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# Healthy Returns:

## Opportunities for market-based solutions to childhood obesity

GUY'S &  
ST THOMAS'  
CHARITY



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CAPITAL

This report was produced for **Guy's and St Thomas' Charity** and **Big Society Capital** by a team coordinated by **The Food Foundation**, including:

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The team received extremely valuable contributions from Dr Thomas Bourgoine from CEDAR, the University of Cambridge and Shona Goudie.



### **About Guy's and St Thomas' Charity**

We're an independent, place-based foundation. We work with Guy's and St Thomas' NHS Foundation Trust and others to improve the health of people in the London boroughs of Lambeth and Southwark.

Childhood obesity is a complex global issue and a major challenge in Lambeth and Southwark, where local rates are among the highest in the country. We are running an ambitious programme focusing on the relationship between child obesity and inequality. Our goal is to close the 'obesity deprivation gap' in our boroughs – bringing the high obesity levels in the most disadvantaged areas down to the level of more affluent ones.

[www.gsttcharity.org.uk](http://www.gsttcharity.org.uk)



### **About Big Society Capital**

Big Society Capital improves the lives of people in the UK by connecting social investment to charities and social enterprises. We know that investment can help charities and social enterprises achieve more. We believe the greatest chance to improve lives comes when investors and enterprises are both motivated by social mission.

We engage with investors, fund managers, charities and social enterprises to make it easier to use social investment. With our co-investors, we have made over £1.3 billion of new capital available to organisations with a social mission, through investments into fund managers and social banks. We have a special focus on: providing homes for people in need; strengthening communities; and early action to prevent problems

[www.bigsocietycapital.com](http://www.bigsocietycapital.com)



### **About the Food Foundation**

The Food Foundation is an independent think tank that tackles the growing challenges facing the UK's food system in the interests of the UK public. We provide clear analysis of the problems caused by the food system and the role of policy and practice in addressing these. We develop and articulate food policies that support and guide the UK public to make choices that improve their health and well-being and we inform and generate demand for new and better public and private sector policy and practice.

[www.foodfoundation.org.uk](http://www.foodfoundation.org.uk)

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**Foreword / 06**

---

**Executive summary / 07**

---

**Introduction / 10**

---

**Setting the scene / 12**

Food markets in the UK / 13

Food environments in urban areas / 15

Food expenditure and children's dietary  
intake in low-income households / 19

Food business research / 24

---

**Opportunity spaces / 28**

Designing healthier products / 30

Designing healthier supply chains / 38

Designing healthier retail opportunities / 44

---

**Considerations for action / 50**

1. Healthy food investment / 51

2. Food specific business expertise / 56

3. Place-based infrastructure / 58

---

**Conclusion / 64**

## Foreword

When we were setting up Leon, creating recipes drove us nuts. We wanted dishes that tasted great, that could be served quickly, that were healthy and that were affordable. Satisfying any two of these conditions was easy. Three was trickier. But four? It seemed almost impossible. Like squeezing a balloon, you could only improve in one area, by compromising in another. To this day it eats up a huge amount of the Leon team's time.

In increasing numbers, start-ups are taking on this challenge – deciding not only to enter the incredibly competitive food-sector but doing it with healthy, affordable products that set out to address one of the biggest societal problems of our day – childhood obesity.

Affordability is critical. Increasingly, we're seeing a clear link between income and child obesity rates. I sit on the advisory committee for Guy's and St Thomas' Charity's Childhood Obesity Programme which is shining a light on this link and the opportunities for change in our homes, schools and streets. And it's ripe territory for challenger brands.

These businesses need support. And this report provides philanthropists, foundations, social investors and government with practical ways in which they can help.

It combines fascinating proprietary new analysis of consumer purchasing data, qualitative research of 80 businesses from across the globe, and detailed case studies of UK start-ups to show what they need to be successful. We hope that this provides both insight into the market opportunity of a sector that has both customer demand as well as social impact – and kick-starts further investment and support activity to help this sector to scale.

“Affordability is critical. Increasingly, we're seeing a clear link between income and child obesity rates.”

Tackling childhood obesity will require many interventions across our society. But it will not happen unless food businesses succeed in creating and marketing healthy products that are every bit as tasty and fun as the junk they marketed in the past. We hope that this report will help that happen.



**Henry Dimbleby**  
Co-founder, Leon Restaurants and  
co-author of The School Food Plan

## Executive summary

In this report we consider the potential role for 'challenger brands', new businesses who are committed to creating healthier food environments, and how they can be supported to thrive.

### Inequality and the role of food environments in childhood obesity

The healthy food and beverage market continues to grow steadily in the UK. However, nutritional value and price often increase hand-in-hand. This places many of the healthiest products out of reach of families most affected by childhood obesity.

This matters. Firstly, there is a clear and persistent relationship between childhood obesity and deprivation. Rates of childhood obesity are more than twice as high in areas with the highest levels of deprivation as that in their wealthiest counterparts; and this gap is widening. It should come as no surprise that income influences the options available to families. The diets of those on the lowest incomes are, on the whole, unhealthier than those in higher income brackets. While they are eating a similar proportion of unhealthy food (which is high across the population), they are eating less healthy foods such as fruit and vegetables. Meeting the recommendations of the Eatwell Guide would currently require families on

the lowest incomes (those earning less than £10,000) to spend 60% of their disposable income on food.

Secondly, we know that people's eating behaviour is strongly affected by their food environment – the availability, attractiveness and accessibility of food inside and out of the home<sup>1</sup> – and that those living in deprived areas face multiple factors that make it more difficult to eat well<sup>2</sup>. Those living in more deprived areas are likely to be faced with a greater number of unhealthy food options when they step out their door, and likely to have less money and headspace to find healthy alternatives.

Tackling childhood obesity requires getting to grips with unhealthy food environments. This includes focusing on lower-income communities who are disproportionately affected by a food market that doesn't currently serve them with products and services that easily enable healthy diets.

### Challenger brands and their role in changing food environments

There is a business sector taking on this challenge. Over the last decade there has been an emergence of challenger brands in the food sector using sustainable business models to enable and drive lower income households to access more nutritious diets. These businesses are in part driven by social purpose; committed to creating healthier food environments and tackling dietary inequality. They are also responding to a market opportunity. The total UK food spend of family households earning less than £20,000 was estimated approximately £6.5 billion last year.

There is unmet demand amongst this group for healthier options. Parents are seeking food options that are attractive, convenient, affordable and healthy. However the current food environment means

compromising on one of these factors – with healthy being the first to go. As some of the case studies in this report highlight, when products and services can meet all these needs, they often have a recipe for success.

Consumer purchasing trends and insights from existing businesses suggest four specific opportunity spaces for challenger brands in this area; two related to product innovation and two related to adapting retail channels:

+ **Snacks** - while children across all wealth groups eat large amounts of foods which are high in fat, sugar and salt, in the poorest groups, sweet and savoury snacks contribute a greater proportion of these foods. At the same time children in these households eat less healthy food. There is an opportunity to

substitute unhealthy snacks with healthier products. Developing a new healthy snack product is extremely difficult given the competitive nature of the market. Those that have tried have not yet reached the scale needed to make their products affordable to those on a low income. Where they have been successful, they have often started with a business selling to other businesses to build their profitability and brand.

+ **Pre-prepared meals** - all households are heavily reliant on pre-prepared meals and there are opportunities to create healthier options which are affordable to those on a low income. This leads to two potential business interventions. First, we know that those on a low income eat out less than wealthier households because it is more expensive. So, improving pre-prepared meals offered through take away outlets is an important opportunity given the density of takeaway options in poor neighbourhoods. Businesses trying this are in their infancy. They depend on access to a suitable standard kitchen for production, online ordering, and a range of cross-subsidisation models. Second, there are some new forms of retail outlet emerging which offer affordable, healthy food as well as pre-prepared meals for takeaway in poorer neighbourhoods, focusing on marketing and educational interventions alongside their food offer. These models often rely on mobilising food surplus and use volunteers to keep costs down.

+ **Supermarkets** - in the UK the majority of most people's food spend, across income categories, is in

supermarkets. The challenge is getting lower-profit margin products onto the shelves and given a real opportunity to compete with more established, but often healthier, products. Where this challenge is overcome, it helps to shift an often-used retail space further towards a healthy as well as affordable food environment for families on a low income, and further diversify supermarkets' offering.

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“Parents are seeking food options that are attractive, convenient, affordable and healthy. However the current food environment means compromising on one of these factors – with healthy being the first to go.”

+ **Convenience stores** - households on a low income depend more than their wealthier counterparts on convenience stores for their food, but this food tends to be healthier than that purchased in large supermarkets. There is an opportunity to improve the availability and marketing of healthy food in convenience stores. There are a number of businesses and social enterprises working on improving the supply of affordable healthy products and the marketing and positioning of these products in convenience stores, especially those in deprived areas. Online platforms which connect suppliers and buyers can offer important opportunities by shortening supply chains and helping to bring scale at low cost.

## Helping challenger brands to scale

The businesses interviewed for this report are great examples of how these opportunities can be met. However, they are representative of a sector that is relatively new and small. As a result, they are facing challenges common to Small and Medium Enterprises (SMEs) around access to capital and markets. Having a social mission can add another challenge as a business sets itself criteria that reduce opportunities for cost-cutting; such as provision of a living wage to its employees. In addition, the food sector is highly competitive and requires sector-specific expertise, which food start-ups may lack.

Funders can help to tackle these barriers to scale. This includes social investors, grant makers and philanthropists who are interested in tackling childhood obesity through market mechanisms. It may also include food specialist institutional and individual investors interested to support innovation and disruption in the food sector. Existing support mechanisms and businesses highlight three areas of consideration for funders in this space:

1. **Healthy food investment** - lack of investment is probably the biggest barrier to 'good food' challenger brands scaling their impact. Tackling this might entail financing mechanisms that offer a range of investment packages (debt, investment and grant) and which include philanthropic capital

which can help to de-risk commercial capital. There is considerable experience of investment funds for healthy food businesses in the USA to draw on.

2. **Food specific business expertise** - to support access to markets, the creation of facilities which can offer business advice which is specific to food, and includes regulatory or nutritional expertise; help with negotiating contracts with buyers; and understanding the customer base, are all important.

3. **Place-based infrastructure** - there were common infrastructure needs highlighted by many ventures, which may be more efficient for support mechanisms to provide for multiple businesses at a time. Suitable kitchen, storage or freezer space can be a critical barrier to businesses in this area. Shared kitchens can help to solve this problem and overcome regulatory hurdles at the same time. In addition, there may be wholesale ways of taking advantage of the high levels of food waste currently present in the food system, and repurposing food fit for consumption but going to waste so that businesses can access lower cost ingredients. These solutions feel most feasible for programmes that can specify a sub-regional geographic boundary for impact.



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## Introduction

Rates of childhood obesity in the UK continue to rise, with over a third of children now leaving primary school obese or overweight<sup>3</sup>. The social, health and economic consequences of poor diets and obesity are well documented. There are countless studies that demonstrate that obesity shortens lives<sup>4</sup>, worsens school performance<sup>5</sup> and reduces overall happiness and wellbeing<sup>6</sup>. The evidence on both the scale and nature of the problem shows that tackling it truly is ‘the challenge of our time’<sup>7</sup>.

At the heart of the problem are two main drivers:

- + **Eating behaviours** - as the analysis in this report demonstrates, across all income groups, children are consuming too much saturated fat, sugar and salt and too little fruit and vegetables, fibre and oily fish. Evidence suggests that eating behaviours are the strongest predictor of obesity.<sup>8</sup>
- + **Inequality** - children living in the most deprived areas are disproportionately affected, with double the rates of obesity compared to those in the least deprived.<sup>9</sup>

We know that people’s eating behaviour is strongly affected by their food environment – the availability, attractiveness and accessibility of food inside and out of the home<sup>10</sup> - and that those living in deprived areas face environments and multiple other factors that make it more difficult to eat well.<sup>11</sup> Those living in more deprived areas are likely to be faced with a greater number of unhealthy food options when they step out their door, and likely to have less resources (money, headspace) to find healthy alternatives.

Given the central role the private sector plays in shaping our food environments, through the development and provision of food products and services, businesses operating across the food system have an important part to play in helping to make these environments healthier. Some progress has been made through Public Health England’s sugar reduction programme, and the Peas Please initiative, which are aimed at stimulating businesses to take steps in favour of reducing sugar

consumption, and increasing vegetable consumption, respectively. But as voluntary schemes, they can only go so far. Tougher regulatory measures have a critical part to play in shaping the policy environment within which businesses are operating. A range of bolder policy proposals are now being considered in both England and Scotland which have the potential to help create those healthier food environments.

In this report we consider the potential role for ‘challenger brands’, new businesses who are committed to creating healthier food environments and to tackling dietary inequality, and how they can be supported to thrive. If successful, tackling obesity with market-based action has a number of benefits.

- + Market-based approaches aim to be financially sustainable and profitable, removing the problem of short term philanthropic endeavour or changing government leadership.
- + A successful market approach has the potential to improve diets without victim-blaming or stigmatising families for their dietary choices.
- + Market-based approaches can attract more commercial funding to help ideas grow and reach the scale needed to tackle the obesity crisis.
- + This situation also presents a market opportunity for businesses. The total food spend of family households earning less than £20,000 was c.£6.5 billion last year<sup>1</sup>. Qualitative research suggests there is unmet demand amongst this group for healthier options<sup>12</sup>.

The healthy food and beverage market continues to grow steadily in the UK, demonstrating an increasing demand<sup>13</sup>. However, nutritional value and price often increase hand-in-hand, placing the healthiest products out of reach of those families most affected by obesity and diet-related health problems<sup>14</sup>. Our starting point is that if successful new business models emerge, they could help to address critical gaps in the market. Additionally, through their innovation, they can stimulate faster change among those businesses which have the biggest influence over our food environments.

This report combines an analysis of food purchasing and consumption data from low-income households with children, trends in the UK food and beverage market and research on affordable, healthy food businesses in the UK and beyond. Through combining these three areas, the report attempts to identify international best practice around how practically philanthropy and social investment can better support market-based approaches to tackling childhood obesity.

The aim is to provide insights into opportunities along the food and beverage supply chain, while also addressing potential challenges and discussing the scope for impact. Our analysis reinforces the notion, put forward in previous research on the topic, that there are no easy solutions, and that efforts should focus on achieving “marginal gains”, facilitating healthier choices, even if not always “the healthiest”<sup>15</sup>.

The findings from this report highlight many challenges, but also give some reasons for optimism. Across the world, many entrepreneurs are introducing bold and innovative new food businesses. They are creating new business models, funding structures, distribution routes and technological platforms with the aim that healthy diets should be accessible to all, regardless of income. These business initiatives are an important element in the fight against obesity.

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<sup>1</sup> Authors’ own estimates based on Kantar Worldpanel 2016 and LCFS 2016

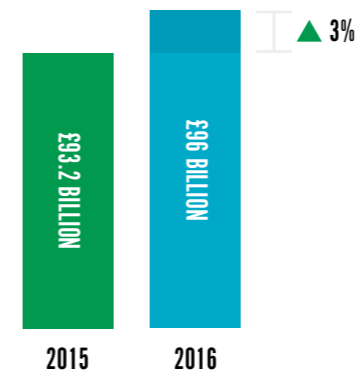
# Setting the scene

An overview of macro trends for the UK food and beverage industry, current purchasing and dietary patterns for UK households.

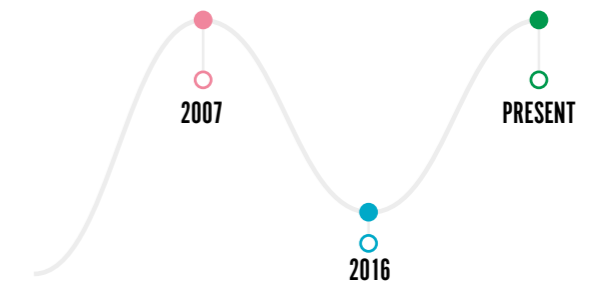
## Food markets in the UK

An overview of the UK food and beverage markets and how these markets shaped the food environment in local areas.

The grocery sector (inc. supermarkets, convenience and other outlets)



In 2016, UK consumers spent £96 billion on food and non-alcoholic drinks in the grocery sector, an increase of 3% from 2015<sup>16</sup>.

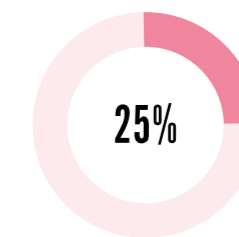


Over the last decade, the grocery sector has been affected by large fluctuations in food prices. Prices rose steeply in 2007-8 and fell gradually up to 2016 (although they have never reached pre-2007 levels), after which they started to rise again<sup>23</sup>.

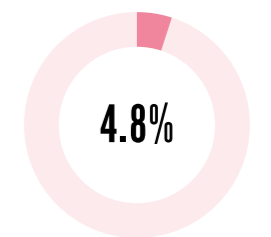


▲ THE CONVENIENCE GROCERY SHOPPING SECTOR IS GROWING FASTER THAN SHOPPING IN LARGE SUPERMARKETS<sup>18</sup>

Supermarkets are increasingly expanding into the convenience sector<sup>19</sup>, as well as into the growing market for out-of-home and “on-the-go” food<sup>20</sup>.



ONLINE SHOPPERS



TOTAL FOOD SALES

Although the online market is growing, with around 25% of UK consumers purchasing groceries online in 2016<sup>21</sup>; it remains a small proportion of the market overall, accounting for 4.8% of total food sales<sup>22</sup>.



