barley)
Reduction of postprandial blood glucose	Arabinoxylan*

Only applies to foods which are **HIGH FIBRE** i.e. where the product contains at least **6 g** of fibre per **100 g** or at least **3 g** of fibre per **100 kcal**


*particular conditions apply

www.efsa.Europa.eu

Health/psychological Benefits of a high fibre diet



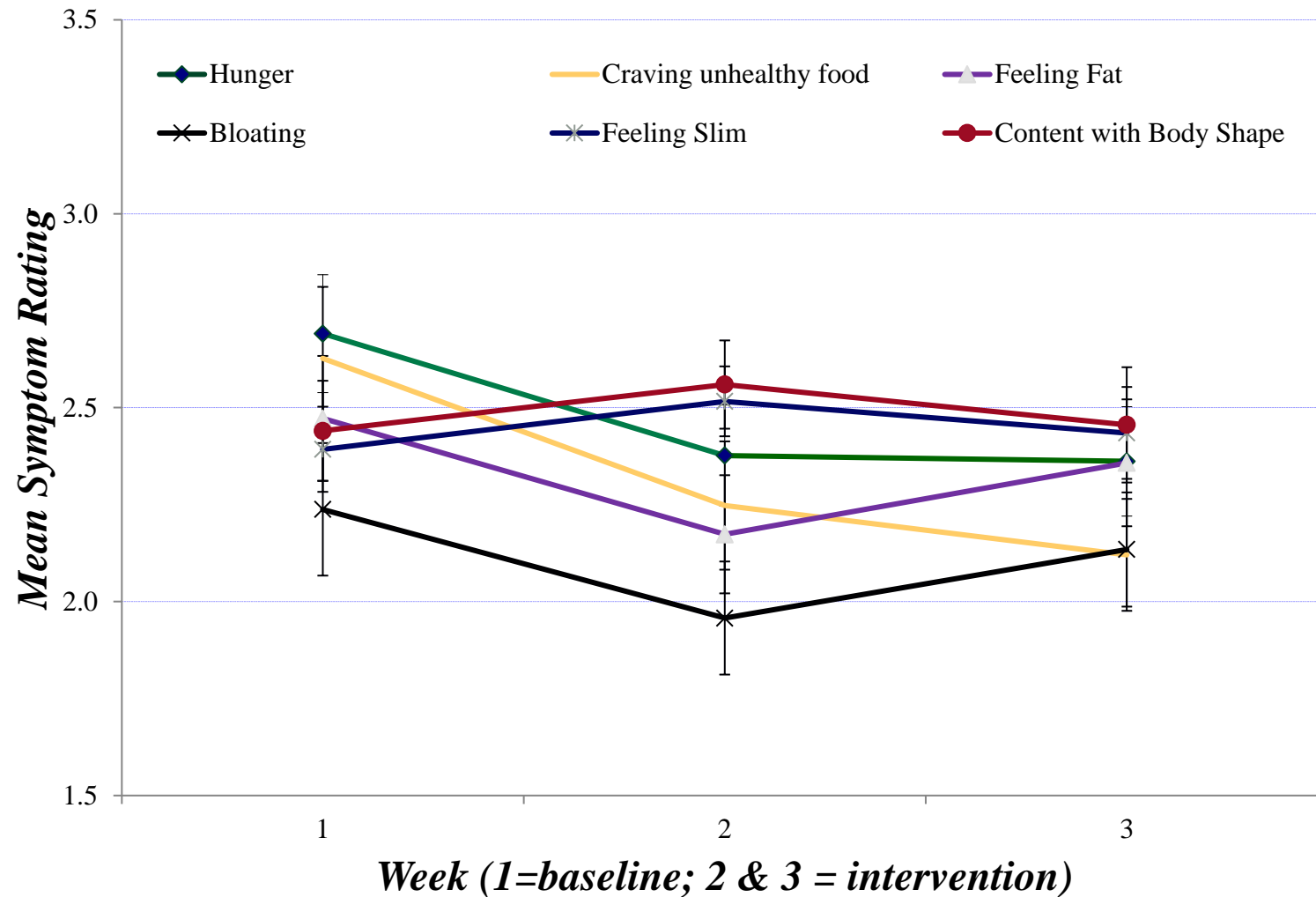
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- Higher fibre intake associated with multiple health benefits
 - Cancer – incidence and survival
 - Digestive function
 - Satiety/Energy Intake/Body weight – controversial but positive
- 
- A white bowl filled with golden-brown, bran-based cereal, topped with three fresh raspberries. A spoon is lifting a portion of the cereal from the bowl.
- Higher fibre intake associated with increased wellbeing (Smith, 2010)
 - Intake of high fibre cereals associated with better physical and psychological health (Smith, 2005; 2011)
 - Improved physical and psychological wellbeing after 2-week interventions with high wheat bran fibre breakfast cereals (Lawton et al., 2013) or breakfast cereals and snacks (Lawton et al., 2011; Kininmonth et al., 2018)

Effects of Increasing Cereal Fibre Intake on Psychological Wellbeing



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Why are people not meeting the dietary recommendations for fibre intake?





