

## **Reducing Childhood Obesity: Food Innovation Consultancy Challenge**

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## Reducing Childhood Obesity: Food Innovation Consultancy Challenge

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### Introduction

Reducing obesity, in particular childhood obesity is the fundamental aim of this new and innovative final year undergraduate module at Sheffield Business School (SBS). 80 x BSc (Hons) Food Marketing Management and BSc (Hons) Food & Nutrition students undertook this real life challenge, known as the Food Innovation Consultancy Challenge (FICC). SBS 'live' offers real-life consultancy, placement and opportunities for students to work abroad. It develops student confidence and resilience and creates knowledge that provides practical solutions to real world challenges. The FICC module is a 40 credit final year module designed to support SBS 'live' and aims to provide students with an opportunity to improve their professional skills through traditional academic learning, but also through **engaging with a current real life challenge**. Ovensen-Hope and Blandford (2018) state 'applied learning' sets learning within practical situations to improve the learner's understanding of how theory works in practice. This module is designed to allow learner's to understand professional development and CPD theory from personal reflection, action planning and using the experience from real-life learning of a topical issue within the industry sector. FICC is tailored to Food Marketing Management and Food & Nutrition students, but it is a model that can be easily adapted to any subject group across a university.

Students take on the role of professional consultants who received a brief from the client. Sheffield Business School were have been appointed by the client Asda Stores plc (Asda, 2019) to investigate sugar reduction across a range of Asda Brand (own-label) biscuits. The student consultants worked on sugar reduction in Asda boursbons, Asda custard creams and Asda milk chocolate digestives. The client advised that the consultancy challenge is in response to the Government directive to **reduce sugar in food and drink within the UK by 20% by 2020** (Govuk, 2018; PHE, 2017 (a), (b), (c), 2018 (a), (b)). In August 2016, Government through Public Health England out its approach to reduce the prevalence of childhood obesity in 'Childhood obesity: a plan for action' (NHS, 2019; Govuk, 2018; PHE, 2017(a), (b), (c), 2018 (a), (b)). A key commitment in the plan was to launch a broad, structured sugar reduction programme to remove sugar from everyday products (Skafida & Chambers, 2018; Briggs et al., 2017; Cooper, 2017). This can be achieved through reducing sugar levels in products, reducing portion size, or shifting purchasing towards lower sugar alternatives. Sugarwise (2019), the **international authority for sugar related claims** who certify products to the World Health Organisation WHO (2018; 2015) guidelines became involved in the challenge, and agreed to support the client to achieve the Sugarwise marque. Sugarwise are the only international certification body for sugar related claims, for example sugar free, low sugar, no added sugar, reduced sugar, low calorie, calorie free and reduced carb and have more than 500 products certified across 70 countries. The Government are currently considering using the Sugarwise marque as the industry benchmark for sugar claims, and as result of this challenge students will attend the Sugar Summit in Parliament in September 2019.

### Aims & Objectives

**Module Learning Outcomes:**

1. Research, interpret and evaluate information from a variety of business sources, for example marketing, commercial, technical etc. in order to frame the consultancy problem and propose a plan of action.
2. Present effectively and professionally the solutions and recommendations against the brief, to the industry partner (client) and academic tutors.
3. Use information gained through reflective practice, work experience and elsewhere to inform your future career planning to improve your employability and career potential, drawing upon concepts and frameworks in career management and personal development theory.

**Client Objectives (Asda Stores plc):**

1. 20% reduction in sugar across focus categories set by Public Health England and legislative bodies, in order to be in line with the 2020 Government Sugar Reduction Strategy.
2. Explore the reasons and benefits of sugar reduction in line with the Government 2020 strategy and as consultant teams develop a tactical initiative to be implemented by the client to help deliver the strategy.
3. Identify and if appropriate recommend the student consultant to apply for a position on the Asda Graduate programme.