Food retail is a highly concentrated sector in the UK, dominated by chains. Nine retail chains together have more than 90% of the market share<sup>17</sup>:

- + TESCO
- + ALDI
- + SAINSBURY'S
- + ASDA
- + LIDL
- + MORRISONS
- + CO-OP
- + ICELAND
- + WAITROSE

### The out-of-home sector (inc. restaurants, cafes, fast food and takeaway)

The UK fast food and takeaway market is currently worth £18.2 billion (2018-19). Within this sector, fast food (typically large brand franchises) represents 55.6%, and takeaways 40.3% (often single sites, owner managed). The remainder being made up by mobile food stands whose proportion in workplace sites and markets has been growing rapidly.

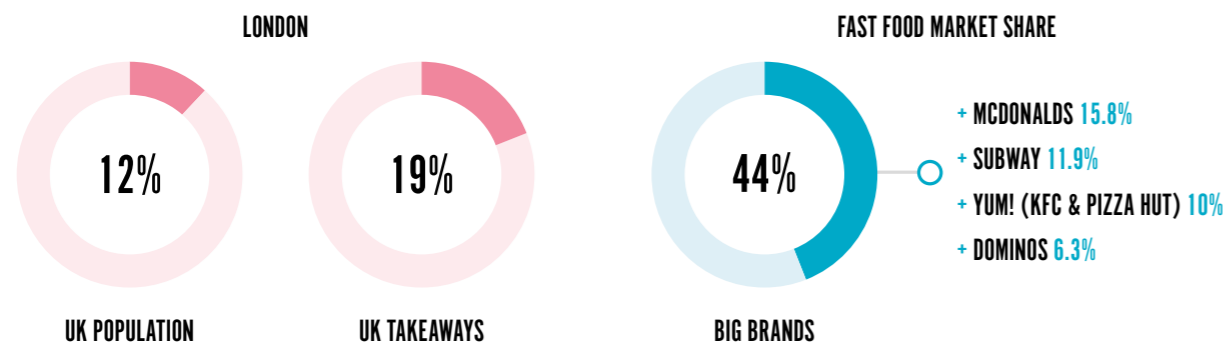
According to recent estimates, home delivery (takeaway) food is growing ten times faster than the rest of the out-of-home sector<sup>27</sup>. In addition to the impact of on demand delivery platforms, key drivers of this growth tend to be disposable income and hours spent at work, pressuring people to trade cooking time for leisure time.

During 2017 and 2018 there was an increase in closures of high street restaurants, attributed to challenging political and economic circumstances including food

inflation and higher costs<sup>28</sup>. But fast food brands are still opening new stores and more consolidation of the sector is likely. This will be driven by the innovation in the offer, the growing demand for healthier choices, and the extent to which businesses can secure prime locations and maximise the impact of online ordering platforms.

Growth in fast food and takeaway tends to be countercyclical – as incomes grow people tend to trade up to restaurants; though the ease of ordering through online platforms is likely to support growth in the coming years even if household incomes grow.

Households with young and teenage children are key markets with middle income earners accounting for the majority of the market. As the population ages, demand for fast and takeaway food is expected to decline.



In London, fast food and takeaway outlet concentration is disproportionately high compared to the population, with an estimated 19% of the establishments but only 12% of the population.

Big brands, driven primarily through the franchise model, make up 44% of the fast food market share dominated by McDonald's (15.8%), Subway (11.9%), Yum! (KFC and Pizza Hut) (10%) and Dominos (6.3%)<sup>26</sup>.

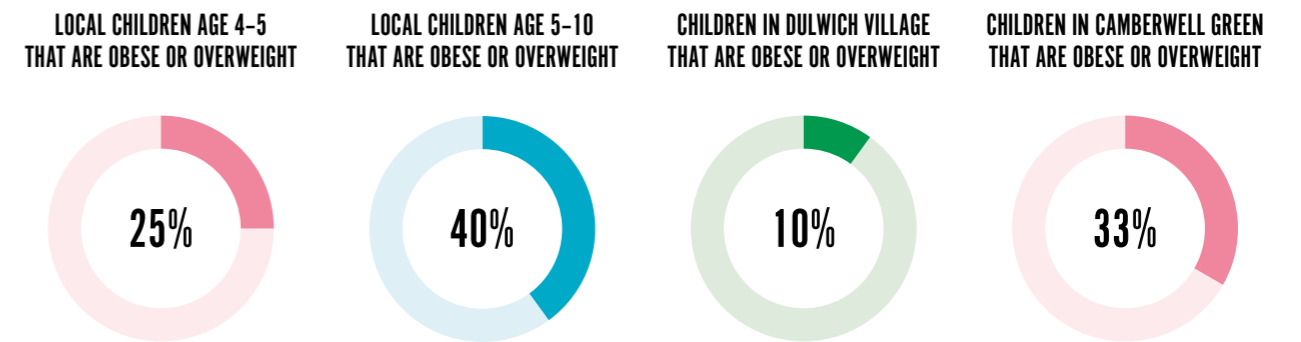


In 2016, British households spent £56 billion on eating out, including restaurants, cafes, fast food, takeaways and mobile food stands<sup>24</sup>.

Hotels, restaurants and cafes represent around 43% of all food expenditure for out-of-home consumption<sup>25</sup>.

### Food environments in urban areas

All over the world, you're more likely to be obese living in an urban environment than a rural one. And in many developed countries, you're also now more likely to be obese if you are poor. London has more overweight and obese children than any other major global city. The boroughs of Lambeth and Southwark, where Guy's and St Thomas' Charity focus its work, encapsulate many of the reasons why.

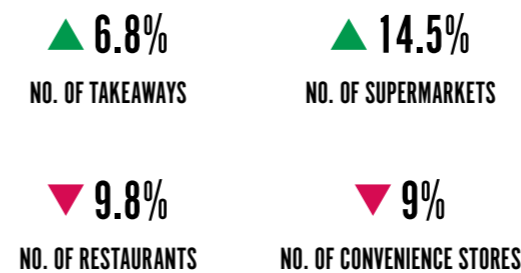


They are densely populated areas, with high rates of population turnover, high rates of income inequality and a complex ethnic and social mix. One in four local children aged four to five are obese or overweight, rising to two in five by age 10. The differences in obesity rates between the most deprived and least

deprived wards are more than double. In the ward of Dulwich Village for example, one in ten children only is obese, rising to one in three in Camberwell Green.

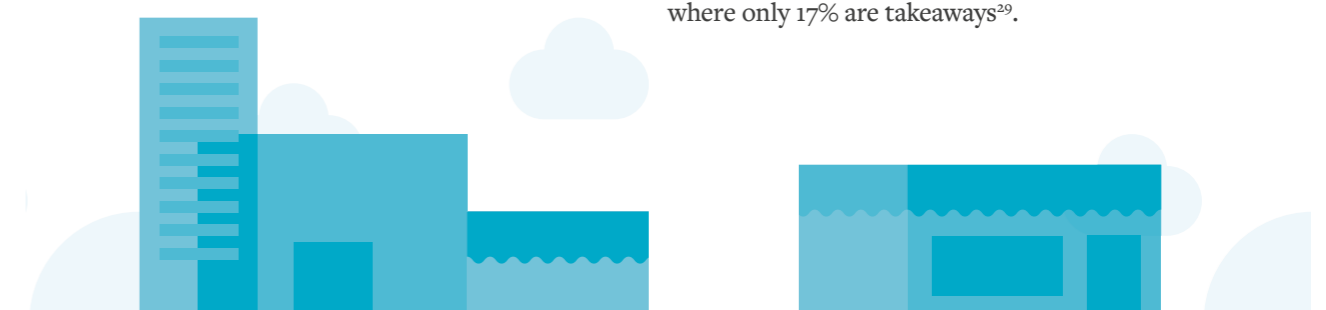
A closer look at these boroughs brings to life what national trends mean in practice.

#### BETWEEN 2014 - 2017:



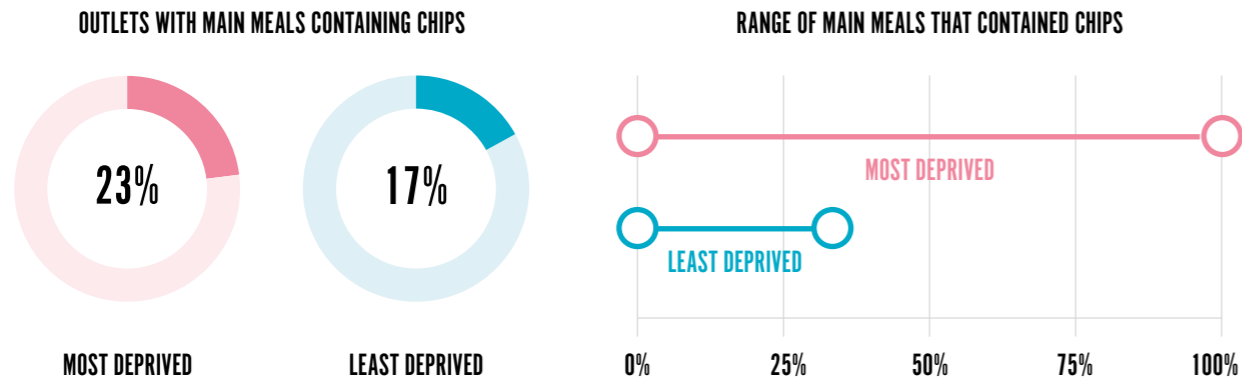
In the period 2014-2017 there has been an increase in the number of takeaways (by 6.8%), an increase in the number of supermarkets (by 14.5%) and a decline in the number of full service restaurants (by 9.8%) and independent/symbol group convenience stores (by 9.0%).

In the 25% most deprived areas within the boroughs, a quarter of all food outlets are takeaways; a significantly higher proportion than in the least deprived quartile where only 17% are takeaways<sup>29</sup>.



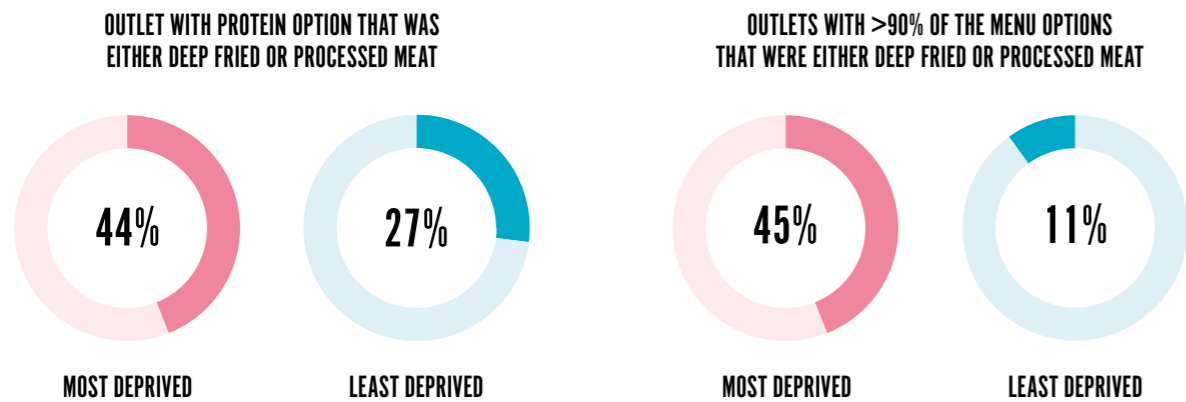


A random sample of twenty out-of-home outlets in the boroughs - ten from the most deprived areas and ten from the least deprived areas identified that:



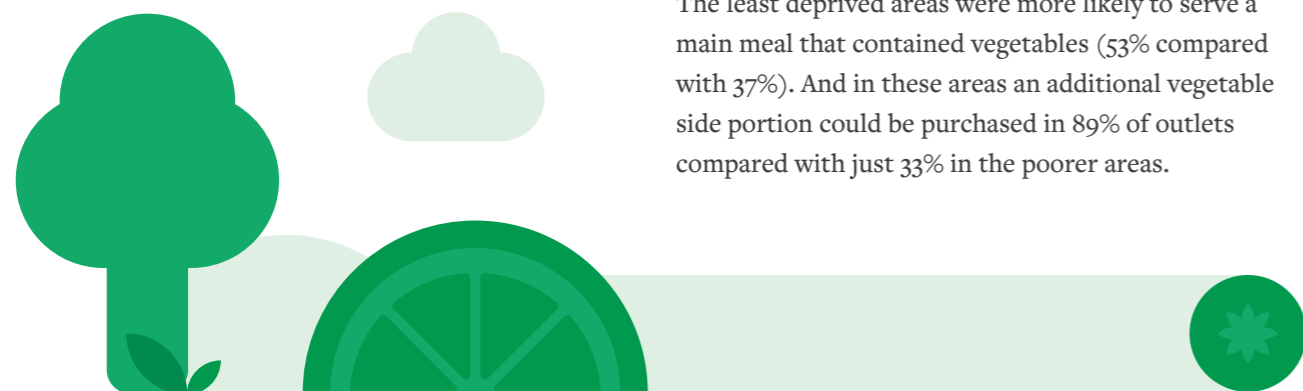
On average, the outlets in the least deprived areas and most deprived areas had similar proportions of main meals containing chips (17% compared with 23%). However, in least deprived, the proportion of

main meals that contained chips ranged from 0 - 38%, while in the poorer areas it ranged from 0-100% with two outlets exclusively offering chips with no healthy starch alternative (e.g. rice).



In the most deprived areas outlets were more likely to offer a protein option that was either deep fried or processed meat (on average 44% compared with 27%).

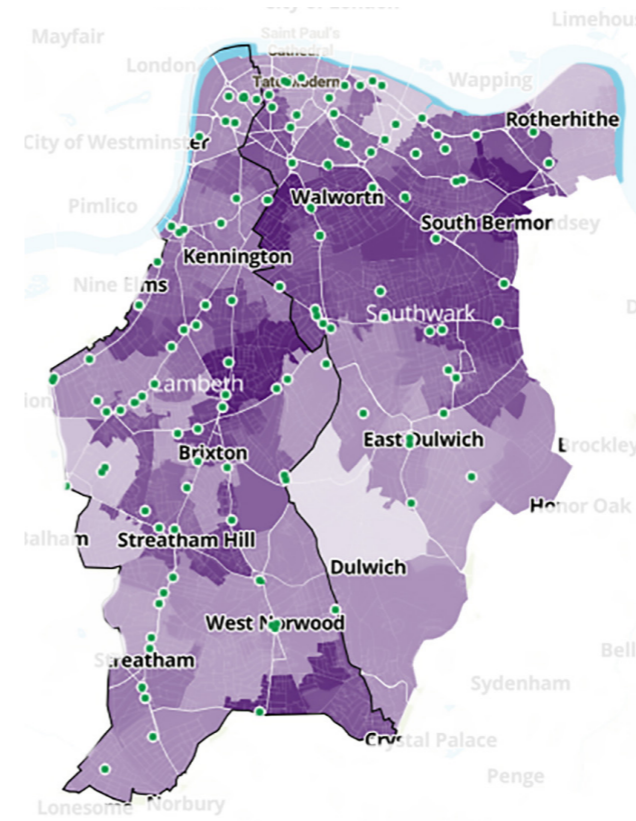
And 45% of the outlets had >90% of the options on the menu falling into this category compared with just 11% in the least deprived areas.



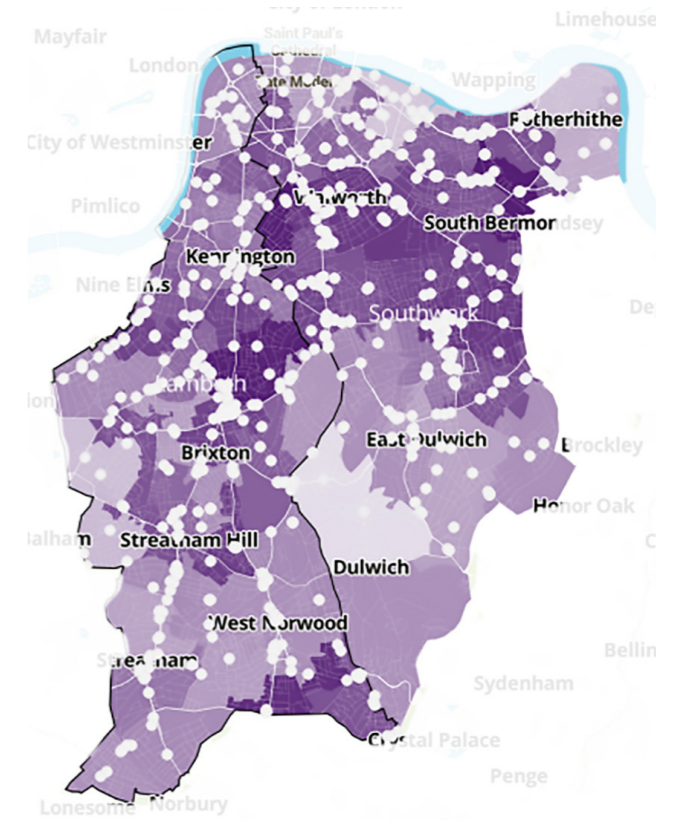
## The spread of grocery and out of home food outlets across Lambeth and Southwark

These maps highlight the large number of food outlets across two London boroughs.