Barriers to increasing fibre intake

- Time – to plan meals, shop and prepare
- Need for flexibility – plan B if food not available/time is short
- Requires level of skill/competence,
 - hampered by lack of confidence/training
 - /experience of cooking
- Experimentation – waste if disliked
- Cant add fibre if cooking for family – waste
- Need to eat (and cook) separately
 - often families do not eat together



People do not always do the things they intend to

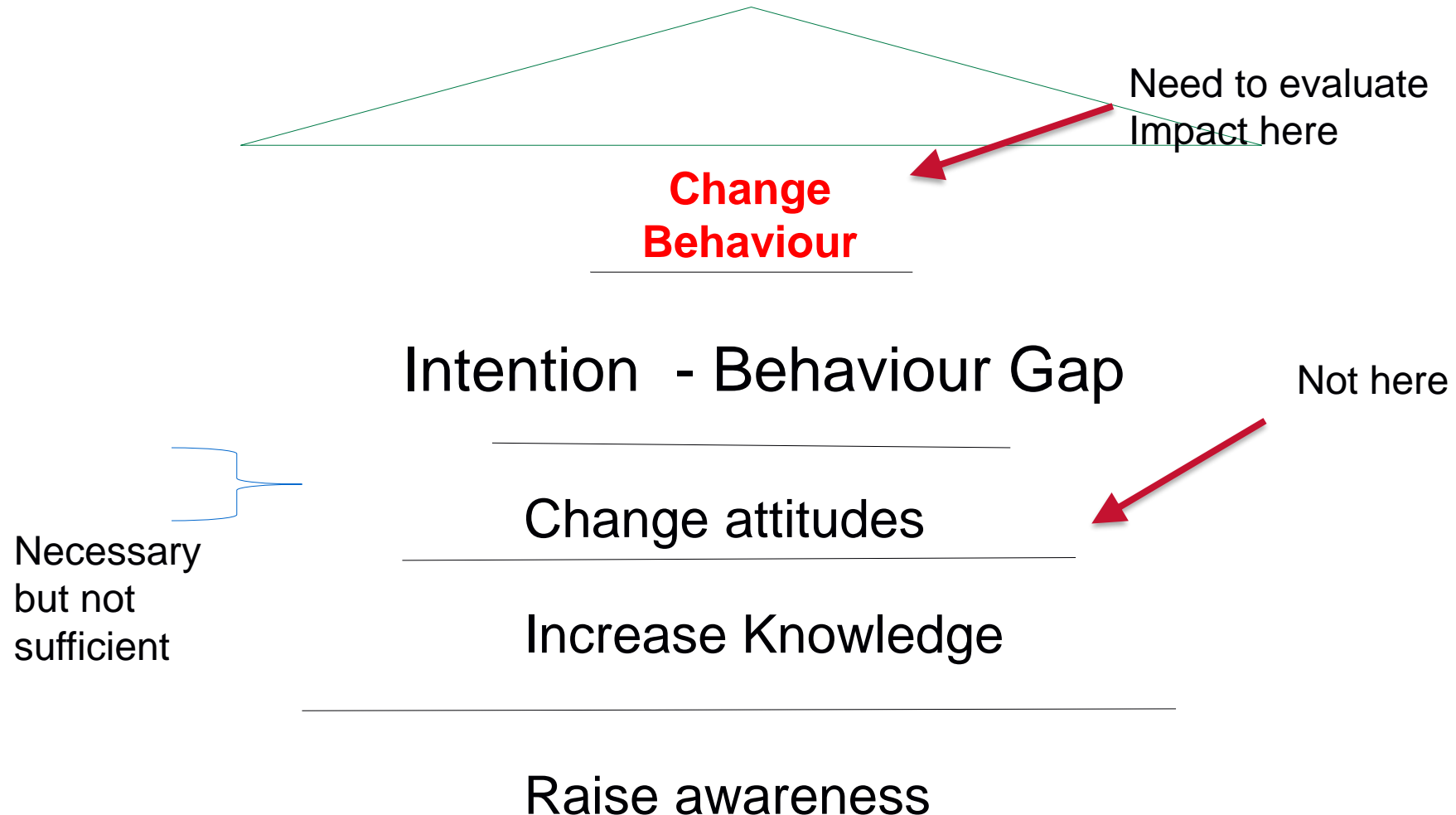
But intentions are a good predictor of behaviour (better than attitudes, perceptions of risk, severity or personality)

A medium-large sized change in intention led to only a small-medium change in behaviour

The Intention-Behaviour Gap

Mainly due to people who intend to change their behaviour but do not – “inclined abstainers”

Changing one’s intention does not guarantee behaviour change



Reasons for Intention – Behaviour Gap in fibre intake



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Fibre intake intentions are not met due to:

- We consistently underestimate our own risk in comparison to others
- Misunderstanding of what is a high fibre food
- Cooking & preparation time
- Price
- Rapid abandonment of high fibre diets
- GI symptoms, constipation, taste
- Fussy eaters in a family determine the foods purchased/cooked