### Method: The Big 7

The students followed the seven steps of the module (Known as the Big 7) to ensure each group maintained a consistent approach. The first step was to carry out primary research involving a gap analysis of the UK biscuit market including reviewing the existing biscuit ranges of mainstream, premium and discounter UK retailers. They carried out a detailed gap analysis of the targeted range of biscuits within the challenge: **bourbon creams, custard creams and milk chocolate digestives**. Students analysed the findings to provide potential gaps in the market and advise the client whether or not to introduce or discontinue biscuit products from their ranges. They also carried out further primary research by interviewing / focus groups of consumers to find out their views on sugar reduction and future biscuit needs. This included new methods of social media research including using Facebook and Instagram for instant feedback. Students then carried out secondary research using databases held at Sheffield Hallam University and with the client. This included using 'live' data from the university library including Kantar Worldpanel data and Shopper Intelligence and Institute of Grocery Distribution (Kantar, 2019; Shopper Intelligence, 2019, IGD, 2019). Students supported industry data with traditional academic research including retailing journals, books and publications. Students analysed the primary and secondary data, calculated the necessary commercials to provide a solution to the client. This process is exactly the same activity as they would follow in a real world situation.

The final step of the Big 7 was the deliverable. All student teams presented a **1,000 word poster and deliverable** to the academic marking team and the Asda judging panel. The academic team marked the presentations against the marking grid criteria and provided a summative degree mark and feedback. The Asda team also provided additional formative feedback from an industry perspective. Food and Nutrition students deliverable was the new 'less sugar' biscuit and Food Marketing Management students deliverable was the marketing communication of a 'less sugar' biscuit range of biscuits by designing a new biscuit merchandising brief and building this on the fixture at the clients premises.

The group presentations and deliverables were exhibited at the end of the module at the **Merchandising Centre of Excellence (MCE) in Asda House**. The Asda team also used the challenge to identify future talent to enter their business, and two students were successful. Working with a UK blue-chip company gave students the best possible opportunity to gain experience, improve confidence and start building lifelong networks. Asda ambassadors regularly communicated with the students by delivering practical sessions, email contact and speed dating. The speed dating is an open discussion session where Asda colleagues from every area of their business are available to answer student questions. Asda also made their internal data available for the students.

Students worked in 'state of the art' facilities provided by SBS; the Business Advice Centre (BAC) and the 12th floor kitchens a £3m food development facility. The Insights Discovery profile provided students with their strengths and weaknesses and they used the challenge to improve these and help get them 'career ready' (IFST, 2016). This was documented on a portable Pebble Pad portfolio for use at future interviews and to support CPD.

### Results - Student Groups

#### FICC Sugar Reduction Challenge 2019 – Bourbon Group 3

**Team Aim:** To develop a bourbon biscuit that meets 20% sugar reduction guidelines whilst maintaining 'clean label' aspect, price and sensory.

**Team Objectives:**

- 1) To outline PHE strategies and guidelines
- 2) To complete a gap analysis of the current biscuit market
- 3) To complete a benchmarking of bourbons from major supermarkets, discounters and other mid-tier bourbons
- 4) To create a questionnaire
- 5) To complete market and academic research
- 6) To formulate a biscuit recipe
- 7) To run Objective and subjective testing on final recipe

**Number 1 – Understanding the Benefits of PHE's Strategy**

Public Health England - Sugar Reduction: Achieving The 20%  
 Biscuits account for the second largest intake of free sugar consumption among both children and adults.

**Number 2 – Gap & Fixture Shot Analysis, Benchmarking**

**Number 3 – Primary Research**

**Number 4 – Secondary Research**

**Number 5 – Commercial Evaluation**

**Number 6 – Professional Development**

**Number 7 – Product Development – Stage Gate Process**

**Team SWOT Analysis**

**Commercial Activation**

**Factory Trials**

**Specifications**

**Recommendations**

**Lab Testing**

**Challenges**

**1. Idea Generation**

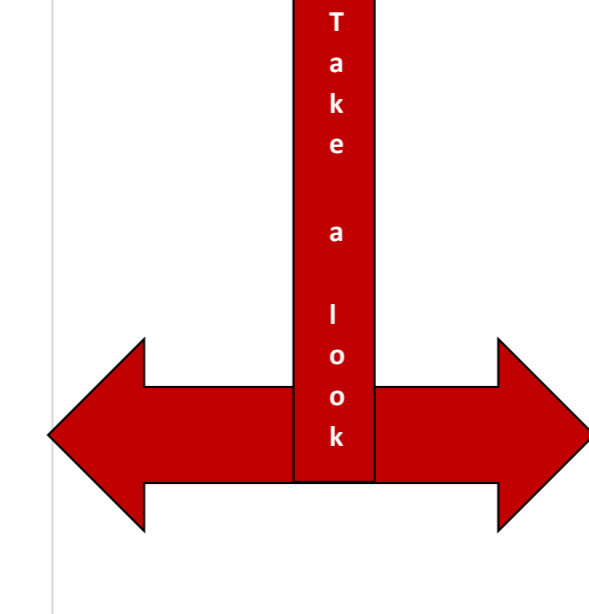
**2. Product Development**

**3. Testing & Validation**

**4. Commercial & Launch**

### Student Examples

Here are a couple of examples of student results: There were 16 group student presentations each following the Big 7 methodology. The student results were high with most achieving either a first or a high second. Students presented posters, sugar reduced product tasters, retailer point of sale, research and commercials. Asda were very impressed by the standards and creativity of the ideas and have agreed to progress some ideas to the retail shelf.