### SUPERMARKETS



### CONVENIENCE STORES

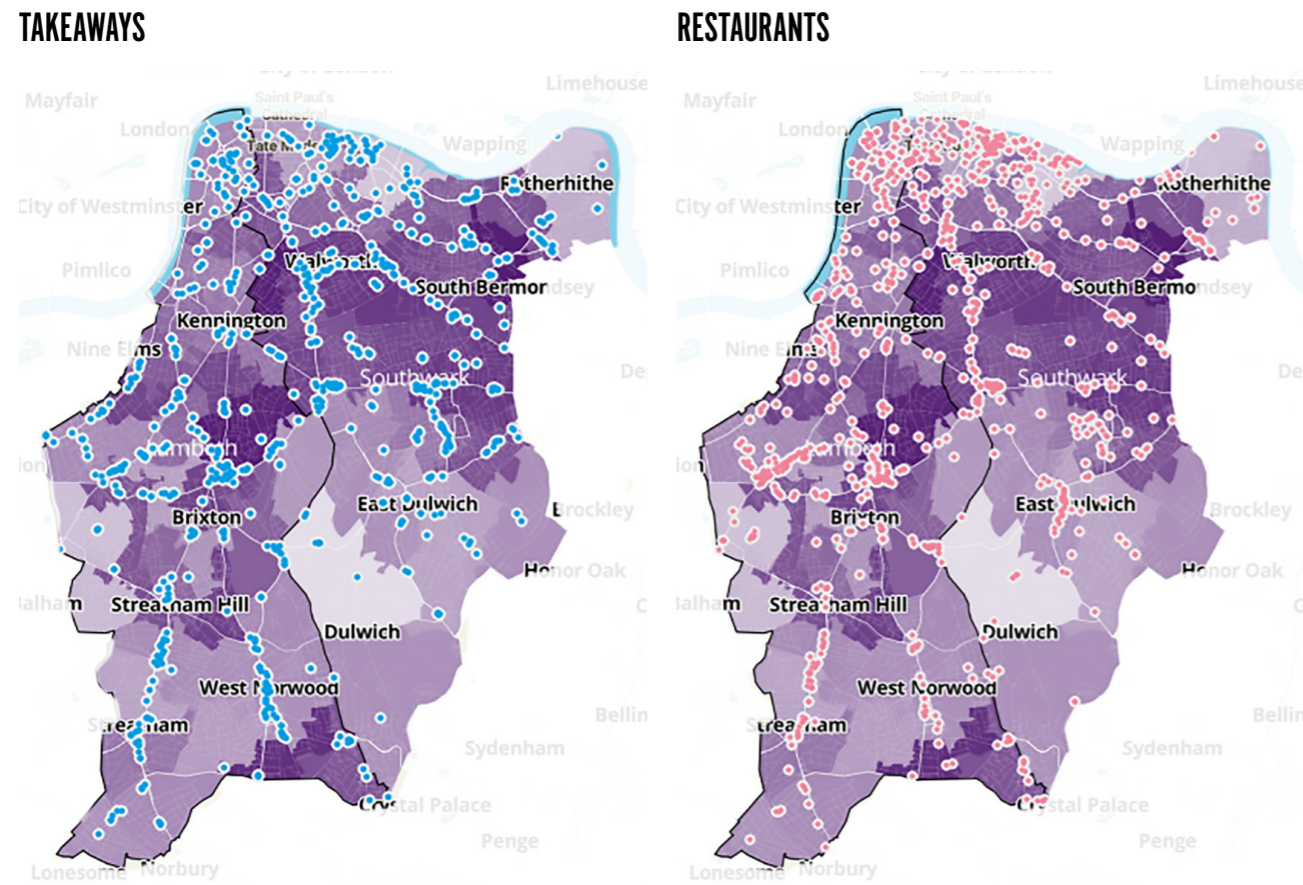


Ordnance Survey Points of Interest data (2017), courtesy of Tom Burgoine (CEDAR/MRC Epidemiology Unit, University of Cambridge)  
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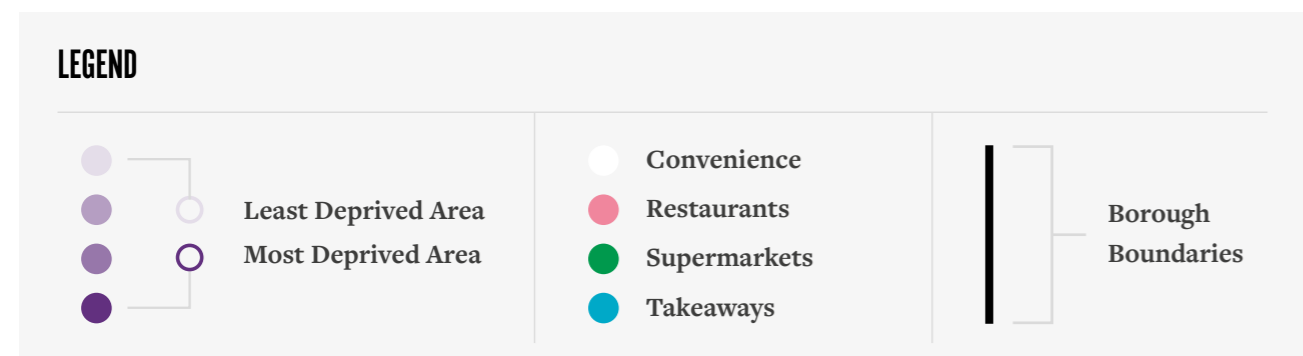
### LEGEND



Takeaways tend to be higher in number than other outlets, concentrated along main roads and relatively more dense in more deprived areas. Restaurants are spread more randomly across the area.



Ordnance Survey Points of Interest data (2017), courtesy of Tom Burgoine (CEDAR/MRC Epidemiology Unit, University of Cambridge)  
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## Food expenditure and children's dietary intake in low-income households

To gain a more detailed insight into the food and drink purchasing habits of families on low-incomes in the UK, two data sets were analysed: the Kantar Worldpanel and Living Costs and Food Survey (LCFS). Given the link between income and childhood obesity, the focus was on households with children, with gross annual incomes below £10,000 and £20,000<sup>ii</sup>.

As food purchasing data does not allow us to separate households explicitly by area deprivation, income is used as a proxy to understand trends and differences in purchasing behaviours. Of all UK households, 29% earn less than £20,000 and of all UK households with children,

approximately 17% fall into this category<sup>iii</sup>. Among these families with children, there is a slightly larger proportion of ethnic minorities, as well as a larger share of single-parent households, particularly among those with incomes less than £10,000<sup>iv, v</sup>.

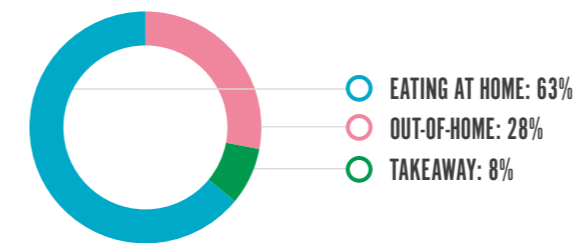
### Food purchasing habits of families with children

- + There is a clear income gradient in total food expenditure, with low-income families spending half (£50) as much on food and beverages in comparison to wealthier families (£100).
- + Families with income below £20,000 in the UK dedicate a large part (76%) of their food budget on eating at home, and only 16% out-of-the home and about 8% on takeaway. This shifts considerably for higher income families (>£20,000) who spend 63% of their expenditure

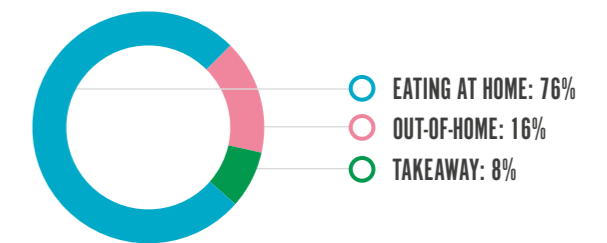
- on food and drink to consume at home, 28% on eating out and on-the-go and a further 8% on takeaway food.
- + It's difficult to assess how this translates into relative quantity of fast food eaten alongside the geospatial analysis, which suggests there are more takeaway options available for those living in areas of deprivation. The nutritional comparison suggests that the takeaway being consumed is likely of lower nutritional quality for this group.

Figure 1

#### HIGHER INCOME FOOD SPEND



#### LOW-INCOME FOOD SPEND



All figures are authors' own estimates based on Kantar Worldpanel 2016, LCFS 2015/16 or NDNS 2012-2016.

<sup>ii</sup> The <£20,000 cut-off aligns with the Government's classification of households living in poverty (defined as those earning less than 60% of the median income). Remaining households, earning above £20,000, are kept in one category as a broad comparator. It should be noted that the sample size in the two lower income categories is relatively small and data on out-of-home purchases may be conservative as it may miss expenditure of adolescents in particular.

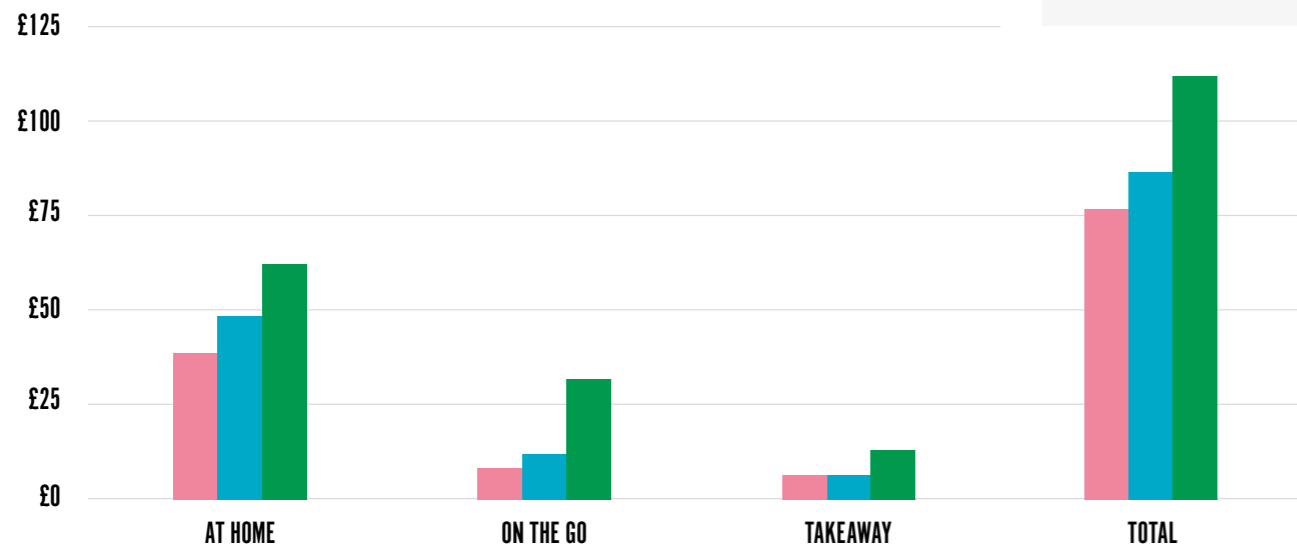
<sup>iii</sup> Based on the Living Costs and Food Survey (LCFS), 2016

<sup>iv</sup> From analysis of Kantar Worldpanel. Underlying data available on request.

<sup>v</sup> A detailed explanation of the methodology and sample characteristics are available on request.

WHERE FAMILIES ARE EATING

Figure 2: Average weekly expenditure



SHARE OF EXPENDITURE

Figure 3: Average weekly expenditure

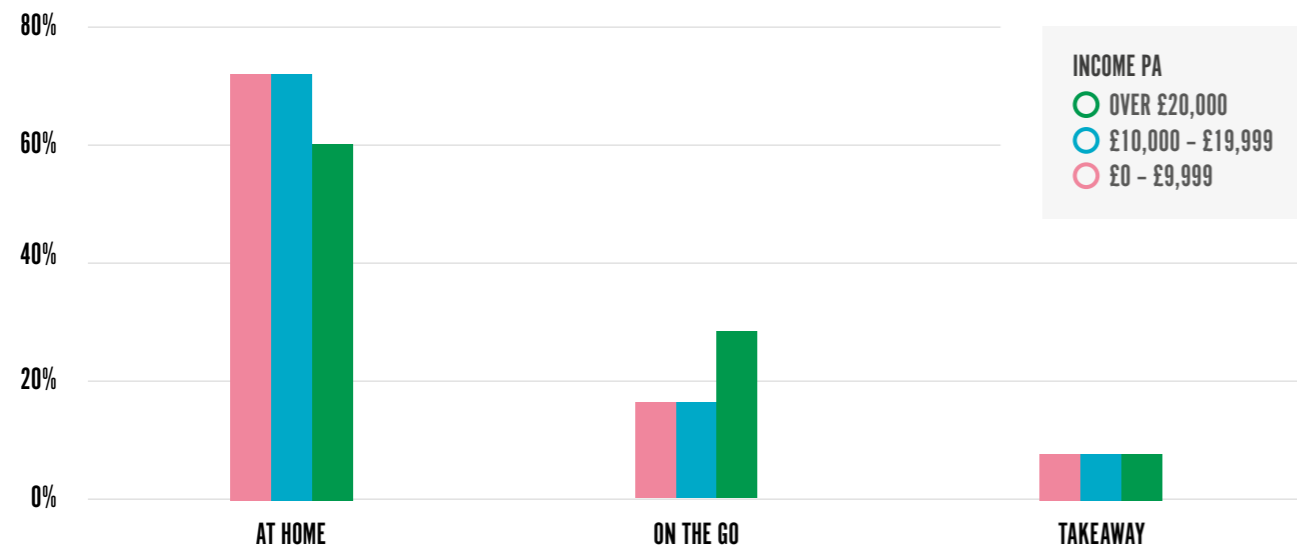
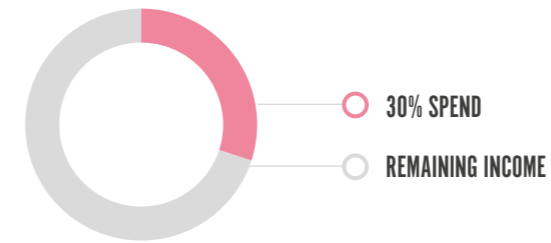
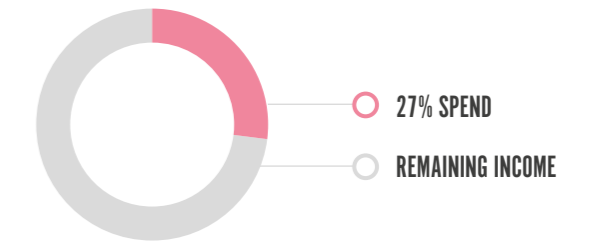


Figure 4  
EATWELL GUIDE FOOD SPEND FROM DISPOSABLE INCOME



ACTUAL FOOD SPEND FROM DISPOSABLE INCOME



Cost of a healthy diet

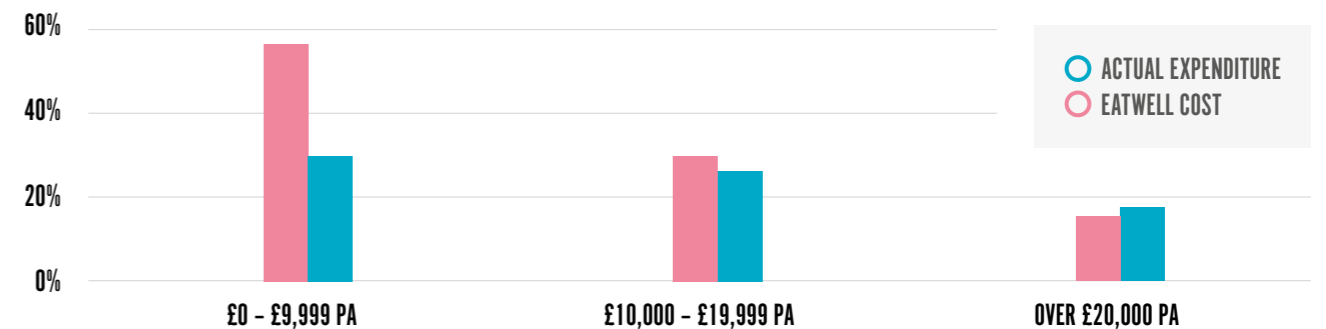
The Eatwell Guide, the Government's official guidance on what constitutes a healthy diet<sup>30</sup> is used to understand the cost of eating healthily. The cost of a diet following this guidance has been previously estimated to be £5.99 per adult per day, or £41.93 per week<sup>31</sup>.

When the cost of Eatwell diet is adjusted to take into account household composition, households with children earning between £10,000 and £20,000 would have to allocate on average 30% of their disposable income after housing costs to food and drink in order to meet this cost<sup>vi, vii</sup>. For those below £10,000 the cost of the Eatwell guide would represent around 57.4% of their income (figure 5).<sup>32</sup>

Affording a healthy diet

DISPOSABLE INCOME REQUIRED TO REACH EATWELL COST AND ACTUAL EXPENDITURE

Figure 5



<sup>vi</sup> Based on an adjustment of the £41.93 cost per week by household composition for LCFS households. More information on methodology available on request.  
<sup>vii</sup> Housing costs include: Rent/rates - last net payment; Net rent - service charge deducted; Domestic rates - last net payment; Council tax - last payment weekly amount; Water charges - last net payment; Council water tax - weekly amount paid; Council sewerage tax - weekly amount paid; Other regular housing payments; Structure insurance - last payment

### Consumption of unhealthy and healthy foods

To understand the intake of unhealthy and healthier foods across income categories, all of the products in National Diet and Nutrition Survey (NDNS) data were classified based on their nutrient profile using a score developed by the Department of Health<sup>33</sup>, and a category of foods High in Fat, Sugar and Salt (HFSS) created.