Beliefs

- Fibre = medicinal “roughage”
- Important for bowel regularity



Perception

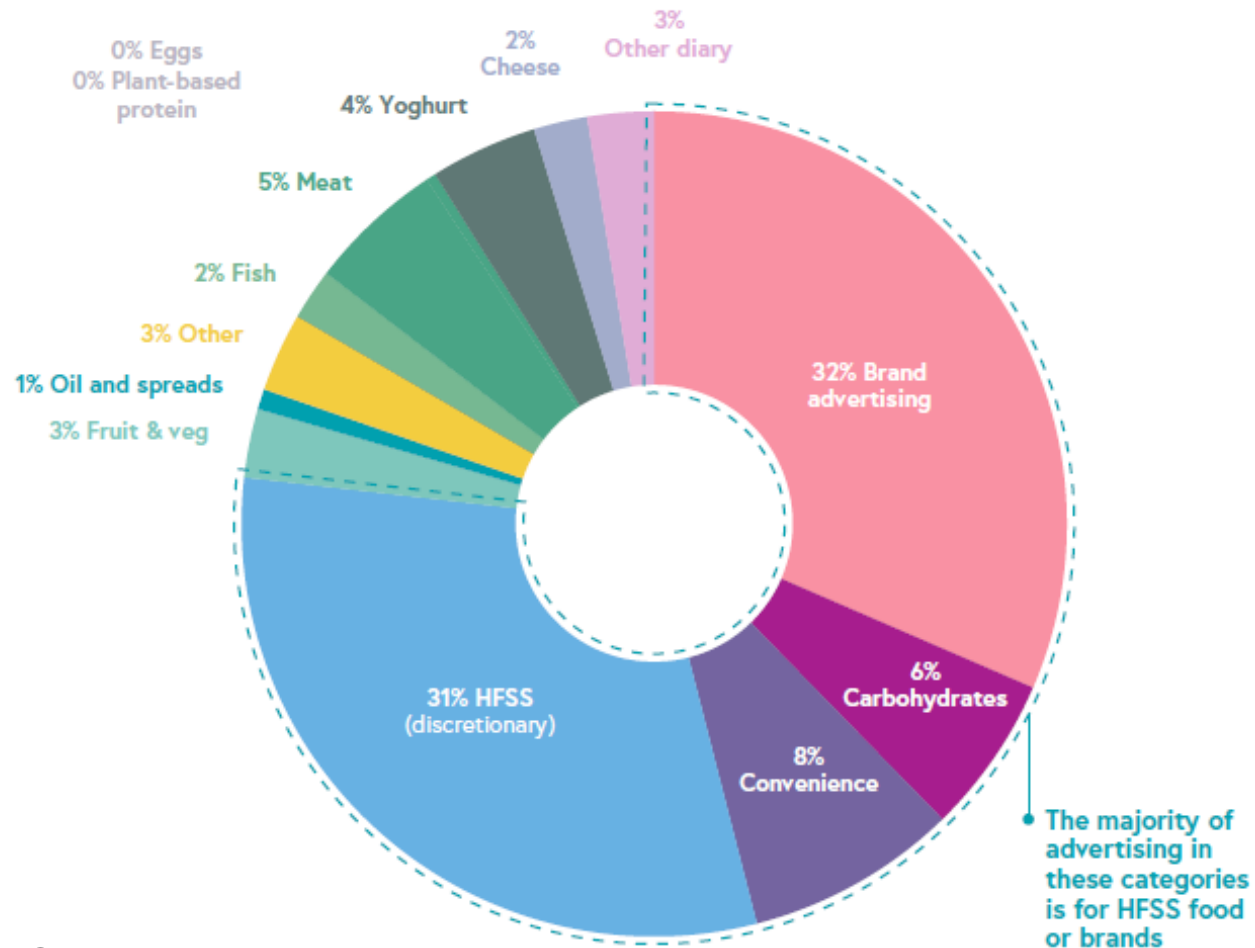
Fibre is brown, needs chewing & doesn't taste good



Some industry marketing supports the perception that fibre or carbohydrate is boring or bad

Perpetuates view that Fibre is bland, brown and boring

Most marketing money is spent promoting unhealthy products²³



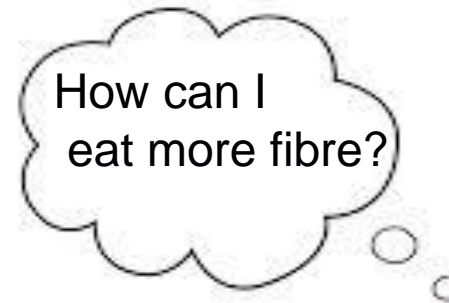


Consumers don't understand the health messages about fibre
all think it is about digestion "toilet"

Consumer surveys suggest, consumers don't know:

1. What their dietary fibre requirements are
2. What are good sources of fibre
3. Labelling
4. Health benefits

Consumers want to know more & trust messages that
Fibre is good for them



Communication Strategies to increase fibre intake



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1. Provide clear & concise information
2. Recommend flavourful fibre-rich foods
3. Describe benefits of adequate fibre intake

e.g. advise people to consistently check nutritional labels to find good sources of fibre

Nutrition Typical values
(cooked as per instructions)

	per 100g	per 1/4 pack	% adult GD, 1/4 pack
Energy kJ	1007	2014	
Energy kcal	241	482	
Protein	8.4g	16.8g	24.1%
Carbohydrate	20.6g	41.2g	37.3%
of which sugars	1.8g	3.6g	17.9%
of which starch	18.8g	37.6g	4.0%
Fat	13.7g	27.4g	39.1%
of which saturates	5.9g	11.8g	57.0%
mono-unsaturates	1.5g	3.0g	
polyunsaturates	0.9g	1.8g	
Fibre	0.50g	1.00g	
Salt	0.20g	0.40g	
of which sodium			

GDAs = Adult Guideline Daily Amounts are based on a diet of 2540 kcal per day for a 70kg male. GDAs are guidelines and personal requirements vary depending on age, gender, weight and activity.