### Acknowledgements

Firstly to the 80 hard working and committed Level 6 students: BSc (Hons) Food Marketing Management and BSc (Hons) Food & Nutrition; and to the leadership team and academic and technical colleagues of Sheffield Business School. Secondly to the institutions supporting the module: Public Health England, NHS, Sheffield Business School, Asda Stores plc, Sugarwise, Insights Discovery, Kantar Worldpanel, Mintel Academic, Pebble Pad, Food Matters Live, The Grocer, BBC Radio Sheffield.

#### ASDA Save money. Live better.

**Introduction:**

The 2020 Childhood obesity: a plan for action revealed that childhood obesity and tooth decay is pressuring the UK's National Health Service (NHS Government, 2016). To improve the energy imbalance of children the government have devised a national plan with a number of initiatives including the 2020 sugar reduction project. The 20% sugar reduction target should be met by 2020. This initiative requires all sectors of the food industry to reduce sugar content of 9 food categories that significantly contribute to children's sugar consumption (Public Health England, 2017). The reduction of sugar should be accompanied by calorie reduction and without increasing the saturated fat content.

**Planogram:**

- Brand blocking: grid oriented schemas (IGD, 2019; Ebers, 2016)
- Vertical/horizontal merchandising: good, better, best (Ebers, 2016)
- Facing volume at Asda has been considered when configuring SKU facings (Kantar Worldpanel, 2018)
- Brand vs OL - the sales data of OL vs branded product types have been considered and the proportions have been reflected in the planogram where possible. However, to reduce basket spend the focus has been on OL (Kantar Worldpanel, 2018)

**1085 tonnes of sugar in Asda costed items each year (own-label)**

**Commercial:**

Item	Current Price	Target Price	Volume	Annual Saving
Labour	£ 0.259	£ 0.200	1085	£ 64.5
Wring packaging	£ 0.005	£ 0.003	1085	£ 2.17
SKP packaging	£ 0.010	£ 0.008	1085	£ 2.17
Cost (inc. supplier margin)	£ 0.274	£ 0.211	1085	£ 68.8
Actual price	£ 0.290	£ 0.230	1085	£ 65.7
Actual profit margin	£ 0.44	£ 0.36	1085	£ 87.0

**Marketing Plans:**

- Soft Launch 14/08/2019 Implementation of planogram
- Back to School 04/09/2019 In-store sampling, tasting and informing customers of the new formulation and the 2020 scheme (Ebers, 2016)
- Asda magazine - 1 page article to show simple swaps in children's lunch to reduce sugar consumption. Issue contains 25% off coupon (Moore, Pinar, & Varcho, 2016). Asda website - site on homepage directing to cross category sugar reduced products.
- Pick Me Up 06/11/2019 Online - social media "sponsored" banners (Russo & Simeone, 2017)
- Social media influencers - sending samples to 30 influencers relevant to target consumer e.g. Briory Williams
- Sugar Reduced Jan 08/01/2020 Asda Magazine - sugar reduced recipes and product across categories (Ebers, 2016)
- Asda website - site on homepage directing to sugar reduced alternative
- Afternoon Tea 22/04/2020 Gift-shelf feature space (IGD ShopperVista, 2019, 2017)
- UK's leading tea brand, Pops (Mintel Academic, 2018) and new sugar reduced biscuits.
- August 2020 Holistic Marketing Review Considering any new legislation and plans to replicate and assist in other sugar reduced products

**Conclusion:**

**Key learnings:**

1. Teamwork worked cohesively, each bringing different experiences and knowledge.
2. We remained mindful and considerate of each of our personality types and learning styles.
3. New practical skills - from completing this project we can apply technical skills learn in packaging and commercial forecasting to future professional roles.
3. Area of improvement: To work closer and cohesively with other groups and support each other in improving our personality types.