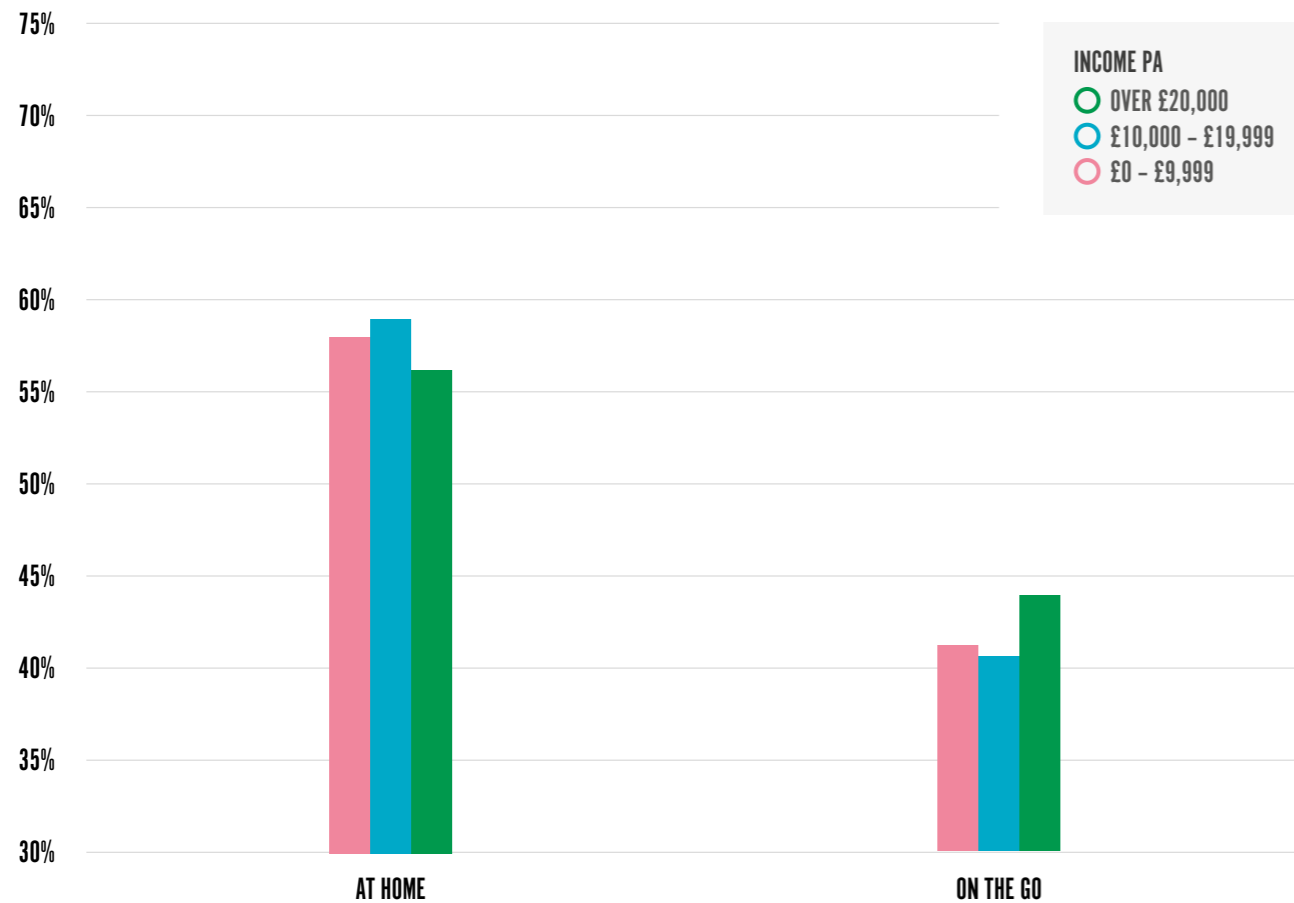
- + Almost 45% of children’s energy intake comes from HFSS food and drink across all income groups (Figure 6). The impact of this on children’s diets is highlighted when looking at the proportion of children meeting dietary recommendations (figures 7-8).
- + Across all income groups, children consume more than the recommended levels of saturated fat, salt

and sugar, with slightly greater consumption among children in the higher income group.

- + In the lower income brackets, nearly 70% of children consume more than the recommended levels of saturated fat, over 90% consume too much sugar, and just over 60% consume too much salt.
- + While children from households in all income brackets get relatively equal share of energy from HFSS foods, the income gradient is clear and evident for healthy food consumption. Figure 8 shows that only about 4% of children in lower-income households meet recommendations for intakes of fruit and vegetables, fibre and oily fish.

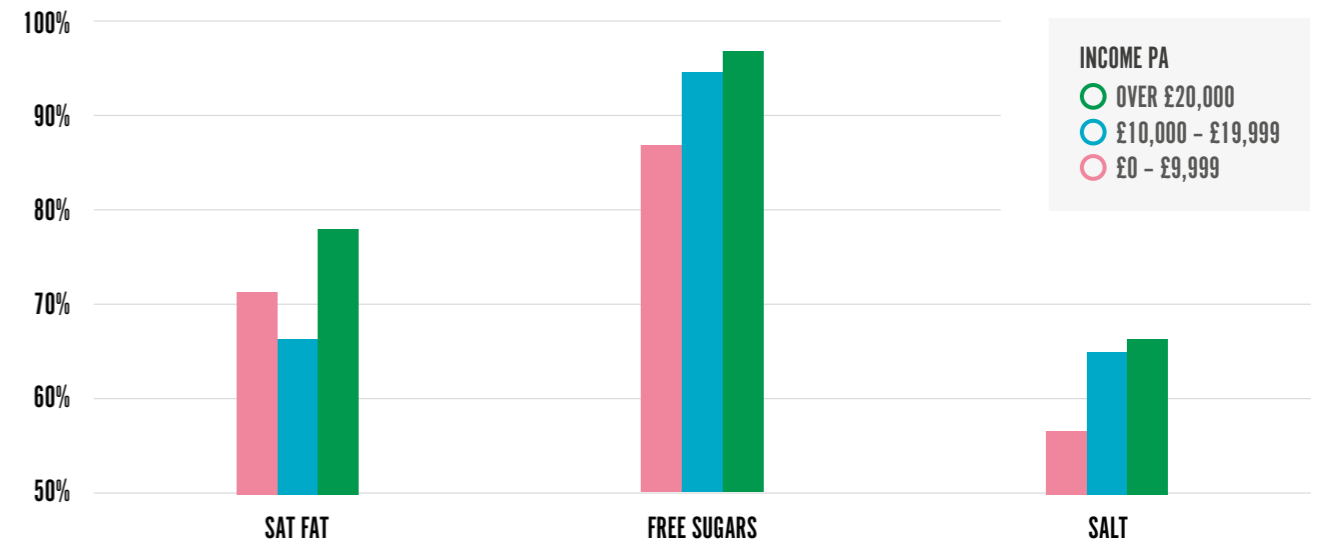
### PROPORTION OF CHILDREN’S ENERGY INTAKE FROM FOODS HIGH IN FAT, SUGAR AND SALT

Figure 6



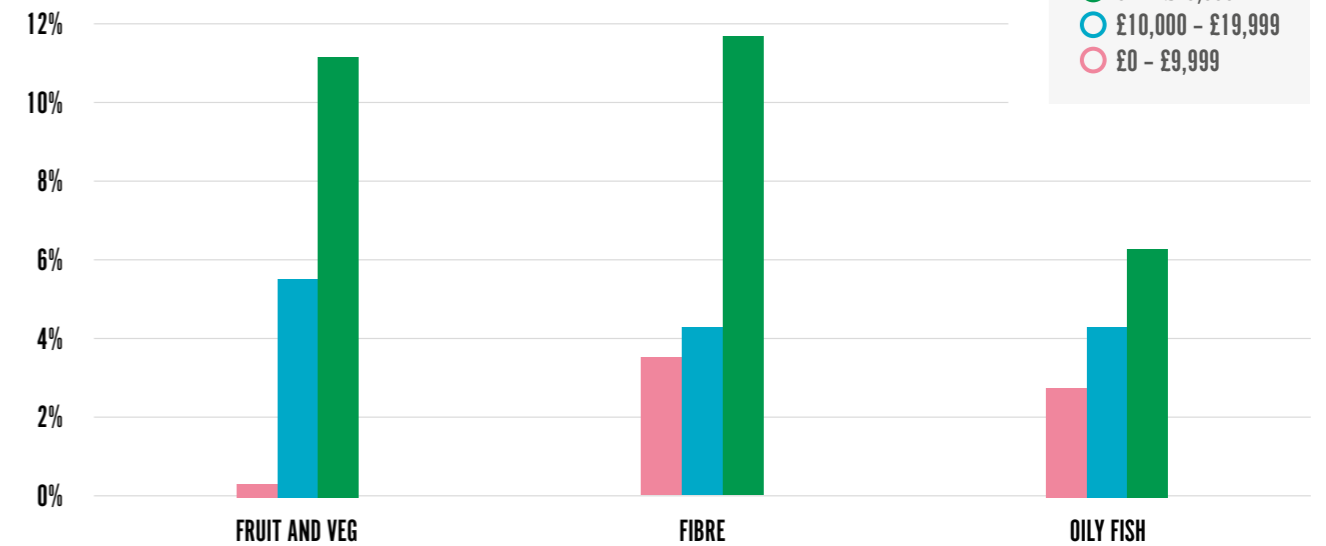
### PROPORTION OF CHILDREN EXCEEDING DIETARY RECOMMENDATIONS FOR SATURATED FAT, SUGAR AND SALT

Figure 7



### PROPORTION OF CHILDREN MEETING DIETARY RECOMMENDATIONS FOR FRUIT, VEGETABLES, FIBRE AND OILY FISH

Figure 8



The proportional intake of unhealthy foods is relatively similar amongst children across income brackets i.e. the majority of children consume too much fat, sugar and salt. Most children consequently do not meet recommended consumption levels of high nutrient foods. Consumption levels vary particularly in this area, with children in low-income households eating particularly

low levels. Our assumption is that if levels of healthier food consumption could be increased, this would displace unhealthier food consumption. Our assumption is also that children in lower-income categories who exceed HFSS recommendations are exceeding in higher volume than their wealthier counterparts, with a subsequent impact on energy intake.

## Food business research

To understand the businesses and organisations that work to offer nutritious food to low-income groups, 84 businesses, social enterprises and organisations operating in this field were reviewed. Operating all over the world, they varied in terms of scale and size, as well as success<sup>viii</sup>.

Just over forty-percent (36) were based in the United States (US). We believe there are two main reasons for the dominance of US companies in our research:

- + **Availability of capital:** the US has considerably more capital available for healthy food businesses for low-income businesses. A lot of this capital comes through ‘Fresh Food Financing programmes’ which are now active in nine states and planned in many more<sup>34</sup>.
- + **Scale of the problem:** in the US, the OECD report that 38.2% of the population is obese compared to 26.9% in the UK<sup>35</sup>. Though rates are clearly high in both countries, the US is in even greater need to find a solution to obesity and so initiatives are emerging rapidly across the country, spurred on by philanthropic, private and public funding.

In researching these food businesses, several key trends became apparent. These indicate important opportunities which might better create programmes to support market-based approaches to childhood obesity.

**Creating social and environmental impact** is the main motivation for founders starting food businesses which explicitly target child obesity. All but one of the founders interviewed said it was their primary reason for starting the company. This is unsurprising given the challenges in meeting this market makes it much more difficult than a standard food business.

**Focusing on providing nutritious food to low-income families is a relatively small and new area** (68% were founded in the last five years). However, many of the businesses have plans for growth with the

average expected growth, rate across the businesses (based on their own projections) at 30% in the next financial year. This points to the recent popularity of food start-ups, realisation of a gap in the market and increasing amount of available capital for investment. The larger businesses we spoke to had attained scale by either selling business to business (B2B) or had received substantial investment to expand operations.

“Creating social and environmental impact is the main motivation for founders starting food businesses which explicitly target child obesity. All but one of the founders interviewed said it was their primary reason for starting the company.”

**Specific business models to keep their product price affordable to everyone** were seen in all but one of the food businesses we spoke to, with a wide-variety of mechanisms to achieve this:

- + Cross-subsidies on products (i.e. sell an expensive product to keep another product line cheap)
- + Cross-subsidies on geographies (i.e. charge higher prices for the same product in more affluent neighbourhood)
- + Food preparation in a central kitchen to lower production and staff costs
- + Alternative food supply chains that use products that would otherwise go to waste, to keep ingredient cost low

<sup>viii</sup> Of these 84, seventeen responded to an online survey on their business model and challenges. In addition, in-depth interviews were conducted with representatives of a further nineteen businesses. A full list of the organisations researched, interviewed or surveyed are available on request.

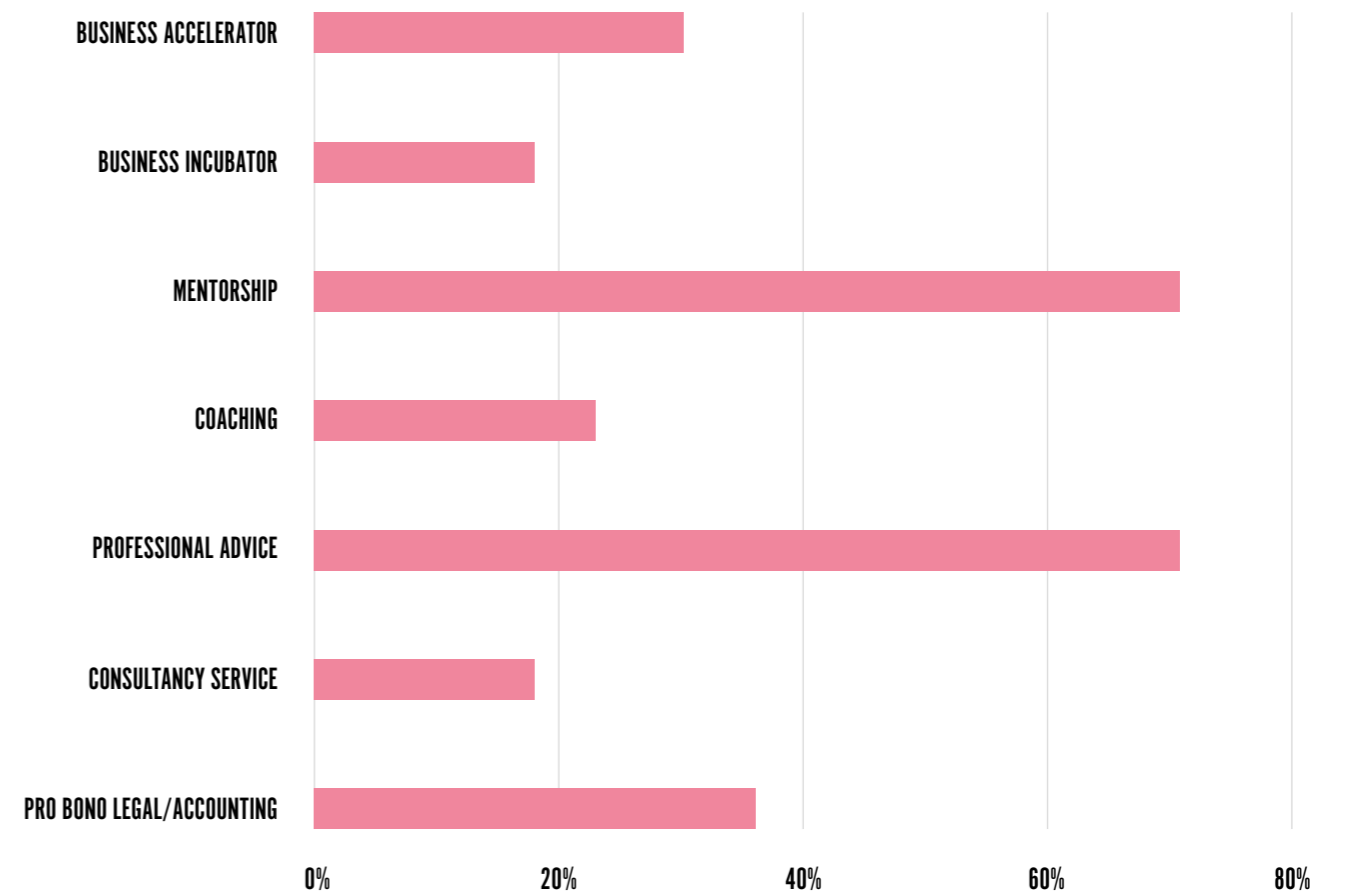
- + Freezing products to extend shelf life whilst maintaining nutrition content

**Non-financial support was provided to help start and develop their venture**, helping businesses develop and access the markets they needed. However, where

this capacity development support is provided, the businesses also describe the importance of ensuring the quality and relevance of the training, as sometimes it can be ‘generalist’ and ‘not specific to the challenges of a food business’.

## NON-FINANCIAL SUPPORT RECEIVED<sup>ix</sup>

Figure 9



Common barriers to growth are not unique to food businesses but apply to start-ups more generally. Issues with cashflow (related to both in-year mismatch between income and expenses and loss-making development stages), regulatory environments and lack of specific food-industry skills (i.e. dealing with buyers,

manufacturing etc.) were among the more commonly mentioned issues.