More effective messages



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Messages which incorporate consumer understanding & capabilities are more effective than those formed top-down

Consumer science tell us

- Older people respond more to disease risk messages e.g. CVD, glucose regulation
- Younger people more motivated by satiety & weight regulation messages
- All think about digestive issues!!



Messages often focus on identifying a threat e.g. the negative consequences of doing something (smoking, eating too much sugar/salt) or of not doing something (not eating 5 day, wearing a seatbelt)



Positive messages

- Eat a variety of foods (ALL)
- Eat (more) fruits and vegetables (N=11) (excludes Japan and Indonesia)
- Eat plenty of (whole grain) cereals (N=9)
- Enjoy food (N=5) (UK, Australia, Canada, South Africa, Japan)

Fibre messages
could be positive
- allowed to do
something rather
than trying to stop

People who skip breakfast are more likely to have low fibre intake compared to breakfast eaters.

- **Promote Breakfast Consumption**

Short-term gastrointestinal symptoms could act as a barrier to compliance

- Advice to increase fibre intake & avoiding GI symptoms
e.g. increase fluid intake, gradually increase fibre intake

Health by stealth – increase fibre surreptitiously

But healthier ranges are often heavily marketed and are more expensive

- not due to the fibre but due to the other ingredients



Wont switch from 15g/ to 50g/d without gradual increase

Even a 5g increase will bring health benefits

Implementation Intentions

If this, then this.....



If I eat bread I will eat wholegrain bread (or 50:50 if starting to increase fibre)

If I eat breakfast, I will choose a high fibre breakfast cereal

4. 12-week randomised controlled dietary intervention study



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- 72 Low fibre consuming overweight women randomised to
 - Diet A - healthy eating or
 - Diet B - healthy eating with increased fibre (HF) - up to 25g/day

- *Products*
- *Recipes*
- *Advice*



Strategies to increase fibre intake to recommendation



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Information - useful to motivate but might not change behaviour on its own

Easy to gauge units e.g. fibre points = 1g to allow easy count of intake

Advice – swap/substitute low fibre for high fibre alternatives

Identify opportune moments e.g. Breakfast

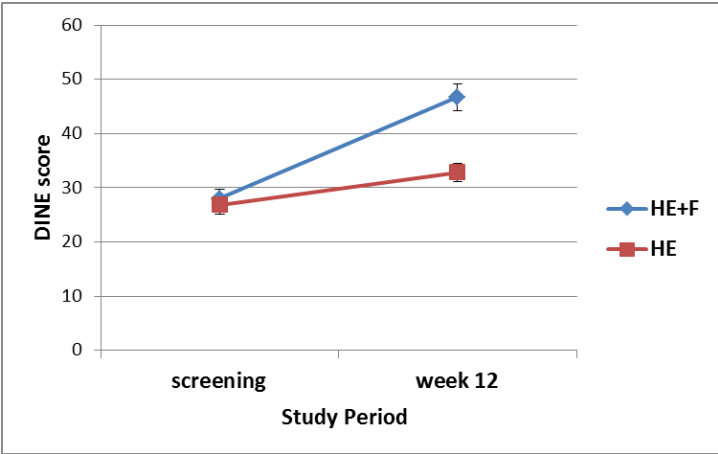
Stealth – adding fibre to recipes e.g. sauces (hiding fibre in food)

Change in Fibre Intake over 12 weeks



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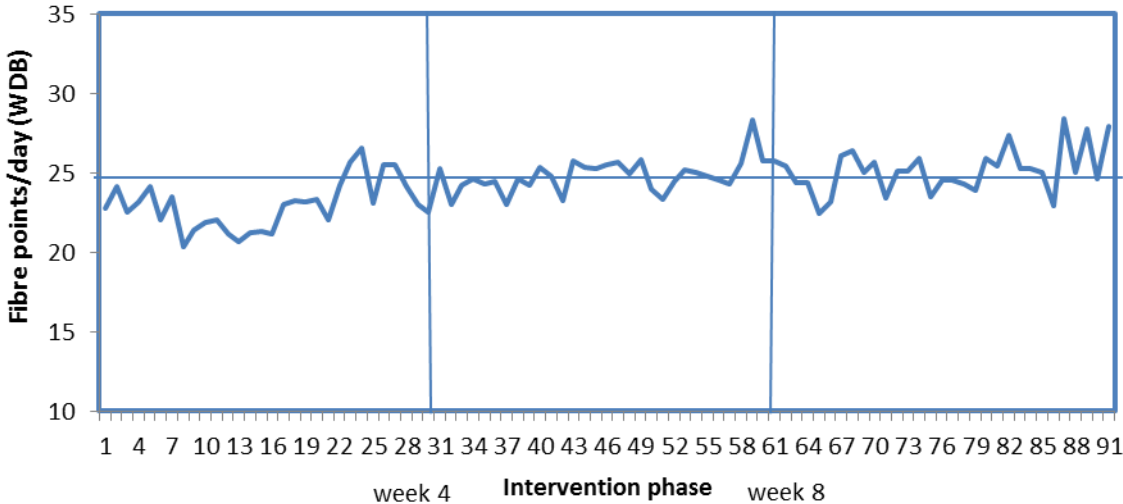
DINE: Fibre score



