

Consumption of discretionary foods and drinks and other categories of dietary concern in adults (16+ yr): analyses of data from Intake24 within 2021 Scottish Health Survey

Introduction

This briefing summarises the key findings in relation to consumption of discretionary foods and additional categories considered within policy proposals for the restriction of promotions. Analyses were conducted using 2021 Scottish Health Survey (SHeS) Intake24 data for adults aged 16 years and over.

Discretionary food and drink: Items of food and drink which are high in calories and/or fats, sugar or salt, low in nutritional value, which aren't required for our health. The discretionary food and drink categories presented in this report are: sweet biscuits, cakes, pastries and puddings, crisps and savoury snacks, confectionery, ice cream and ice lollies and sugar-containing soft drinks.

Additional foods included within the analyses: Pizza, breakfast cereals, ready meals, yoghurts, fromage frais and dairy desserts, roast potatoes, chips and other processed potato products

Key Findings

- On average, discretionary foods and sugar-containing soft drinks provided 260 kcal per day, accounting for 15% of total energy intakes, 17% of total fat, 18% of saturated fat and 38% of free sugars intake.
- Sweet biscuits were the biggest contributor to intakes of calories, fats and free sugars. Sugar-containing soft drinks alone contributed an additional 9% to intakes of free sugars.
- Whilst intakes of discretionary foods were greatest among the oldest age groups (75 years and above), younger adults aged between 16 – 35 years old consumed the greatest amount of sugar containing soft drinks. Intakes of sugar containing soft drinks was also greater among adults living in the most deprived areas, as was the contribution these drinks made to free sugars.
- The mean intake from all additional categories was 124g/d, providing an average of 207 kcal per day and accounting for 13% of total energy intakes, 11% of total fat and free sugars intakes, and 10% of saturated fat intakes.

- Of the additional foods, breakfast cereals contributed the most to energy, total fat and free sugars. The yoghurts, fromage frais and dairy desserts category was the top contributor to intakes of saturated fat, alongside pizza.
- Men consumed a greater quantity of the additional categories combined compared to females, with a greater proportion of energy, fats and free sugars coming from these foods in 2021.
- In total, discretionary foods, sugar-containing soft drinks and the additional foods contributed 28% to average intakes of calories, 18% to average intakes of total fat and saturated fat and 49% to average intakes of free sugars among adults in 2021.

Methodology

In 2018, FSS piloted the use of an online 24 hour recall dietary assessment method (called Intake24) in the SHeS. Intake24 was since included in the 2021 SHeS, providing an estimate of dietary intake in almost 3,500 adults (16+y) living in Scotland in 2021.

The overall sample included a total of 3,447 respondents, with 3,042 (88%) of those completing two recalls. Analyses have been based on those who completed two recalls which provides a better indicator of intake than a single recall. Respondents who consented to take part in Intake24 as part of the 2021 SHeS were invited to undertake dietary recalls on two separate occasions where they input details of their food and beverage consumption for the previous day. Two recalls, rather than a single recall, were requested to get a better understanding of an individual's typical diet. Online Intake24 dietary recalls were completed via a link sent by text or email directly to participants by the interviewer within minutes of giving consent. The second recall was completed within seven days of the initial recall. Days for dietary recall were assigned at random with the aim of achieving a proportionate spread of week and weekend days.

Results

Table 1 provides a breakdown of average intakes and the contribution of discretionary categories to calories and macronutrients among adults living in Scotland, in 2021.

On average, adults consumed 61g per day of discretionary foods, with an additional 77g coming from sugar-containing soft drinks. Combined, these foods and drinks provided an average of 260 kcal per day, accounting for 15% of total energy intakes. The contribution was 17% and 18% of total fat and saturated fat, and 38% of free sugars intake.

Sweet biscuits were the biggest contributor to intakes of calories, fats and free sugars among adults in 2021. Sugar-containing soft drinks alone contributed an additional 9% to intakes of free sugars.

The full report provides more detail on differences in intakes between males and females, age groups and by areas of deprivation. In summary, for discretionary foods intakes were greatest among the oldest age groups (75 years and above), whereas younger adults aged between 16 – 35 years old consumed the greatest amount of sugar containing soft drinks. Intakes of sugar containing soft drinks was also greater among adults living in the most deprived areas, as was the contribution these drinks made to free sugars.