Food related challenges were identified as:

- + Ingredients for nutritious food tend to be more expensive than their less nutritious counterparts

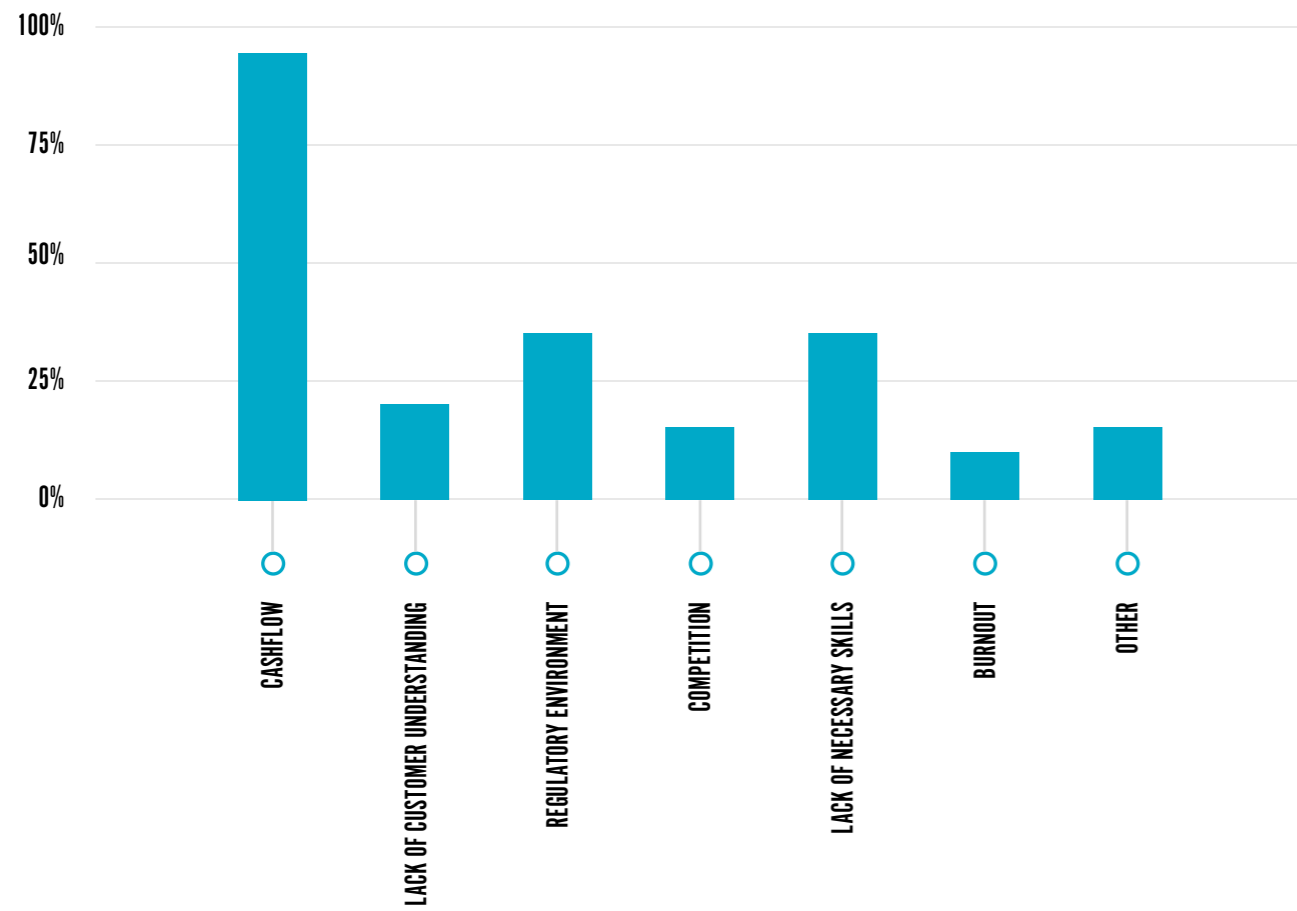
<sup>ix</sup> In this graph, a Business Incubator refers to a programme of support that helps turn an idea for a business into an early stage business and a Business Accelerator is a programme of support to help an early stage business to grow, attract sizeable investment and reach new customers

**SETTING THE SCENE**

- + Fresher, more nutritious food items result in higher wastage because of shorter shelf life. Again, this wastage contributes to the higher costs of running a 'healthy' food business
  - + Two-thirds of businesses spoke of staff costs being their greatest outgoing and the continual challenge of offering rewarding and fair employment and delivering low-cost nutritious food
  - + Cost-control is particularly important for these food businesses. Product margins are small and keeping a firm hold of production and distribution costs were key to success
- Food businesses face many of the same challenges as any startup. However, the journey of a nutritious, affordable, food business has many added challenges as they wrestle with small profit margins, high staff costs, a strict regulatory environment and potentially high wastage costs. In the sample interviewed for this report, some businesses had overcome these challenges and others that had not.

**TOP BARRIERS TO GROWTH FOR FOOD BUSINESS**

Figure 10



# Opportunity spaces

From our research and interviews, three opportunity areas across the food supply chain stood out when tackling child obesity, taking into account the specific purchasing patterns of low-income families.

For each of these opportunity areas, we provide a range of business case studies, discussing both the strengths of different business models and the challenges they may face, as well as, what can be learned for replicating their success elsewhere.

In tackling childhood obesity, there are opportunities along the supply chain to help get more nutritious food to families, and examples across the world from which to learn. The food supply chain runs from farm to fork, passing through the hands of farmers, producers and manufacturers, distributors, cooks and retailers on the way.

Three main opportunity areas have been identified for new business activity aimed at enabling low-income families to access a nutritious diet:

- + Designing Healthier Products
- + Designing Healthier Supply Chains
- + Designing Healthier Retail Opportunities

Providing nutritious food requires changes not only on the supply side, but also changes in demand. Simply providing nutritious food may not be enough to get people to eat it and interventions are also needed to actively encourage changes in habits and behaviours<sup>36</sup>. This is one area where investors might consider designing infrastructure that would serve multiple businesses. Others identified are providing shared kitchens and making use of surplus food.

## Overview of Opportunity Areas

OPPORTUNITY AREA	DESIGN QUESTION	TYPE OF BUSINESS
Designing Healthier Products	Focusing on key categories of food/drink types that are high HFSS, how can we reformulate them to be healthy, produce them at an affordable price and ensure the brand position appeals to low-income families, particularly children/teenagers?	Food processor / manufacturer Drinks processor/ manufacturer
Designing Healthier Supply Chains	Focusing on existing independent convenience stores and supermarkets, how can we better support them to stock and sell a healthier food offering?	Wholesale companies and distributors
Designing Healthier Retail Opportunities - fast food/takeaway	Recognising the growing importance of convenience in families' food purchasing behaviour, how can we offer a takeaway food product that is nutritious and affordable?	Fast food/takeaway company / online ordering platforms
Designing Healthier Retail Opportunities - grocery store	Recognising that food shopping environments influence our food purchases; how can we redesign the grocery store to improve its fresh and to-go food offering?	Grocery stores, including supermarkets and independent convenience stores

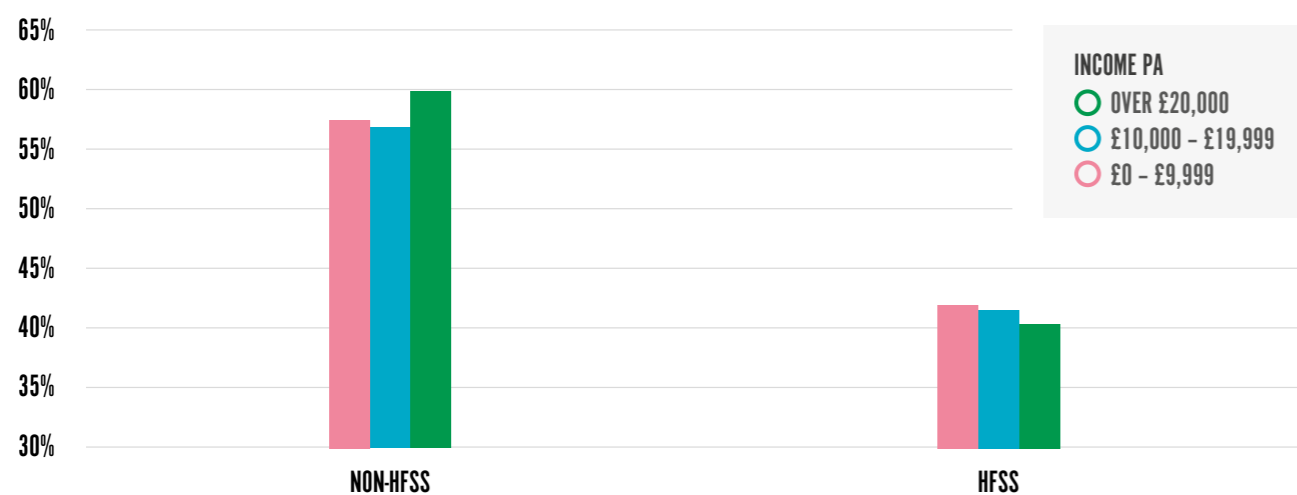
## Designing healthier products

A recent study using National Diet and Nutrition Survey data found that more than half of the dietary energy consumed by the UK population came from ultra-processed food<sup>37</sup>. The same study also found that ultra-processed foods are low in protein, fibre, and potassium but high in carbohydrates, free sugars, total fats, saturated fats, and salt.

Our analysis shows that households with children spend over 40% of their take-home food budget on foods that are high in fat, salt and sugar (HFSS) and that these foods contribute to around 40% of children’s energy intake.

### PERCENTAGE OF FOOD EXPENDITURE ON FOODS HIGH IN FAT, SUGAR AND SALT

Figure 11



Furthermore, when food purchase data is allocated into categories to match the Eatwell guidance, households spent 21-24% of their take-home food and drink expenditure on unhealthy, processed foods, drinks and

snacks that the Eatwell Guide recommends to consume as little as possible. Households with children earning less than £10,000 spend 24.7% and those earning more than £20,000 spend 21.4%.

## Weekly shopping basket for at-home consumption

Table 1

EXPENDITURE ON EATWELL GUIDELINE CATEGORIES	£0 - £9,999 PA	£10,000 - £19,999 PA	OVER £20,000 PA
Weekly expenditure	£35.40	£42.90	£64.8
Fruit and veg	14.0%	12.8%	14.6%
Starchy carbs	13.1%	14.0%	14.3%
Dairy and alternatives	13.2%	13.1%	13.1%
Oils and spreads	1.9%	1.9%	1.9%
Proteins	14.9%	15.5%	16.2%
Unhealthy processed foods, drinks and snacks	24.7%	24.4%	21.4%
Ready meals, soups and semi-prepared	11.3%	11.7%	12.0%
Beverages healthy	3.4%	3.0%	3.0%
Other	3.5%	3.8%	3.8%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

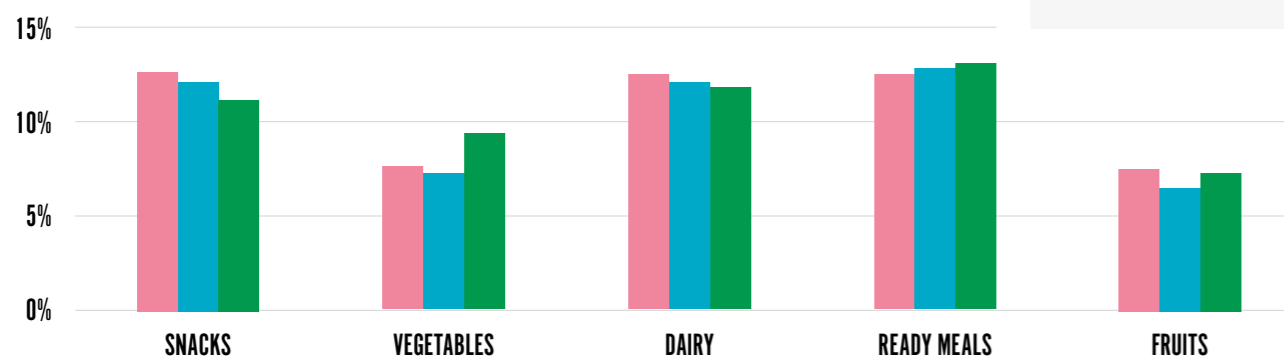
Snacks alone represent a large proportion of the expenditure within the “unhealthy processed foods” category. In fact, a significant proportion of the weekly budget - up to 12.9% - is spent on sweet and savoury snacks. This is more than the weekly expenditure

on vegetables, fruits or dairy and similar to the expenditure on ready meals for at-home consumption. Many snack products marketed towards children using colourful branding and attractive packaging, which are known to influence purchases<sup>38, 39</sup>.



### FOOD TYPES WITH HIGHEST SHARE OF WEEKLY FOOD BUDGET

Figure 12



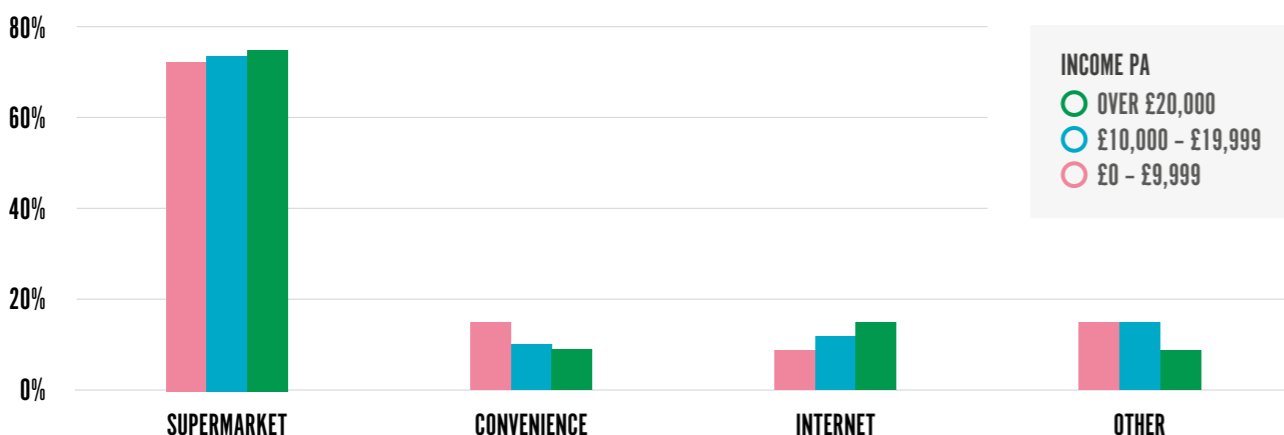
While supermarkets are the main place where take-home snacks are purchased (70-75% across the income bands), there are some interesting differences across the different income groups for the remaining expenditure. In comparison to households earning above £20,000, lower income households purchased relatively more snacks from convenience stores (11% vs 7%) and from “other” store types (12% vs 8%), which include bargain and pound stores. This pattern is even more pronounced for specific snack products, such as

chocolate and confectionery and for the lowest income bracket, below £10,000, as shown in the graph below. To the contrary, higher income households spent more on snacks and particularly on savoury snacks and biscuits, in online shopping.

Though this does not necessarily imply differences in impulse purchases it does highlight that households may have different strategies in food shopping as well as the different range of foods available in these types of stores.

### SNACKS PURCHASED BY OUTLET

Figure 13

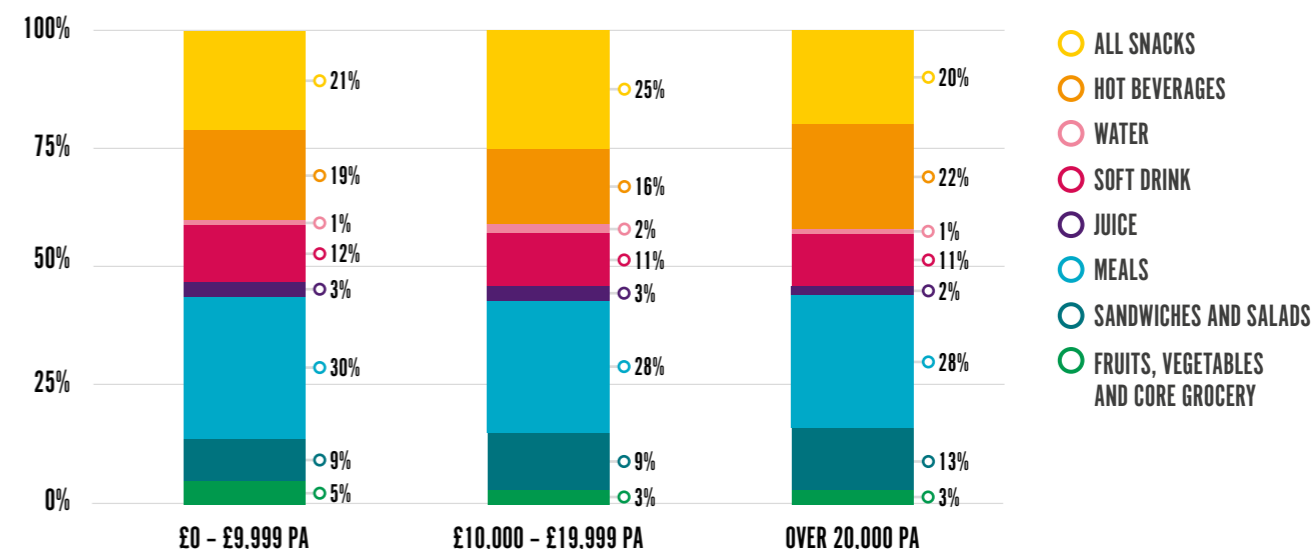


In addition to unhealthy snacks and drinks being a mainstay of food consumption within the home, they also form a sizeable part of food purchased for consumption out of the home. Figure 14 shows the breakdown of food

for out-of-home consumption. Sweet and savoury snacks combined is the third largest category after hot drinks and meals and contributes to a greater share of total out-of-home expenditure for low-income households.

### BREAKDOWN OF FOOD FOR OUT-OF-HOME CONSUMPTION

Figure 14



The importance of sweet and savoury snack consumption both inside and outside of the home for households across the income groups and their generally unhealthy nutritional profile,<sup>40</sup> points to an important market opportunity for healthier snacks. In fact, in response to this market opportunity, the global healthy snack market size which was valued at \$21.1 billion in 2016 is expected to grow at 5.1% over the next 5 years<sup>41</sup>. This includes the healthy snack bar market in the UK, which was £365m in 2017, up 1.5% on the year before<sup>42</sup>.