3-d Food Diary: Fibre g/day

	HE	HE+F
Inclusion	14.1 (0.52)	14.5 (0.59)
Week 12	17.7 (0.76)	25.2 (1.45)

HE+F (N=35) : Fibre points recorded in daily diaries



Leeds women's
Wellbeing

At 1 month follow-up, LWW volunteers maintained 25g/day fibre intake

At 1 year, they had reverted to pre-intervention levels of fibre intake

Why?

- No free products – expensive
- No support - creative ways to include dietary fibre in meals
- Implementation intention generated by the study – not by participant
- Monitoring by research staff and self-monitoring by participant



Learning:

- Need to enable people to implement their intentions
- Support to include fibre – free recipes, trial products,
- Promoting/advertising economical sources of fibre

Leeds Women's
Wellbeing

- Under/over/desirable reporting
- Liking -have to like the food to comply
- Breaking diet plan – relapse in restraint – “What the hell”
- Portion size - overestimate – over consume, reluctance to throw away
- Motivation:
 - Weight
 - Health
 - money

Characteristics associated with compliance

- Women
 - <65
 - white
- Married/cohabitating

Increasing dietary fibre intake could be an important strategy to promote health outcomes

- Fibre intakes in all populations across EU are lower than recommended guidelines
- *Many higher fibre products are also high in sugar*
- *Careful messages to communicate about fibre and where to get it from – avoid mixed messages*
- *Understand the consumer & tailor messages*
- *Encourage implementation intentions to narrow the intention-behaviour gap*
- *Need for innovation to increase fibre intake – product development and health interventions*



HEALTHY SOIL
HEALTHY FOOD
HEALTHY PEOPLE

Part of the Transforming
UK Food Systems SPF Programme



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WP5: Research question and brief summary of work

How can we most effectively increase fibre intake in low SES populations?

1. Augmenting fibre intake in children from low SES backgrounds
 - – reformulate products to increase fibre/WG content
 - Demonstrate improved functionality (slower energy release/nutrient absorption -iv digestion, appetite) & palatability
 - Pilot via School Breakfast Programme in schools with high deprivation and community level projects eg social supermarkets
 - Rollout reformulated products to schools/community projects for longer term evaluation

Action on Fibre – Jackon's Bakery

Lucy Wilson

Brand Marketing Manager

Jackson's Bakery

Where does the brand fit in ?

- Role of NPD
- Dialogue with consumers
- Dialogue with employees
- Working with retailers

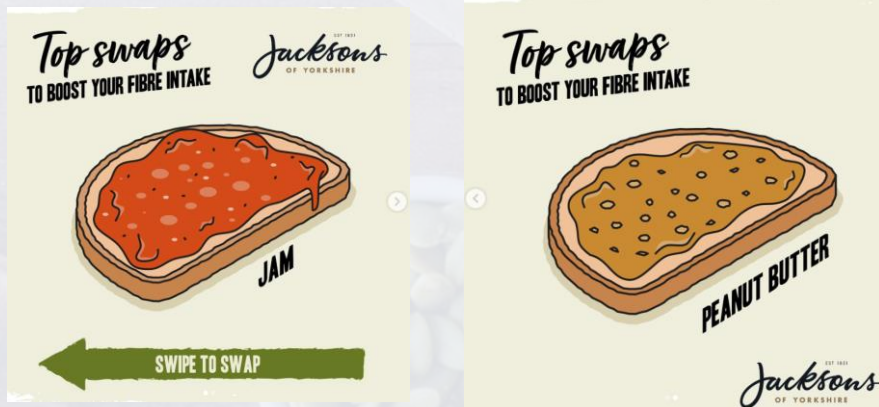
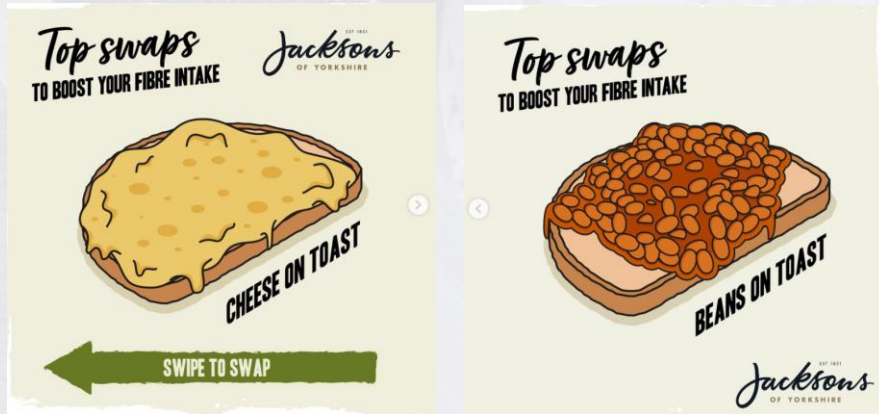
NPD Is A Key Vehicle to Helping Consumers Make A Lifestyle Change