Table 1. Mean intakes and contribution of discretionary foods and drinks to calories and macronutrients in adults (16+y) living in Scotland, in 2021 (n=3042)

Food group	% consumers in sample	Average intake (g/d)	% Total energy	% Total fat	% Saturated fat	% Free sugars
Sweet biscuits	46%	15	4	5	6	10
Cakes, sweet pastries & puddings	39%	20	4	4	5	8
Crisps & savoury snacks	33%	9	3	4	1	0
Confectionery	31%	10	3	4	5	9
Ice cream & ice lollies	14%	6	1	1	2	3
Total discretionary foods (excluding sugar-containing soft drinks)	82%	61	14	17	18	29
Sugar-containing soft drinks	26%	77	1	0	0	9

Table 2 provides a breakdown of average intakes and the contribution of the additional categories to calories and macronutrients among adults living in Scotland, in 2021.

The average intake of these categories was 124g per day, providing around 207 kcal per day and accounting for 13% of energy intakes, 11% of total fat and free sugars intakes, and 10% of saturated fat intakes.

Of the additional foods, breakfast cereals contributed the most to energy, total fat and free sugars.. The yoghurts, fromage frais and dairy desserts category was the top contributor to intakes of saturated fat, alongside pizza.

Men consumed a greater quantity of the additional categories combined compared to females, with a greater proportion of energy, fats and free sugars coming from these foods in 2021.

Table 2. Contribution of additional foods to intakes of calories and macronutrients in adults (16+y) living in Scotland, in 2021 (n=3042)

Food group	% consumers in sample	Average intake (g/d)	% Total energy	% Total fat	% Saturated fat	% Free sugars
Breakfast cereals	54%	45	5	3	2	5
Roast potatoes, chips and similar roasted potato products	33%	21	2	2	1	0
Pizza	11%	18	2	2	3	1
Yoghurts, fromage frais and dairy desserts	29%	26	2	2	3	3
Ready Meals	6%	13	1	1	2	1
Total additional foods	82%	124	13	11	10	11

Overall, discretionary foods, sugar-containing soft drinks and the additional foods contributed on average:

- 28% to intakes of calories
- 18% to average intakes of total fat and saturated fat and
- 49% to average intakes of free sugars among adults in 2021.

Limitations

Key limitations to note when interpreting these analyses include:

- Definitions used for food and drink categories within this report are different to those used for previous FSS reports on dietary intake, which means the results are not directly comparable.
- Misreporting of intake is a known issue for all dietary surveys and studies. Most often this leads to under-reporting where items are intentionally not consumed or are forgotten and unreported. Consequently, reported intakes of discretionary food and drink products and additional food categories may be subject to misreporting.
- Dietary estimates in this dataset are based on two days of diet recall. Given that some of these categories are perhaps not consumed daily, it is possible that some respondents may have consumed these foods and drinks outside of the surveyed period.
- No statistical testing to compare differences in intakes between categories and groups has been carried out. However, analyses have been conducted on survey-weighted estimates intended to be representative of the population and therefore results are reflective of patterns of intake in Scotland.

Summary and conclusion

Overall, these analyses provides an up-to-date view of intakes of discretionary foods and drinks, alongside additional categories of interest to inform development of policy to improve diet and related health, including any future restriction on the promotion of these foods and drinks. The findings demonstrate that discretionary and additional foods contribute substantially to intakes of calories and nutrients of public health concern. In total, these categories contributed 28% to average intakes of calories, 18% to average intakes of total fat and saturated fat and 49% to average intakes of free sugars among adults in 2021. Given that diet in Scotland is too high in saturated fat and free sugars in particular, measures which support consumers to consume fewer products high in fat, salt and sugar (including discretionary foods and drinks) would contribute towards achieving our Scottish Dietary Goals.

These findings complement and add to existing evidence that monitors trends in food and drink intake in Scotland. This data will be used to support and policy development, particularly in relation to restricting promotions of food and drink high in fat, sugar or salt, and also to inform public health communications and consumer advice.