The official recommendation is to move towards healthier snacks and to reduce the frequency of snacking. Although increased access to fresh foods and cooked meals can reduce snack consumption, current data suggests that snacks have a significant place in diets and providing affordable, healthier alternatives can be a pragmatic way to improving diets for low-income families. Public Health England’s sugar

reduction program has instructed food producers to voluntarily reformulate existing products in a range of categories to contain less sugar. The programme covers the main categories of sweet snacks in particular (chocolate, confectionery, biscuits)<sup>43</sup>. This means that the market for healthier snacks may face tougher competition from existing brands that have undergone reformulation for example Dairy Milk offering a low-sugar version, or Jammie Dodgers cutting off 22% sugar from their traditional recipe.

Snacks and drinks targeting the “health” driven consumer tend to be financially out of reach for lower-income groups. This reinforces the social and cultural barriers between healthy food and lower-income communities, who may already see foods labelled ‘healthy’ as ‘not for them’<sup>44</sup>. While this can be partly attributable to higher input and manufacturing costs, other factors can push the price up, including high fixed

“Sugar costs £600 a ton, whereas natural sweeteners like dates are twice the price. If you can sell more of your product it will help bring unit costs down but many of the ingredient fillers in unhealthy snacks are just so cheap, it’s hard to compete.”

costs for small manufacturers but also higher margins per unit, which form part of a marketing strategy aimed at higher-income consumers. The analysis of business models suggests that producing healthy and affordable

snacks and drinks at a competitive price is achievable if there is support with creating new recipes, simplifying manufacturing processes, shortening supply chains, better understanding customer preferences, routes to market and distribution and, most importantly, creating economies of scale.

As one food business commented: “Sugar costs £600 a ton whereas natural sweeteners like dates are twice the price. If you can sell more of your product it will help bring unit costs down but many of the ingredient fillers in unhealthy snacks are just so cheap, it’s hard to compete.”

**Key insights:**

- + Marketing and branding healthier products to target young consumers can be important. Some entrepreneurs attributed their success to the marketing of their products as fun and aspirational, rather than focusing on the more serious health message.
- + Scale is key to driving down marginal costs and increasing the competitiveness of a product vs established competitors.
- + Negotiating access to large distributors (supermarkets, wholesalers and online distribution platforms) is a crucial step, and can be the main challenge for small, new businesses designing new products. Food and beverage businesses with a social ethos can find this opens up distribution partnerships if effectively leveraged.
- + Business to business distribution and distribution to institutional buyers (schools, hospitals) is a potential way of achieving scale, before entering the business to consumer segment.



California, USA

For more information:  
[revolutionfoods.com](http://revolutionfoods.com)

## Revolution Foods

LunchBundle is an initiative by Revolution Foods in the USA. Started by Kristin Groos Richmond and Kirsten Saenz Toby, the business provides access to healthy, affordable meals, primarily through schools. A decade after launching, the company now serves over 2.5 million meals per week in 1000+ schools and had annual revenues of \$125 million in 2016<sup>45</sup>.

Food businesses that begin by trading business to business (B2B), particularly through institutional buyers (i.e. schools, hospitals) can be more stable. RevolutionFoods is a good example of the potential advantages of B2B as an entry point into the market. New businesses can use B2B to achieve scale, revenue stability, profits and brand recognition, all of which can then be used to enter the business to consumer (B2C) segment.

Following their commercial success in schools, Revolution Foods entered the retail market in 2016 with a range of healthy products designed to make

family food choices easier at breakfast, lunch and dinner. Among other products, they launched Lunch Bundle, a nutritionally-balanced snack platter for children or adults. The bundles cost \$4.97 for three, or just over £1 per kit<sup>46</sup> and were distributed by more than 4,000 grocery stores, supermarkets and wholesalers across the USA.

At the end of July 2018, Revolution Foods terminated its B2C snack lines opting to focus solely on its nutritious B2B meal offerings, suggesting challenges in making the business model work despite having a high quality product, their scale and brand positioning.



London, UK

For more information:  
[uglydrinks.co.uk](http://uglydrinks.co.uk)

## Ugly Drinks

In 2016, Ugly Drinks – founded by Joe Benn and Hugh Thomas – entered the soft drinks market to see if their healthy soft-drink could compete on taste, brand image and price with larger brands. Their soft drinks contain zero sugar, no calories or sweetener and nothing artificial.

Founders Joe Benn and Hugh Thomas had the idea for Ugly Drinks back in 2013 whilst both working at drinks startup Vita Coco. Their experiences in fast-moving consumer goods (FMCG) coupled with both founders having family members who work supporting people with diabetes, inspired them to create a brand that made it ‘cool’ for young people to switch to a healthier soft drink.

Ugly Drinks have spent a lot of time creating the right brand. They were frustrated that healthy products were often accompanied with serious brand images that made them ‘inaccessible’ to young audiences. Ugly Drinks wanted to create something akin to the big-brand soft drinks companies which is more rebellious, fun and makes you feel happy. This was a sentiment echoed by other food businesses - such as Chicken Town in Tottenham -

who said that healthy food can often be seen as for the middle or upper class and can be perceived as divisive if portrayed in the wrong way.

After two years, Ugly Drinks are now stocked in Tesco and Sainsbury’s and the company will sell more than 1 million cans in 2018. Equally, in 2018, they opened operations in the USA to benefit from the huge consumption amounts and the decline of the larger, unhealthier soft drinks businesses.

At £1 per can, Ugly Drinks are currently more expensive than average soft drinks (by about 30p). However, the founders’ aim is that their healthy soft drinks also compete on price with larger soft drinks companies. To achieve, this Ugly Drinks will have to substantially increase sales and production numbers.



London, UK

For more information:  
[snact.co.uk](http://snact.co.uk)

## Snact

Snact is a London-based healthy snack provider which operated between 2013-2018. Snact produced fruity jerky and banana bars, had an environmental mission making all of its product from fruit that would otherwise have gone to waste and used compostable packaging.

When Snact started in 2013, they initially hoped to target their product at low-income families. However, the production costs of the Snact bars made this goal unattainable, as the ingredients (even as potential food waste) and manufacturing method were too costly. Michael Minch Dixon, one of the Snact founders noted that a lot of snack providers are able to keep unit costs low because they use ‘bulking agents’ that provide calories and flavour but offer few nutritional benefits.

The Snact bars costed £5.99 for a box of five and the packs of fruit jerky £3.99 for five. At this price point, one box of the healthy bars would use approximately 10% of a lower income families weekly food budget. Minch-Dixon states that economies of scale are important to bring the cost of healthy food items down. However, he also urges caution in thinking of economies of scale as the golden bullet. He cites

the example Nakd Bars that command 10.6% of the retail value of the UK snack market<sup>47</sup> but still cost substantially more than a Mars bar (£1 and £0.60 respectively).

After five years, Snact was distributing its product through Ocado, Amazon, Planet Organic and many independent retailers. Ultimately, it was a failed distribution deal with a UK supermarket that made Snact close operations in summer 2018. On the closure, Minch Dixon highlighted how difficult it can be as a small supplier to attract the attention of large food retailers. He suggested that a programme of support that helped small producers come together to have better leverage over food buyers would be helpful in disrupting the kind of products that supermarkets stock. Another option worth exploring may be to partner with a supermarket to co-develop a healthy product offer.

Beyond the snack market there is also lots of work to be done reformulating some of Britain’s best loved convenience foods. One example is Eat Balanced, a Scottish business that redesigned the pizza to be much healthier without losing or changing the taste. Today, Eat Balanced are one of the UK’s leading providers of pizzas for children and are sold through schools,

leisure, tourism and family restaurants. They currently sell between 30-50,000 pizza portions per week and aim to grow by 30% over the coming year. Donnie MacLean, the founder of the company, talks of the importance of having a product that can compete on taste, nutrition and price as being key to disrupting the market.

## Designing healthier supply chains

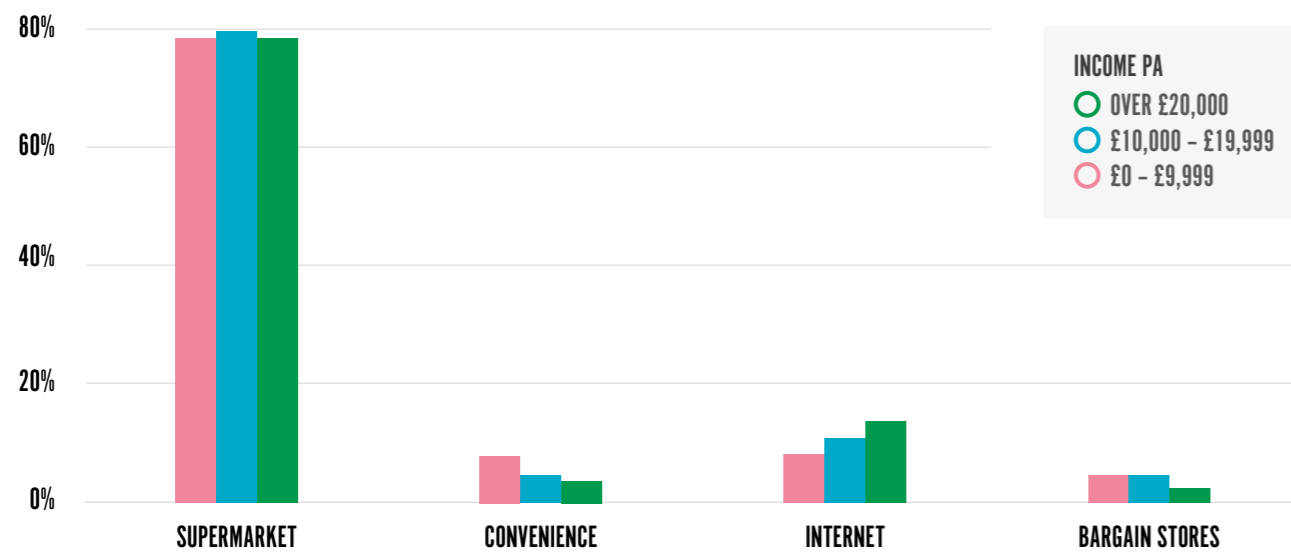
Large supermarkets still dominate food purchases for families across income groups. Few existing challenger brands seem to have managed to enter this retail supply chain, due to issues such as: lack of production scale required for supermarket contract; lack of finance to spend on in-store marketing relative to other brands; inability to negotiate shelf space and positioning.

On the other hand, supermarkets present a much less fragmented set of customers than other food retail sectors. Where a brand can negotiate a partnership with a single supermarket, it presents an opportunity to access a market at a scale that can enable the business to be profitable.

In addition, although large supermarkets still dominate food purchase, lower-income families are spending more of their budget for at-home consumption in convenience stores than higher income groups. Reduced time and transport availability is likely to be an important factor driving convenience purchases for these families, particularly if we take into account the higher proportion of single-parent families in this group<sup>48</sup>.

### WHERE DO FAMILIES SPEND THEIR FOOD BUDGET FOR AT HOME CONSUMPTION?

Figure 15



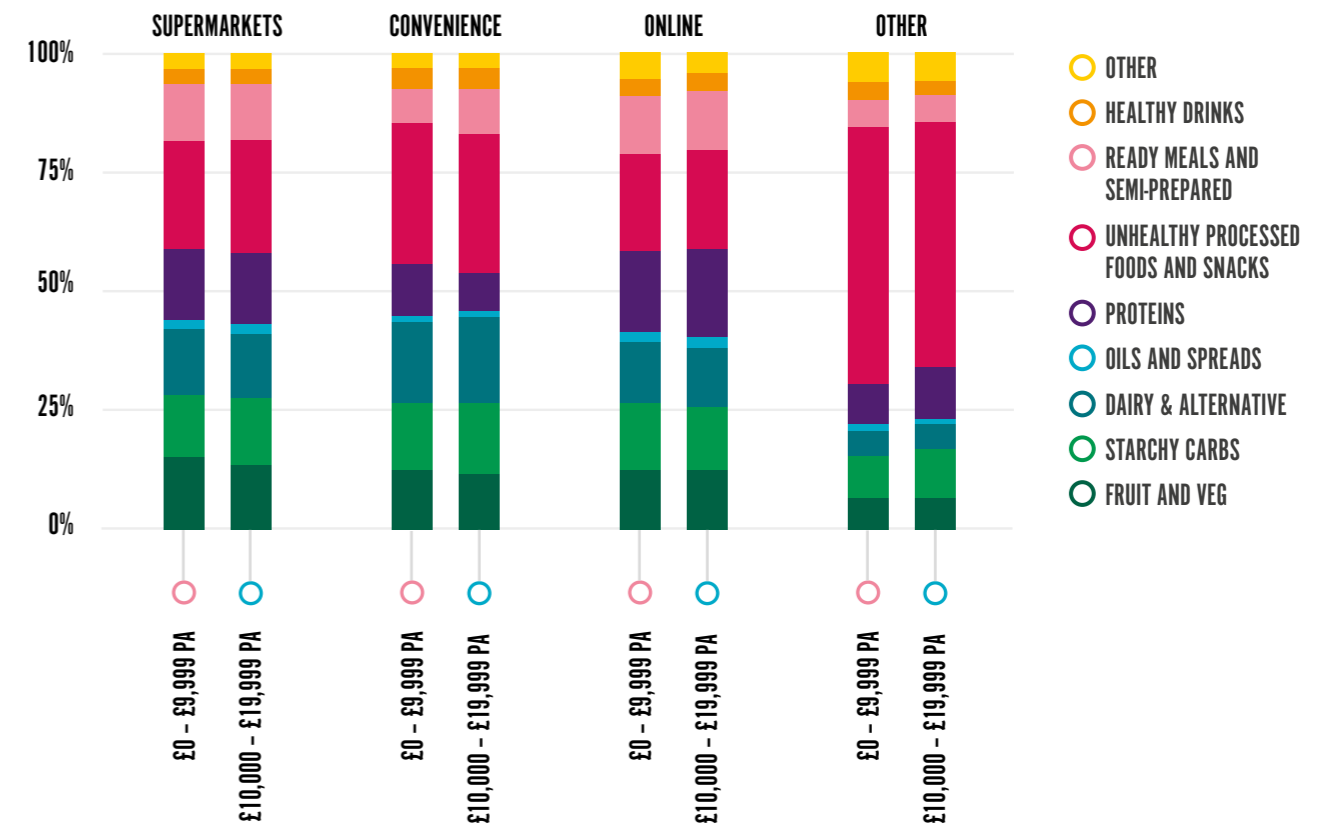
Additionally, convenience stores play an increasingly important role in out-of-home consumption, representing around 9% of all food expenditure for consumption out of the house, for the general population<sup>49</sup>.

Looking at the breakdown of foods that are typically purchased in different outlets below, the quantity of unhealthy foods increases in convenience stores (newsagents, corner shops, small supermarkets) and

other (discount stores, pound stores etc), and the amount of fresh produce decreases. In fact, a 17% drop is seen in the purchasing of fruit and veg when people move from supermarkets to convenience, and a 27% increase in the purchase of unhealthy foods. In particular, products such as snacks, chocolate and biscuits are making up a larger proportion of take-home purchases when compared to supermarkets or online grocery shopping.

### HOW DOES THE SHOPPING BASKET DIFFER ACROSS OUTLETS?

Figure 16



There are many factors that can influence the types of purchases made from different outlets, including differences in the shopping occasion and the customer profiles, as well as the range of products available. Regarding the latter, we know that there are important barriers for small independent stores to offer fresh products and, in particular, fruit and vegetables such as high wastage costs, need for new costly infrastructure

etc. This suggests that there may be an opportunity to support independent convenience and other stores to increase their healthy offering and help them market healthy items to their customers. This could be achieved by importing models that have worked well in other countries to get nutritious food to low-income families, in both urban and rural contexts.

It is important to take into account that, in many cases these models might be best suited to independent stores, which have a market share of around 10% of convenience take-home food retail, going up to 15% for lower-income families. There is strong competition from leading supermarket brands in this segment. As is the case in other segments throughout the supply

chain, entrepreneurs can find opportunities by focusing on niches in the market, addressing areas where the penetration of market leaders is lower. Equally, there are some interesting further questions to be answered about how foundations and charities can work with large supermarket brands to continue to increase the range and popularity of their healthy options.

**Key insights:**

- + Challenger brands need to be supported to enter supermarket distribution chains, as there is the dominant channel through which families purchase food. Support could be focused on building strong partnerships with supermarket buyers so that challenger brands have an opportunity to be stocked, despite their lower profit margins and in-store marketing spend.
- + It is important not to underestimate the financial risks that convenience stores face in offering healthier, fresher product lines. There is a high likelihood of product wastage and financial losses in early months and securing a supply chain which can deliver small quantities on a regular basis is not always easy. Adequate financial and infrastructure support are likely to be crucial, particularly in the initial period.
- + Efforts to improve the supply of healthy foods at convenience stores are likely to be more successful if combined with interventions to get customers through the door: branded display units, advertisement campaigns etc.
- + Leveraging technology wherever possible to shorten supply chains or extend product shelf life can be a good way to reduce costs.



Washington DC, USA

For more information:  
[dcentralkitchen.org](http://dcentralkitchen.org)

## Healthy Corners

Healthy Corners is a venture that aims to expand healthy food access in Washington DC’s food deserts and low-income communities<sup>50</sup>. Through the programme, DC Central Kitchen (DCKK) delivers fresh produce and prepared healthy snacks to convenience stores in DC’s low-income communities, offering produce to corner stores at wholesale prices and in smaller quantities than a conventional distributor. The stores then sell the produce on at an affordable price.

To encourage convenience stores to participate, DC Central Kitchen offers free marketing support, technical assistance and also provides branded fridges and display units. Equally, DC Central Kitchen delivers nutrition education sessions and cooking demonstrations to encourage changes in shopping habits. Finally, once the convenience store has demonstrated financial sustainability of a fresh food product line, DCKK supports them to transition to receiving similar deliveries from larger, for-profit wholesalers.