Launched November 2020

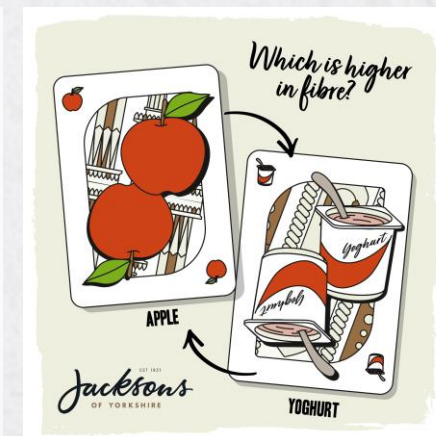
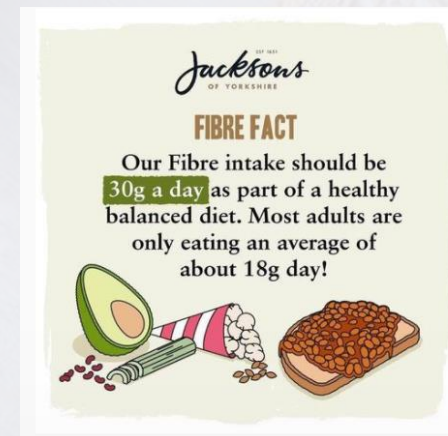
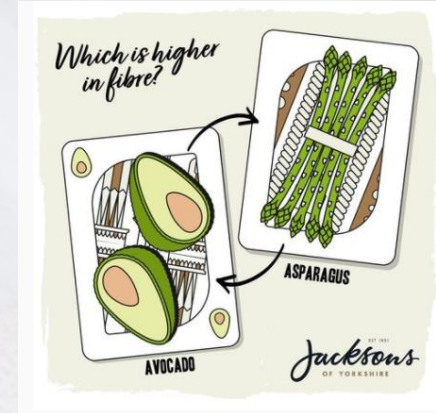


Starting The Conversation Around Fibre

Top Swaps



Higher or Lower



Packaging & On Pack Claims To Aid Consumer Decision Making

Current on pack
claims



High Fibre ✓



New and improved
claim call outs

**HIGH IN
FIBRE**

**HIGH IN
OMEGA 3**

Internal Communication Is Important For Staff Wellbeing and Initiative Engagement

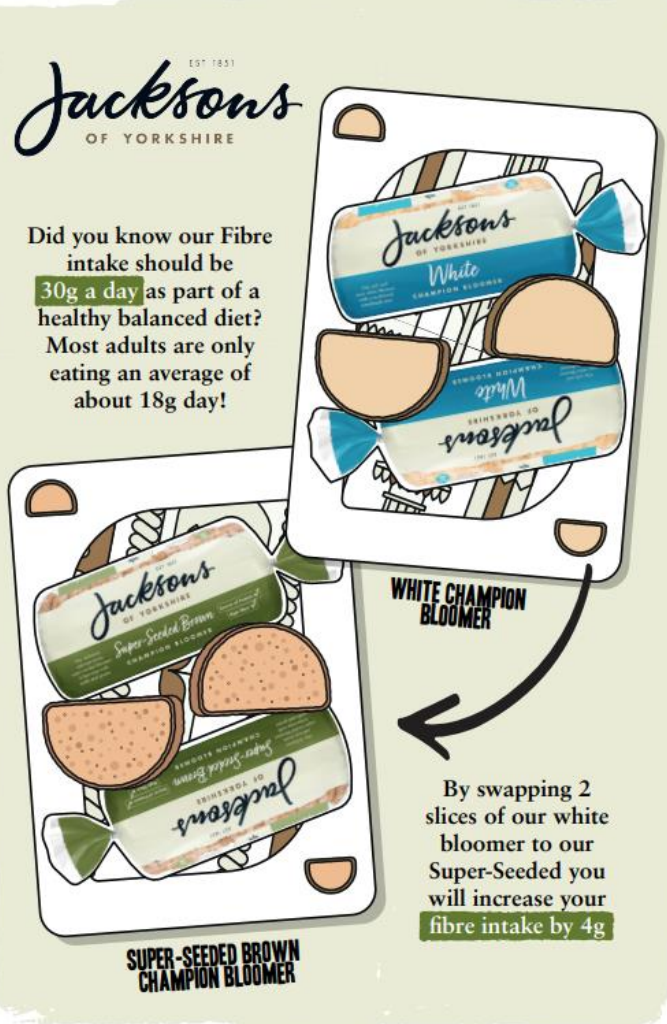
Jacksons
OF YORKSHIRE

Did you know our Fibre intake should be 30g a day as part of a healthy balanced diet? Most adults are only eating an average of about 18g a day!