### Media

**VIDEO PRACTICAL:**

Short video clip showing students working on sugar reduced biscuits in the kitchen:

<https://drive.google.com/file/d/1OGpTxC05agYvTIRuRE6hD88FbwZk8s/view?ts=5d4451ae>

80 students participated in the challenge, and took part in lectures, seminars, practical's and speed-dating where students asked direct questions of the Asda team.

**Asda working with Sheffield students on obesity initiative**

Asda NPDP Chef and Project Pioneer: Andrew Johnson (NPD Chef). The collaboration is working well with Sheffield Hallam and we are fortunate to work with such fantastic students. They are all passionate about food and keen to make a real-world impact to quality of life in the UK by reducing the amount of sugar in our own-brand biscuits. We look forward to seeing some innovative ideas in the coming months and working with Sheffield Hallam students to help tackle obesity, particularly amongst young people.

**Student: Josh Williams BSc (Hons) Food & Nutrition.** Just wanted to take the time to thank you for the teaching on the Asda Innovation challenge module and the impact this will have on reducing childhood obesity, it has been the most enjoyable task I have experienced whilst at University. As a TEF panel member for SHU, I've recognised how students have thoroughly enjoyed this module due to the exposure to relevant industry challenges. Moving forward, I have since been offered a job in R&D for Synergy Flavours with whom I first made contact as part of this module. They were very impressed with the relevance and level of work conducted, and I will now continue to work on sugar/fat/salt reductions across the whole of the food sector. I wish you the best in the future and hope that future students will also be able to enjoy such a unique learning experience.

**Student: Charlotte Goose BSc (Hons) Food Marketing Management.** I am excited to be part of the Food Innovation Consultancy Challenge in partnership with ASDA, reducing childhood obesity and the associated health problems should be top priority and as a student who will soon be graduating and starting my career within the Food Industry I feel that it should be part of my responsibility to offer new innovations to make all manufactured as food as healthy as possible. It's an exciting project to be a part of especially due to it being a real life problem and I am looking forward to being part of the solution. The module has been noticed by some key industry organisations such as The Grocer, BBC and Sugarwise, this shows how new and unique this type of module is to the industry and is exciting for us as students that it has already been recognised. Overall, I think this module will be very helpful when applying for graduate jobs and is a great talking point in interviews.

**Student: Catherine Hall (Food Marketing Management).** When I was first briefed on the Food Innovation Consultancy Challenge and gained an understanding of what this would entail, I could not wait to get started! Working on a live challenge in partnership with Asda on sugar reduction for their own-brand biscuits, enables us not only to deal with a real industry issue, but also to build our professional development. Sugar was the number one health concern by consumers for the fourth consecutive year in 2018 according to Nielsen statistics. Working on such a contemporary issue is essential towards the positive contribution concerning the UK's obesity epidemic, particularly childhood obesity. Through making recommendations to Asda and considering marketing communications for the sugar-reduced biscuits, this may lead to Asda implementing the initiatives to help deliver the Government 2020 Sugar Reduction Strategy.

**KANTAR WORLD PANEL** | **Shopper Intelligence** | **IGD** | **SUGAR WISE**

**Sheffield Hallam University** | **Sheffield Business School** | **Discovery** | **Insights** | **Public Health England** | **ASDA**

### Testimonials

**Asda NPDP Chef and Project Pioneer: Andrew Johnson (NPD Chef).** The collaboration is working well with Sheffield Hallam and we are fortunate to work with such fantastic students. They are all passionate about food and keen to make a real-world impact to quality of life in the UK by reducing the amount of sugar in our own-brand biscuits. We look forward to seeing some innovative ideas in the coming months and working with Sheffield Hallam students to help tackle obesity, particularly amongst young people.

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**KANTAR WORLD PANEL** | **Shopper Intelligence** | **IGD** | **SUGAR WISE**

**Sheffield Hallam University** | **Sheffield Business School** | **Discovery** | **Insights** | **Public Health England** | **ASDA**

### Conclusion

The module accounted for a third of the students final year, and had a major impact on their overall degree classification. Students therefore committed over 20 hours per week to attend the seamless teaching and also significant individual and group work in their own time. They were responsible for managing the client, timekeeping, teamwork and peers also marked each other which contributed to the final grade.