The programme is currently active in 65 convenience stores in DC. In its current form, Healthy Corner is subsidised by grant and public funding, as the business

model is not sustainable. However, the team managing the project believe with some changes that it could be self-financing. Their comments to achieve financial sustainability include:

- + Charging a small delivery cost to stores (currently delivered free)
- + Adding a small margin to the fresh and healthy goods sold to convenience stores (currently sold at price)
- + Getting the convenience store owner to contribute to the cost of branded fridges and storage units (currently given free).



California, USA

For more information:  
[mandelamarketplace.org](http://mandelamarketplace.org)

## Mandela Marketplace

The Mandela Marketplace Healthy Retail Network seeks to increase access points for healthy food.

In addition to partnering with store owners by providing a produce delivery service, the Healthy Retail programming also provides complementary services that encourage consumption of healthier food options, including: store environment improvement, marketing, nutrition education, and sourcing and procurement assistance.

Mandela Marketplace also supports local, under-resourced farmers by establishing an alternative distribution network that passes on wholesale prices to community retailers and institutions. Forty percent of the produce purchased by Mandela Foods Distribution comes directly from local family farms.

Many of the food businesses we spoke to mentioned that the fragmented and long nature of food supply chains is a key cost driver. This has given rise to an interesting sub-group of food businesses who shorten

the supply chain, often leveraging technology to deliver better quality products to consumers at a lower cost.

Some examples include:



California, USA

For more information:  
[aglink.com](http://aglink.com)

## Ag Link

Ag Link provides high quality fruits, vegetables and meats to 50 school districts (similar to UK Local Education Authorities) in the USA

They act as an intermediary between farmers and school districts. An online platform enables California's farmers to trade directly with school districts, removing the middleman and lowering costs of nutritious, fresh food.



London, UK

For more information:  
[foodclubs.co](http://foodclubs.co)

## Food Club

Food Club is a new online platform that enables people to purchase sustainable food and household products at cheaper prices by removing costs in the supply chain, distribution and the process of customer acquisition.

Food Clubs achieves this by creating online groups of food buyers who, by nature of the size of the group, are able to purchase foods at wholesale prices. Food Clubs is then able to pass these savings onto the consumer, after they take a small commission for themselves.

It currently has a very small customer base of c.150 regular customers. However, after receiving investment they are looking to grow this substantially over coming months.



London, UK

For more information:  
[thefoodassembly.com](http://thefoodassembly.com)

## Food Assembly

Individual organisers use the Food Assembly platform to set up an online farmers market in their local community.

This requires them to find and register appropriate local food producers. Once their Assembly is set up, local customers go onto their local Food Assembly online shop and place and pay for their order. They pick up their order at a weekly "pop up" farmers market where the food producers come to deliver the goods.

## Designing healthier retail opportunities

In retail, two key market opportunities have been identified which can directly address childhood obesity in low-income families. The first addresses the importance of using fast food and takeaway channels to deliver a more nutritious product and the second looks at the scope for a new type of convenience grocery store, that puts fresh and healthy food centre stage.

### Healthier fast food and takeaway

Convenience is an important driver of food choice across income groups. In fact, household purchasing patterns can often be best understood as the result of consumers balancing out convenience and taste with price to suit their budgets. For example, although buying raw ingredients is sometimes cheaper than buying pre-prepared meals, families spend almost half their take-home food budget (with marginal difference

across the income groups) on items that prioritise convenience. This includes ready meals and semi-prepared meals (e.g. pasta sauce, tex mex kit) among others, accounting for 18-20% of the expenditure. The demand for convenient products for preparing a meal can reflect financial limitations but also the underlying factors such as time limitations, cooking skills, as well as access to suitable kitchen and equipment<sup>51, 52</sup>.

Table 2:

EXPENDITURE ON EATWELL GUIDE CATEGORIES	£0 - £9,999 PA	£10,000 - £19,999 PA	OVER £20,000 PA
Fresh food and ingredients	51.2%	50.9%	53.7%
Pre-prepared food (take-home purchases)	48.8%	49.1%	46.3%
Semi-processed and convenience foods	12.9%	13.9%	14.2%
Ready meals and soups	6.0%	6.1%	6.0%
Drinks	10.2%	9.6%	8.5%
Desserts	6.7%	7.0%	6.5%
Snacks	12.9%	12.6%	11.2%

Given the importance of convenience for low-income families, the demand for takeaway meals and fast food is likely to be constrained by price, with these households replacing eating out with supermarket ready meals, snacks and other semi-processed goods. When it comes to takeaway meals however, previous research has

shown that not only price but also brand recognition and familiarity are taken into account by low-income families, who want to make sure that the children will eat the meal on offer<sup>53</sup>. This often means that families tend to rely on well-established, popular brands. This is consistent with our analysis, which shows that the

most popular fast food venues for the lowest income group are market-leading brands. Among higher income families, on the other hand, other options including chinese takeaways or fish and chips are most popular.

In terms of their nutritional content, and despite an increased availability of healthy options, both supermarket ready meals and other convenient foods to takeaway are often unhealthy. Large studies looking at nutritional composition have found:

- + Ready meals in the UK to be high in saturated fat and salt, and low in sugar. Only one-fifth of meals were low in fat, saturated fat, salt and sugar, including two-thirds of 'healthier' meals<sup>54</sup>.

- + Takeaway foods to be inconsistent with UK dietary recommendations, with pizzas revealed the highest energy content, and Chinese meals lowest in total fat. A high degree of variability was found between and within categories, but the majority of meals were excessive for portion size, energy, macronutrients and salt.<sup>55</sup>

This suggests that there may be opportunities to improve access to nutritious meals by providing healthier, more affordable and convenient ready meals as well as takeaways. However, our analysis also points towards some potential challenges, including competition from established fast food brands, which are very popular across income categories and particularly among lower-income groups, and from supermarket ready meals.

### Key insights:

- + Staff costs can be kept low by using a centralised production facility and using minimal, if any, staff at points of retail.
- + When creating new products, the ability to scale the recipe is a key component to keeping unit costs low.
- + Convenience of accessing product is a fundamental driver of product purchase - whether through online ordering, delivery or availability of parking.



Kent, UK

## Our Kitchen

Our Kitchen provides nutritious and affordable ready meals to low-income households in Kent. Our Kitchen produce the ready meals in house or procure them from local business kitchens.

The ready meals they produce are tasty, healthy, affordable and all contain a minimum 80g of veg per portion. The food is packed in compostable pots and sold via a network of community fridge/

freezers at around £1.40 per serving. Started in 2016, this is a relatively new business that requires investment, support and marketing to help Our Kitchen deliver its products at scale<sup>56</sup>.



Birmingham, UK

For more information:  
[shiftdesign.org.uk](http://shiftdesign.org.uk)

## Shift

Shift are investigating how to get nutritious, affordable, hot meals to families with the convenience of a takeaway. A pilot launched in Birmingham in summer 2018, enabling families to order family classics (like spaghetti bolognese, shepherd's pie) and have them home-delivered.

Shift settled on this business model after conducting ethnographic research with target families, takeaway owners and looking at data trends through working closely with JustEat. Interestingly, in some ways, Shift are simply extending the trend evident in higher income brackets where people are ordering their

healthy evening meal from a restaurant and having it delivered to their door by one of the food delivery platforms. Through having a centralised production facility, simple meals and no retail outlet, Shift are able to keep costs low, and offer nutrition and convenience.



Los Angeles, USA

For more information:  
[everytable.com](http://everytable.com)

## Everytable

Everytable aims to sell nutritious, fresh, made-from-scratch food, at fast-food prices.

Their business model reduces the costs of the standard restaurant model by relying on centralised kitchens and small retail outlets, which both reduce staff costs.

Everytable have locations in low-income communities with little or no access to healthy food, and in affluent areas. To ensure affordability, they use a dynamic pricing strategy which changes the product price, depending on the neighbourhood you find the store in.

## Redesigning the Grocery Store

The second opportunity area to consider in retail concerns a new type of convenience store that prioritises fresh produce and enables the easy pickup of healthy grab-and-go, pre-prepared meals and snacks. Our food purchasing habits are increasingly driven by convenience but at the same time, we are currently buying more unhealthy foods

from these convenience stores than larger supermarkets. The opportunity here is to redesign the typical convenience store to put fresh produce and healthy, grab-and-go food front and centre. Through our research with food businesses (predominantly in the USA), we spoke with several organisations who have done just this.

### Key insights:

- + A kitchen within a grocery store is a very good way to tackle food waste, maximise revenues and offer healthy, takeaway meals.
- + Leverage food surplus supply chains to access products that would otherwise go to waste to lower product costs in store.
- + Ensuring that a grocery store initiative is open to everyone supports its success. Having food businesses that are available to only low-income families makes it feel akin to a food bank and not an enjoyable experience.



Boston, USA

For more information:  
[dailytable.org](http://dailytable.org)

## Daily Table

Daily Table is a convenience store that offers low-income communities a variety of fresh, convenient and affordable foods. Across two stores in Boston, USA, they provide both “grab-n-go” ready to eat meals, and a selection of grocery items all at affordable prices. Many of their items are prepared fresh every day in their onsite kitchen.

Founded by Doug Rauch, former president of Trader Joe's supermarket chain, Daily Table serves customers from different income groups but strategically position their stores in low-income communities to increase access to healthy foods. They are able to offer such affordable prices by having c. 20% of their workforce as volunteers and working closely with suppliers to access

special buying opportunities, as products move towards the end of their shelf life.

Their ready meals are priced to compete with fast food options, making it easier for families to eat healthier within their means. All the food in the store is informed by guidelines set by nutritional experts.





Across USA

For more information:  
[northgatemarket.com](http://northgatemarket.com)

## Northgate Gonzalez Market

This medium-sized supermarket chain in the US has been described as ‘Whole Foods quality at Walmart prices’, and offers a shopping experience that focuses on Mexican product lines. The supermarkets offer a wide variety of fresh fruit and vegetables, an in-house kitchen preparing healthy food to go and food experts throughout the store to guide families on their purchases.

They currently operate more than 50 stores in the USA. Though Northgate Gonzalez Market is a ‘large’ business, we include them as a case study here to demonstrate what could be possible when it comes to a provision of healthy, affordable and convenient food. Through having a clear mission to support the health and well-being of their customers, securing substantial investment from targeted healthy food investment funds and focusing on fresh produce, Northgate

Gonzalez have transformed food deserts and the food offering of low-income neighbourhoods. Interestingly, Northgate Gonzalez also focuses a lot of its fresh produce on Latin American fruits and vegetables that were traditionally unavailable in US supermarkets. Through differentiating themselves like this, Northgate Gonzalez have been able to better attract ethnic minorities to their store, who, like in the UK, typically have lower-incomes and poorer diets.



London, UK

For more information:  
[makekitfood.com](http://makekitfood.com)

## Make Kit Food

Make Kit Food are a London-based startup delivering plant-based recipe kits at an affordable price. Make Kit Food’s mission is to lift low-income families out of food poverty by equipping them with the tools, skills and knowledge to confidently cook and eat more vegetables on a budget.

Make Kit Food do this by delivering all the pre-measured ingredients one needs to cook a nutritionally balanced meal, in under 30 minutes. In this regard, Make Kit Food is addressing the convenience needs of families by removing the need to select a recipe, shop for the ingredients and potentially waste surplus ingredients. Make Kit Food also operate a social business model where a percentage of their profits is used to fund cookery classes and subsidised meal kits for people in need.

Make Kit Food has strived to create a product that is affordable, nutritious, and appropriate for their target audience. However, despite their social mission, they

have recently had to focus on a slightly higher-end customer base so that they can cross-subsidise their reduced-price menu kits.

The market for online ordered recipe kits is large and growing<sup>57</sup>. Most of the providers are currently prohibitively expensive for low-income families and do not fully address the convenience needs of our busy lives (i.e. you still need to spend 30 minutes cooking), but these new businesses look like they are here to stay. In the US for example, meal kits are growing 3 times faster than other food retail channels<sup>58</sup>. As such, we believe that as economies of scale lower prices further, recipe kits will be an important part of the food retail scene.

## Considerations for action

This work has identified some international best practice that philanthropists, foundations, social investors and government may want to explore in developing new, and supporting existing, market-based approaches to childhood obesity. These sit alongside ways in which government, particularly local authorities, can use policy instruments to help these businesses to thrive – whether through planning regulations, discounted business rates, environmental health rules or investment packages for new housing developments.

With each approach, a couple of examples are included, to be drawn on as a blueprint or potential partnership.

## Healthy food investment

A dedicated finance mechanism is one crucial approach that has been proven to support market-based approaches to childhood obesity. Funding models exist in the US, focusing on gaps in fresh food access (food deserts) and the belief that these are driving unhealthy eating habits. In the UK, particularly in London, there is generally no shortage of fresh food access and the focus is instead on improving the affordability of healthy, convenient and tasty food. This is more complex as the solution goes beyond the simple provision of grocery stores and supermarkets. However, there are very limited investment funds available for UK food businesses to achieve this.

Existing foundations and healthy food investment funds recommend that opportunities to create new financing mechanisms should consider:

1. **Explore mixed funding products:** if the aim of the project is to support market-based approaches to childhood obesity, market-based capital can be a very helpful element. Several startups we spoke to actively regretted taking grant capital over investment because it tied them into delivering specified charitable projects, not refining their business, whereas social investment seeks a blend of social and financial returns. There could also be the opportunity to use tax reliefs such as SEIS or SITR to channel private capital to early stage food start-ups.
2. **De-risk entry for other investors:** in the UK and beyond, there is no shortage of money being invested in food and drinks companies. The problem is that they are not being directed towards companies that are providing products to lower-income groups. Like the FreshWorks 2.0 Investment Fund in California, philanthropic capital can be used to de-risk venture capital and attract more investors to this market.

3. **Ensure that investment provider/product is suitable for investee:** supplying nutritious food to low-income groups is a complex challenge that will require many different types of business to be involved in the solution. These different businesses need to be funded in different ways and any investment mechanisms should be set up with this diversity in mind. For example, consider using a more commercial investment intermediary to deal with larger real estate investments, a venture-capital style fund to provide investment, hands on support to early stage digital technology or food tech based approaches, and a credit union to deal with more community-based small organisations.

Interestingly, several food social businesses spoken to during the creation of this report declined to participate because they said that large market-based support programmes like these never benefit small, front-line organisations like theirs because the administrative burden is too high for them.

4. **Looking at tying to property/fixed assets:** as with other investments, a relatively low-risk starting point to supporting food businesses is to offer investment that is tied to fixed assets and/or property.



Pennsylvania, USA

For more information:  
[reinvestment.com](http://reinvestment.com)

## Pennsylvania Fresh Food Financing Initiative

The Pennsylvania Fresh Food Financing Initiative (FFFI) was designed to attract supermarkets and grocery stores to underserved urban and rural communities. The programme, which began in 2004 as the first fresh food financing initiative, ended six years later when all of its funds were deployed.

The objectives of the program were to:

- + Stimulate investment of private capital in low-income communities
- + Remove financing obstacles and lower operating barriers for supermarkets in poor communities
- + Reduce the high incidence of diet-related diseases by providing healthy food
- + Create living wage jobs
- + Prepare and retain a qualified workforce

Developed as a public-private partnership, FFFI was designed to support grocery store operators whose infrastructure costs and credit needs were not met by conventional financial institutions. The initiative used market analysis, leveraged capital, and public policy to stimulate supermarket development and increase the availability of fresh food in low-income neighbourhoods.

The State of Pennsylvania seeded the program with a \$30 million grant, which the Reinvestment Fund leveraged with \$145 million in additional investment to provide loans and grants for predevelopment, acquisition, equipment and construction costs, as well as for start-up costs such as employee recruitment and training.

FFFI attracted 206 applications from across Pennsylvania, with 88 projects financed as of June 2010. In total, more than \$73.2 million in loans and \$12.1 million in grants were approved. Projects approved for financing were expected to bring 5,023 jobs and 1.67 million sq/ft of commercial space.

Studies of the programme have shown that though FFFI did increase perceptions of food access, it did little to reduce BMI<sup>59</sup>. Tracking built environment interventions back to BMI is extremely difficult, due to the many other factors influencing health weight. Including robust evaluation that tracks impact on purchasing behavior would be a good proxy for a fund to estimate its impact on obesity.

Nevertheless, the model in Pennsylvania has influenced the design and creation of similar programs in several states, including California, Colorado, Illinois, Louisiana, Maryland, New Jersey, Michigan, Ohio and New York. Importantly, future iterations of these food funds have widened their scope to not only focus on food retail but to look along the supply chain for market-based interventions. Importantly, of the now many Fresh Food Funds in the USA, they have experienced virtually no financial losses: i.e. borrowers are paying their loans.<sup>60</sup>



California, USA

For more information:  
[cafreshworks.com](http://cafreshworks.com)

## Freshworks 1.0 and 2.0

California FreshWorks is a loan and grant program that provides financing to food enterprises who are working to increase access to affordable, healthy food in low-income and underserved communities in California. They work with a variety of businesses that grow, aggregate, distribute, and sell healthy food in a way that builds a sustainable food system and reaches people in need.