WHITE CHAMPION BLOOMER

By swapping 2 slices of our white bloomer to our Super-Seeded you will increase your fibre intake by 4g

SUPER-SEEDED BROWN CHAMPION BLOOMER



Next Steps...

- Retailer buy in and support
- Brand Collaborations
- Coming together as a collective group to make a change
- How can we make the subject more interesting and engaging for consumers?

Using brand communications to encourage fibre intakes



Anna Collins RD

Nutrition Manager for Food &
Dairy

Nestlé Professional

Nestlé FDF Fibre Pledges include focusing on brand communications to help consumers increase their fibre consumption



We commit to increasing communications to help consumers increase their fibre consumption. This will be through on pack messaging and meal suggestions, as well as online consumer and B2B recipe recommendations.

- On pack messaging and meal suggestions
- Online consumer and B2B recipe recommendations



We increased on pack fibre messaging & improved Meal Suggestions



- ✓ Back of pack includes a 'Meal Suggestion'
- ✓ All Meal Suggestions have at least 160g veg per serve (2 veg serves)

Meal Suggestion
For 2 of your 5 a day+
serve with...

Meal Suggestion
+For 2 of your 5 a day serve with
boiled new potatoes, peas and broccoli
YOUR SHOPPING LIST:
4 x 150g chicken breasts
1 large onion
250g mushrooms
480g new potatoes
160g frozen peas
1 medium broccoli



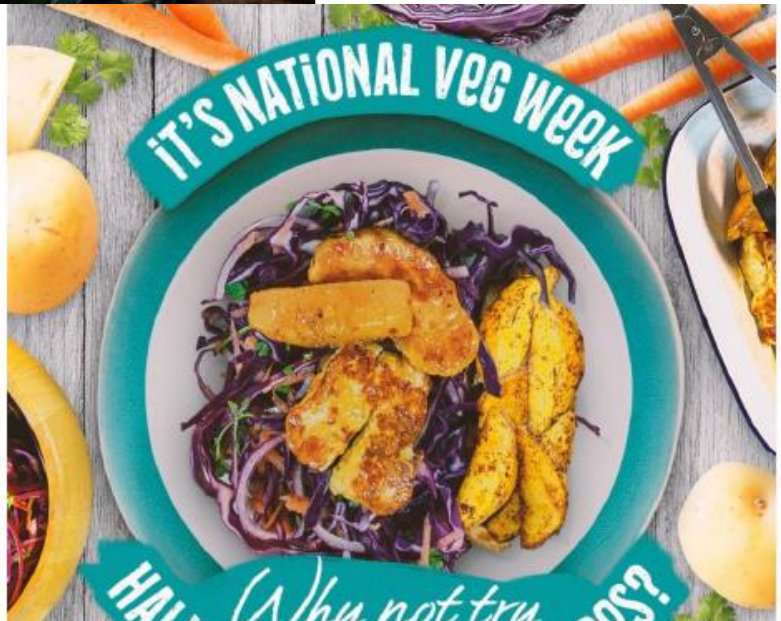
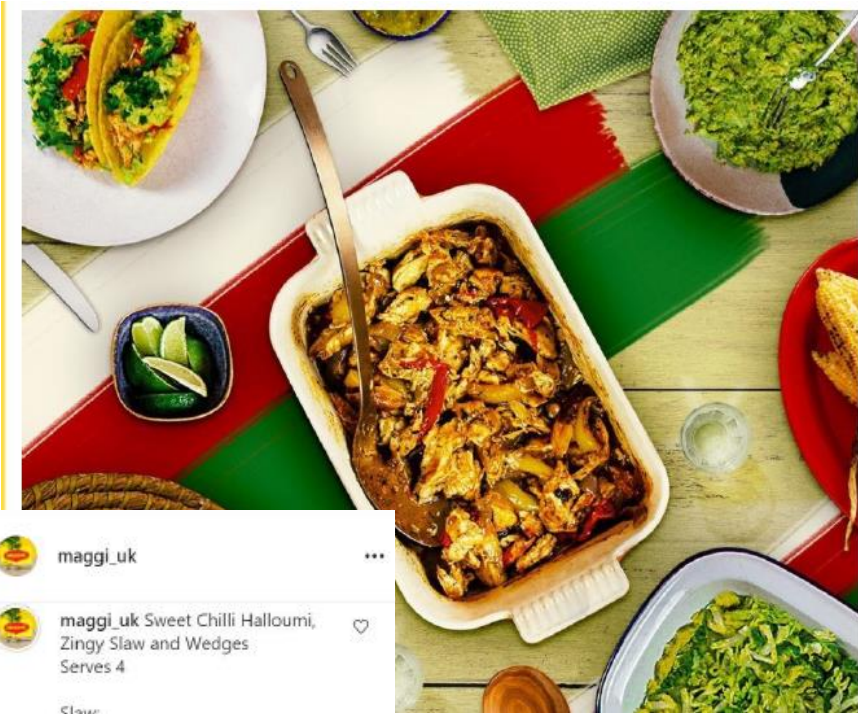
- ✓ Back of pack includes a 'Tips for Balance' message
- ✓ Increased the number of products containing a fibre message