This was the first year the module has ran, student feedback from student voice and Module Evaluation Questionnaires has allowed the module team to improve further for next year. 2018 19 NSS Scores were 100% for Food Marketing Management and 97% for Food & Nutrition, the highest scores achieved in Sheffield Hallam University. 2019-20 has already welcomed Innocent Drinks, Taylors of Harrogate and Warburton's to propose challenges to make a difference, and will include packaging reduction, and the changing consumer tastes to assist health benefits. **We welcome the challenge!**

### References

Briggs, A. D. M., Mytton, O. T., Kehlbacher, A., Tiffin, R., Elhousseini, A., Rayner, M., Jebb, S. A., Blakley, T., Scarborough, P. (2017). Health impact assessment of the UK soft drinks industry levy: A comparative risk assessment modelling study. *Journal of Public Health* (Oxford, England), 40(3), e283. doi:10.1093/pubmed/idx184

Cooper, J. M. (2017). The challenges of reformulation for sugars reduction. Retrieved from <https://iftjournal.org/features/31-1/sugars-reduction>

GOV.UK (2018). Sugar tax revenue helps tackle childhood obesity. <https://www.gov.uk/government/news/sugar-tax-revenue-helps-tackle-childhood-obesity>

IFST. (2016). Sugars. Retrieved from <https://www.ifst.org/resources/information-statements/sugars>

IGD. (2019). Strategic outlook for Asda. Retrieved from <https://retailanalysis-igd.com/hallam/igm/oclr/retailers/presentation-viewer?strategic-outlook-for-asda&7453>

Kantar. (2019). Products - Drivers for GB - Biscuits. Retrieved from [https://eu.worldpanelonline.com/Reporting/Content/Navigator.aspx?xe=99060&~\\$a4990b6-6d1d-494b-804d-ed4b67265f0c~ReadyToUse-0](https://eu.worldpanelonline.com/Reporting/Content/Navigator.aspx?xe=99060&~$a4990b6-6d1d-494b-804d-ed4b67265f0c~ReadyToUse-0)

NHS. (2019). Change4life - sugar swaps for kids. Retrieved from <https://www.nhs.uk/change4life/food-facts/sugar-swaps-for-kids>

Ovensen-Hope, Tanya & Blandford, Sonia (2018). Understanding Applied Learning: Developing Effective Practice to Support All Learners. Routledge, London.

Public Health England (2015). Sugar Reduction: The evidence for action. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/470179/Sugar-reduction\\_the\\_evidence\\_for\\_action.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/470179/Sugar-reduction_the_evidence_for_action.pdf)

Public Health England (2017a). Sugar Reduction: Achieving the 20%. A technical report outlining progress to date, guidelines for industry, 2015 baseline levels in key foods and next steps. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/604336/Sugar\\_reduction\\_achieving\\_the\\_20.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/604336/Sugar_reduction_achieving_the_20.pdf)

Public Health England (2017b). Health Matters: Child Dental Health. <https://www.gov.uk/government/publications/health-matters-child-dental-health/health-matters-child-dental-health>

Public Health England (2018a). The problem with sugar. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/710312/Sugar\\_reduction\\_and\\_wider\\_reformulation\\_jayman\\_s\\_summary.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/710312/Sugar_reduction_and_wider_reformulation_jayman_s_summary.pdf)

Public Health England (2018b). Child oral health: applying All Our Health. Retrieved from GOV.UK: <https://www.gov.uk/government/publications/child-oral-health-applying-all-our-health/child-oral-health-applying-all-our-health>

Public Health England (2017c). Guidance: Childhood Obesity: a plan for action. <https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action/childhood-obesity-a-plan-for-action>

Skafida, V. & Chambers, S. (2018). Positive association between sugar consumption and dental decay prevalence independent of oral hygiene in pre-school children: A longitudinal prospective study. *Journal of Public Health* (Oxford, England), 40(3), e283. doi:10.1093/pubmed/idx184

Shopper Intelligence (2019). [www.shopperintelligence.com](https://www.shopperintelligence.com), last accessed August 2019.

Sugarwise. (2019). Get Certified: Sugarwise Certification. Retrieved from <https://sugarwise.org/verify/certified/>

World Health Organization (2015). Sugars intake for adults and children. Guideline. Online. Available from: [http://www.who.int/nutrition/publications/guidelines/sugars\\_title/en/](http://www.who.int/nutrition/publications/guidelines/sugars_title/en/)

World Health Organization. (2018). Obesity and Overweight. Available from: <https://www.who.int/en/news-room/fact-sheets/detail/obesity-and-overweight>