Their network of lenders provides flexible capital to healthy food enterprises that are often unable to receive credit from traditional sources. The lending is supported by technical assistance grants that help build capacity, as well as a credit enhancement program that

helps lenders take additional risk. The programme was initiated by the California Endowment who was founder of the fund and the anchor funder. The overall structure of the first California Freshworks Fund was as follows<sup>61</sup>:

### LOAN FUND £125 MILLION LLC

#### £100 MILLION SENIOR DEBT

- + JP Morgan Chase
- + Citi Community Capital
- + Morgan Stanley
- + Bank of America
- + MetLife
- + Charles Schwab

#### £25 MILLION SUBORDINATE DEBT

- + The California Endowment
- + Capital Impact Partners
- + Dignity Health
- + Opportunity Finance Network

#### £7.5 MILLION LOAN LOSS RESERVE

- + JP Morgan Chase Foundation
- + The California Endowment
- + Healthy Food Financing Initiative

### NEW MARKETS TAX CREDITS £120.5 MILLION

- + JP Morgan Chase
- + The California Endowment
- + Capital Impact Partners
- + National Cooperative Bank
- + US Bank

### GRANTS AND OTHER LENDING £20.4 MILLION

- + The California Endowment
- + Capital Impact Partners
- + The W.K. Kellogg Foundation
- + Healthy Food Financing Initiative
- + Kaiser Permanente
- + First 5 LA
- + Koret Foundation

As the above demonstrates, there are a number of different capital ‘pots’ within the Freshworks Fund. The larger pots of money (i.e. Senior Debt) come from financial institutions and are underpinned by smaller, often more philanthropic pots (i.e. Subordinate Debt and Loan Loss Reserve). These smaller pots, though less financially lucrative, were key to attract larger funders to the FreshWorks Fund. The Grants and Other Lending pool of capital was designed to support higher-risk, innovative business models and enterprises that did not meet typical underwriting parameters. In terms of investment success, senior debt repaid around 4%, subordinate debt and NMTC debt was repaid at 7%, and program related investments were paid at 1-3%<sup>62</sup>.

The FreshWorks Fund increased access to fresh food for more than 800,000 Californians, created or retained more than 1,900 jobs and generated hundreds of millions of dollars in economic impact<sup>63, 64</sup>.

Following the learnings from Freshworks 1.0, some important changes were made in Freshworks 2.0:

- + More non-financial support was offered
- + More tailored and varied financial products were made available, depending on the stage and type of food business supported i.e. an investment and grant blend
- + More intermediary financial institutions were selected to help get the investment funds to different types of food business
- + A ‘Credit Enhancement Program’ was created whereby Freshworks provides extra credit support for promising healthy food projects, allowing their network lenders to make loans to some borrowers that might otherwise not meet credit requirements



Michigan, USA

For more information:  
[miguoodfoodfund.org](http://miguoodfoodfund.org)

## Michigan Good Food Fund

Learning from both FreshWorks 1.0 and the Pennsylvania Fresh Food Fund, the Michigan Good Food Fund (MGFF) launched in 2015. The fund is a \$30 million public-private partnership loan fund that provides financing to good food enterprises working to increase access to affordable, healthy food in low-income and underserved communities in Michigan.

The Michigan Fund, unlike in Pennsylvania, was seeded by philanthropic capital then grown with private capital. The fund supports a wide range of businesses that grow, process, distribute, and sell healthy food to those who need it most. It provides flexible, patient capital to good food enterprises often overlooked by traditional banks.

Lending is bolstered by business support to help entrepreneurs grow their ventures and prepare for financing. Since its June 2015<sup>65</sup> launch, the fund has invested more than \$11 million in good food enterprises, supported 47 businesses with financing and business support, conducted eight intensive workshops through programs like the “Bodega Boot Camp”, and created/retained 390 jobs across the state food value chain.

Avivar Capital who helped design the California and Michigan funds, and Sarah Samuel’s Centre who evaluated the impact of the funds provided insights for this report. Their advice for new organisations in this space was:

1. Don’t rush the creation of a fund. Take time to strategically plan co-investors, implementing partners and investment guidelines, even if it takes a year or two.
2. Make sure comprehensive market research is conducted to understand where the investment opportunities lie and whether a fund is possible.
3. High-functioning, collaborative partnerships between different types of organisations are complicated and need a lot of effort to work well. Early on, it’s important to establish responsibilities, decision making and team morale within the fund.
4. Financial institutions typically have strict rules while people they are funding are flexible and community focused. Work with fund partners on how to reconcile these differences.
5. Be able to offer blended financing of grant and loan where appropriate.
6. Offering non-financial, technical assistance is key. Set aside funding for technical assistance to help investment return.

Despite these funds being US focussed, we believe there is a clear gap in the market for a UK focused social investment fund to help support market-based approaches to childhood obesity. We know that food startups themselves are seeking investment capital as

well as grant funding, that this kind of capital can have a multiplying effect (i.e. philanthropic capital can be used to leverage more commercial funding) and that the UK food startup scene is thriving, providing strong deal flow for any potential fund.

## Food specific business expertise

Existing fund examples suggests that building a programme of support that brings food-specific expertise is crucial. In conversation with food businesses, many commented how they have participated in accelerator and incubator programmes, but to be truly helpful the programmes needed industry expertise and access to buyers. This type of support tends to be funded through philanthropic grant capital.

In delivering the training, some areas that were specifically requested by food businesses include:

- + **Training to help business owners better understand their customer's needs.** The benefits of this approach can be seen in Shift's work<sup>66</sup> but can often be daunting, time-consuming and expensive. Equally, the work of Healthy Places by Design<sup>67</sup> provides an interesting model.
- + **Regulatory Environment Training:** a third of food-businesses mention that the regulatory environment has been very challenging for them and they would benefit from training on food safety, marketing and selling rules.
- + **Marketing food products:** marketing is key for any business but with 8500<sup>68</sup> new food products released last year to UK supermarkets, the need to stand out from the crowd is even more pressing. Support, training and resources to help food businesses run effective campaigns would be very helpful.
- + **Bookkeeping and Financial Controls:** all startups listed cash flow as the biggest challenge in their business and spoke of the need for strict financial controls to maintain profit margins and keep their businesses viable. Specific trainings on cost-control in food production would be beneficial in this regard.
- + **Help with raising funds:** the investment funds in the US often found that smaller healthy food businesses could not deal with administrative burden of taking on investment because they did not have the processes in place to complete the necessary paperwork and therefore could not benefit from the funds. We heard similar complaints from some of the social food businesses we interviewed in the UK.
- + **Relationships with buyers:** many food businesses spoke of the challenges of working with supermarkets or wholesale buyers. Though senior staff at supermarkets can see the benefit of stocking healthier products for lower income families (i.e. for brand image reasons), the buyers are assessed on different and often purely financial metrics. Some kind of mechanism where food businesses can interact with buyers where they have some power would be hugely important.
- + **Brilliant mentors/advisors:** all the food businesses we interviewed who had reached scale were either staffed by or mentored from someone with deep experience in the food sector. Funders in this area should explore building a bank of advisors with many years' experience across the food sector to act as advisors and mentors to food businesses.



London, UK

For more information:  
[groceryaccelerator.co.uk](http://groceryaccelerator.co.uk)

## Grocery Accelerator

The Grocery Accelerator aims to provide all the essentials a business needs to thrive in the tough world of the FMCG food & drink market.

In addition to the 12-month programme that they offer of general business support, mentorship and assistance finding follow on investment, the Grocery Accelerator offers:

- + A 'Discovery Shop' on Ocado where they help list innovative new products with the UK's leading online supermarket.
- + Consumer Insights: with access to over 30,000 UK shoppers nationwide, Grocery Accelerator can help food businesses by testing how consumers respond to the product.



California, USA

For more information:  
[foodsystem6.org](http://foodsystem6.org)

## Food Systems 6

Food System 6 (FS 6) is a non-profit in the San Francisco Bay Area supporting entrepreneurs aiming to transform how we grow, produce and distribute food<sup>69</sup>. FS6 runs an accelerator programme that includes business and organisational support to help entrepreneurs accelerate growth and impact.

Selected startups join a 4-month program combining business and organisational development skills with a broad education of the food system. Sessions combine presentations, workshops and tailored support. To deliver the training, FS6 brings together industry experts, mentors, investors, researchers and customers from supply chain and community perspectives.

FS 6 stands out from other accelerators due to its focus on the food system. This thematic focus might be helpful in a programme of non-financial support for organisations tackling childhood obesity. When food businesses are well-equipped on their specific issue, they are often better able to raise investment and design products/services to address the problem.

## Place-based infrastructure

A common challenge faced by early-stage food businesses is the void between them producing and distributing their product from a 'home kitchen' to needing to manufacture at a larger scale. In this void there is an opportunity for funders to explore the creation of shared, commercial kitchens.

### Shared kitchens

Aly Johnson, co-founder of chilled dessert company Fools & Queens recently commented in *The Guardian*<sup>70</sup>:

“At first, we looked for empty kitchens in London to rent, but realised these were like hen’s teeth, with rents to match their rarity. We considered ‘rent by the day’ kitchens, but lugging ingredients and finished products across town just wasn’t for us.”

The benefits of a shared kitchen are as follows:

- + Meeting all necessary food safety regulations to trade through a centralised production facility
- + New food businesses are able to scale gradually instead of having to take the leap from kitchen table to external manufacturer.
- + Smaller food businesses can keep costs down by sharing key costs. Equally, by centralising production, food businesses are able to reach the economies of scale necessary to get nutritious food to low-income families.
- + Network of food businesses all in one place that can help with networking, morale and collaboration.
- + Lowers the barrier of entry for people who don’t have a big kitchen at home to trial a new healthy food business.
- + Can operate as a social enterprise itself, charging rents to participating food businesses



London, UK

For more information:  
[missionkitchen.org](http://missionkitchen.org)

## Mission Kitchen

Mission Kitchen is a new organisation in London providing shared kitchen space to food entrepreneurs<sup>72</sup>. They are in the process of opening two sites: one in Brixton and one in Vauxhall. Their aim is to provide:

- + Top of the range commercial kitchens for small and growing food businesses, available at the best rates in London.
- + A place for everyone working in food to cook together, work together, eat together and learn from one another.



Paris, France

For more information:  
[unitedkitchens.fr](http://unitedkitchens.fr)

## United Kitchens

Opened in an old toothpaste factory on the outskirts of Paris, United Kitchens is Europe’s largest culinary incubator.

United Kitchen help actors across the food supply chain (from startups to multinationals) driven by a set of social goals.<sup>71</sup>

Their 600 sqm shared kitchen has the highest level of EU food safety approval. Members of the kitchen benefit from kitchen co-working space, a full research and development kitchen section and a teaching kitchen as well.

### Explore surplus healthy food

Many of the food businesses who are explicitly providing food for lower income groups are able to make their business models work by sourcing products that don't meet the highest grading standards (for fruit and veg) or are close to expiry.

This doesn't have to mean compromising on quality. There are examples of business models that both provide fresh food at lower cost and help in

preventing food waste, even though many of the existing models in this area do not necessarily focus on fresh fruit and veg.

Those designing support in this area could conduct further research into how food surplus supply chains can be better leveraged to ensure that low-cost fresh products can be utilised, without sacrificing nutritional quality or brand image.



United Kingdom

For more information:  
[companyshop.co.uk](http://companyshop.co.uk)

## Company Shop and Community Shop

Company Shop stops good food and household products going to waste. Founded by John Marren over 40 years ago, Company Shop is now the UK's largest redistributor of surplus food. Company Shop purchases its stocks from food manufacturers for 5-20% of the retail value.

Given that this food will otherwise go to waste (mislabelled, short shelf life etc.) Company Shop are a more economical option for food manufacturers than having to dispose of the products via animal feed, anaerobic digestion or landfill. Having secured surplus food from the UK's largest retailers and distributors, Company Shop redistribute surplus through a national network of staff shops, standalone stores and 'click and collect' services, providing offers to members of Company Shop that work in the food manufacturing industry and emergency services. Company Shop currently stops over 46 million items from going to

waste every year. It should be noted that unfortunately it is much easier to redistribute surplus processed food because they have longer shelf life and therefore have time to make into programmes like Company Shop.

In 2013, and off the back of the commercial success of Company Shop, John Marren launched Community Shop. Community Shop is a social enterprise where low-income families or individuals can access good food at low prices and access personal development programmes to help with longer term life changes, like finding work or housing.



Europe-wide

For more information:  
[toogoodtogo.co.uk](http://toogoodtogo.co.uk)

## Too Good to Go

Too Good To Go is a pan-European tech start-up that connects customers with cafes and restaurants with food surplus. They are currently active in eight European countries with a strong presence in the UK.

Through their online platform, they allow stores to sell food that would otherwise go to waste and in less than two years have partnered with over 5,000 stores to fight food waste and three million people have downloaded the app<sup>73</sup>. So far, Too Good To Go have saved 2.5 million meals from going to waste.



United Kingdom

For more information:  
[olioex.com](http://olioex.com)

## Olio

Olio is a free mobile app that acts as an online marketplace to tackle the challenges of surplus food. Anyone with surplus food - an individual or local business - takes a picture of the surplus food they no longer need and uploads it to the app. People who live nearby then receive customised alerts of what is available and can collect the products they wish.

Launched in January 2016, Olio now has over 500,000<sup>74</sup> registered users and is growing at a rate of 15,000 per month<sup>75</sup>. To date, the app has facilitated the sharing of 697,000 items of food, which represents 70-90% of all the food

items that have been posted. With funding from investors including Mustard Seed, Quadia and Octopus Ventures, Olio has expanded internationally to 31 countries, from Russia to South Africa.

### Understanding and stimulating demand

The simple existence of healthy food businesses will only go part of the way to change the purchasing behaviour of low-income families, even with the right price point. The interventions that stimulate demand are just as important as those that stimulate supply.

One food business put it particularly well stating that when it comes to shifting to healthy alternatives ‘awareness is key, but marketing is expensive.’

Moreover, assumptions are often made about low levels of demand for healthier food from those on

a low-income which are not supported by evidence and this knowledge gap can be a barrier to businesses development. Investment in generating good quality data on the nature of demand may help to stimulate faster action from existing businesses as well as build confidence in new businesses.

As such, funders require good quality data on demand as well as considering an overarching marketing strategy for their area of geographic interest to nudge families towards the healthy food businesses that are operating in the area.



Washington DC, USA

For more information:  
[dcentralkitchen.org](http://dcentralkitchen.org)

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## Healthy Corners

The previously mentioned Healthy Corners initiative in Washington DC complemented distribution activities with a city-wide marketing campaign to drive people to stores. There were advertisements on the sides of buses and also branded fridges and storage units for the stores participating in the project.



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# Conclusion

As this report sets out, food businesses effectively serving low-income households with nutritious food options can play an important role in creating healthier food environments that are accessible for all, that in turn can help to tackle childhood obesity. Through a combined analysis of food purchasing and dietary patterns of families with children and food business models, we investigate potential opportunities for market-based initiatives. Our analysis provides a mixed outlook.

Unprecedented interest in healthy foods and investment in new food and beverage companies is at an all-time high and some very exciting new businesses are transforming food offerings in schools, businesses, homes and on the high street. However, many of the convenient, healthier options remain financially out of reach for lower-income families. A growing demand for healthier options, alongside new challenger brands aiming to meet this demand suggests an exciting opportunity. One that can support brands entering or trying to scale within this market, focused product innovation and adapting supply chains through:

- + **Snacks:** creating healthier snacks to substitute high sugar, fat and salt products, prominent in family diets. Successful ventures often begin business-to-business in order to build profitability and brand.
- + **Pre-prepared meals:** convenient and healthy meals for sale in takeaway outlets or through other platforms. Some successful models have made use of food surplus and volunteers.
- + **Supermarkets:** critical as the destination for the biggest proportion of low-income families' spend. Many UK supermarkets are already supporting employee and customer health so brands linking this with their social mission, customer insight and high quality product might help to access these supply chains.
- + **Convenience stores:** another significant focus for food spend of low-income families, they tend to be unhealthier than supermarkets. Businesses able to position their products in these spaces have been able to access this customer base.

This report looks at great examples of how these opportunities can be met. However, they seem to represent a sector that is still relatively new and small, facing challenges common to SMEs around access to capital and access to markets. Having a social mission can add another challenge as a business sets itself criteria that reduce opportunities for cost-cutting; such as provision of a living wage to its employees. In addition, the food sector is highly competitive and requires sector-specific expertise, which food start-ups may lack. Support from social investors, grant funders and others could help to tackle these barriers and enable 'good food' challenger brands to scale. Existing support mechanisms and businesses highlight three areas of consideration for funders in this space:

**Capital** – lack of investment is probably the biggest barrier to 'good food' challenger brands scaling their impact. Tackling this might entail financing mechanisms that offer a range of investment packages (debt, investment and grant) and which include philanthropic capital which can help to de-risk commercial capital. There is considerable experience of investment funds for healthy food businesses in the USA to draw on.

**Tailored business support** – to support access to markets, the creation of facilities which can offer business advice which is specific to food, and includes regulatory or nutritional expertise; help with negotiating contracts with buyers; and understanding the customer base, are all important.

**Place-based infrastructure** – there were common infrastructure needs highlighted by many ventures, which may be more efficient for support mechanisms to provide for multiple businesses at a time. Suitable kitchen, storage or freezer space can be a critical barrier to businesses in this area. Shared kitchens can help to solve this problem and overcome regulatory hurdles at the same time. In addition, there may be wholesale ways of taking advantage of the high levels of food waste currently present in the food system, and repurposing food fit for consumption but going to waste so that businesses can access lower cost ingredients. These solutions feel most feasible for programmes that can specify a sub-regional geographic boundary for impact.

We hope that the opportunity areas discussed in this report can demonstrate potential approaches for new food businesses seeking to achieve a positive social impact, helping reduce childhood obesity. Likewise, we hope that the examples of support mechanisms provided can illustrate a range of options for public and private investors seeking to support these businesses.

Given the right support, we believe there is an opportunity for challenger brands to make a profound and positive change to food environments faced by low-income communities in the UK. This would make a significant contribution to tackling the issue of childhood obesity and break its seemingly intractable link with inequality.

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