TIPS FOR BALANCE
Try wholegrain brown rice to increase your fibre intake

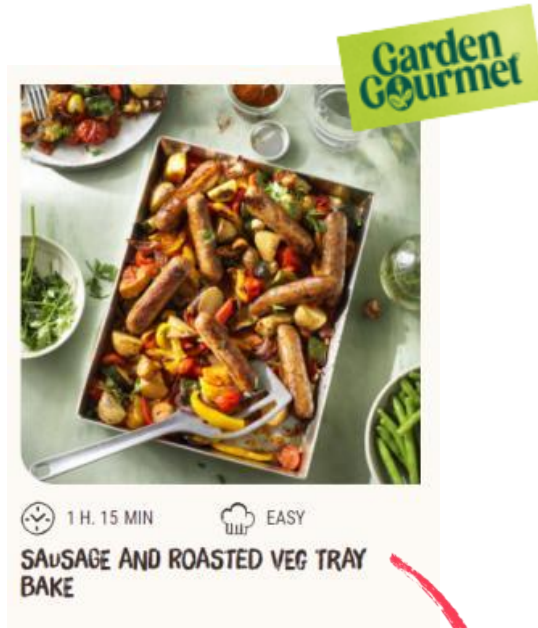
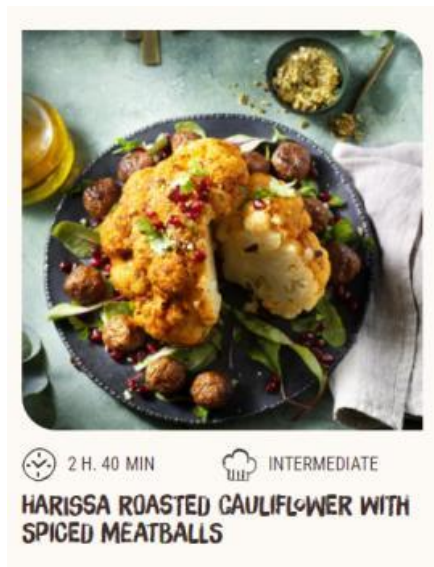
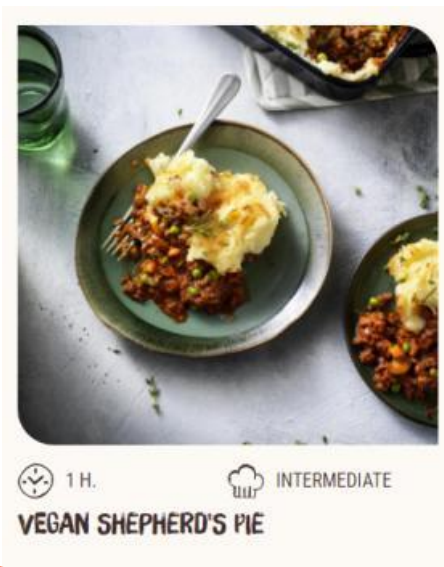
TIPS FOR BALANCE
Leave the skin on your sweet potato wedges to increase your fibre intake

TIPS FOR BALANCE
Increase your fibre by using brown wholegrain pasta

Extending communications to social media posts to encourage veg intake



Online consumer recipe recommendations include 2 of your 5 a day



Source of fibre claim on front of pack

Internal recipe guidelines


- Include at least 2 of your 5 a day = fibre!
- Under 600kcal per serve
- Meet UK Salt Reduction targets
- Avoid red 'traffic lights'



Our commitments extend to Out of Home recipe recommendations with 2 of your 5 a day & nutrition tips



Why not offer a choice of wholemeal wrap with this dish?
Wholemeal options can provide extra fibre



Internal recipe guidelines

- Include at least 2 of your 5 a day = fibre!
- Under 600kcal per serve
- Meet UK Salt Reduction targets
- Limit red 'traffic lights'





Good food, Good life

Thank you

Anna Collins

Nutrition Manager Food & Dairy, Nestlé Professional

24/02/2022

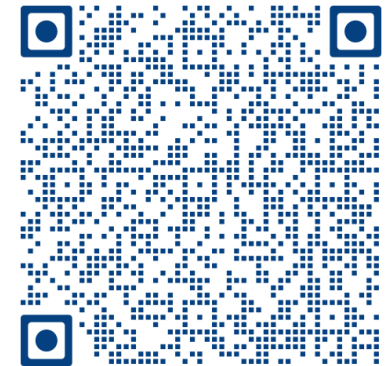


Panel Discussion

Thank you for listening!

Amy Glass
UK Diet and Health Policy Manager
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Fiyin Makinwa
Diet and Health Executive
Fiyin.Makinwa@fdf.org.uk



Entries
are now
open!

fdf
AWARDS

food and drink federation

2022

Diet & Health Registered Nutritionist Nutritionist / Dietitian of the Year Year

Deadline for entries:
28 February 2022

<https://www.fdf.org.uk/fdf/events-and-meetings/fdf-awards/>