

**Packaging Purity: Government Intervention, Commercial Innovation and
Adulteration in Britain, c. 1870-1914**

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PREFACE

Everyday, our consumption of food passes by with relatively little thought, unless the most recent scandal or scare has reminded us that whilst we believe we know what we are consuming; hidden horrors may still lie within. The alum, chalk and poisons used in the early nineteenth century may be a thing of the past, but just as consumers in the nineteenth century were unaware of, or gave little regard to, the contents of their food, do we know the extent of preservatives or e-numbers in our foods today? Can we even trust that our beef lasagne isn't tasting a little horsey? Have the labelling regulations truly enabled us to make informed decisions about what we are eating? In researching the period following the introduction of Laws governing adulteration, I hope understand how the subsequent market was created and draw parallels with our food market today.

We undoubtedly have a market full of choice, with a range of products to suit every budget, from fresh to frozen there is a vast array of goods available to us. Yet we mirror the nineteenth century in that the cheaper end of our market is subject to 'adulteration' in the same way as it was then; to make the product more affordable it is generally an inferior quality, bulked out with a product to make it go further. For example, lower price sausages have a much lower content of pork than those which sell for a higher price, and a much higher rusk, fat and water content. But at the end of the day its still a sausage, so is this a form of 'adulteration'? Furthermore, can we justify the additives, preservatives or emulsifiers which are in our foods? Are all additives in some way an adulteration, or do their benefits negate the fact we are adding foreign substances to our products?

The influx of people to towns and cities in the nineteenth century saw the significant move of food production away from the home and towards the retailer. What started was the production basic items, such as bread, on a larger scale. Today this has expanded, offering not only basic items like bread to us in a finished form, but entire meals can be cooked with out any need for the consumer to prepare any of the elements which form it. I'm not questioning the use of such meals, but the common problem both then and now remains that we have no real knowledge of how it has been made, in what hygiene conditions and using what ingredients. If we take an example of lasagne, we have little knowledge of the quality of tomatoes, beef or pasta which have been used to construct it, or the preservatives which have enabled it to sit unharmed on the shelf until the willing consumer purchases it. Recently, greater distinction has been made in the labelling of ingredients in an item, for instance 100% 'chicken' is entirely different from 'chicken breast,' since 'chicken' could cover any cut of meat, piece of fat or connective tissue and so on which has been reformed into something which resembles meat.

We also live in an age of fad diets and where trends come and go, or where supposed 'super foods' or unhealthy foods live a short life in the public eye before something else replaces them. Some people make an effort to eat according to certain production methods, such as free range or organic, either for ethical reasons or

because they deem the product superior, perhaps attempting to avoid chemicals and pesticides. But even if you pay attention to certain aspects of food production, you can learn new things about that method every day, for example, in a herd of organic milking goats, the animals have to be kept indoors and fed on a special diet to stop them getting worms, since the organic method would forbid the use of medicines to worm the animals. Fine for being organic, but not compatible with being free range. We can draw contrasts with these types of selling points and dietary benefits back in the late nineteenth century too, with supposed health benefits being used in many adverts and even newspaper campaigns. Aiding digestion was a common USP but and at the end of the century the idea of better nutrition begins to play apart. However since smoking was once encouraged as being beneficial, surely all advertisements promising us health benefits should be taken with a pinch of salt, even today?

Therefore, even though its been well over a century since the height of the issue, I have chosen to study this period as I believe it is extremely relevant today. The period is of the utmost importance as in many ways adulteration was defined during that period, and therefore what we accept as normal today, stems from what was created then. In addition, I have always had a passion for food, my family being Italian taught me from a young age to cook from scratch foods which are more regularly purchased than created at home, such as breads, preserves or sauces and pastas. It is shocking in many ways how different home made bread tastes in comparison to a basic white loaf; and funnier still how quickly this product could go mouldy compared to shop bought bread since there are no additives in it. There is currently a great revival of the artisan bread industry, with small bakeries becoming ever popular in an attempt to purchase more rustic and varied loaves. There are also many writings upon the consumption of bread and our health, and particularly of gluten intolerance, cases of which have risen drastically in recent years. However, misinformation and confusion has lead to a lot of people jumping on the 'gluten free' bandwagon without actually being intolerant. For a celiac it can be life threatening issue, but are many myths surrounding a general 'intolerance' to bread, wheat or gluten, and for others with an intolerance it could be commonly confused with other intolerances or poor diet. There are also several schools of thought which suggest that some of the changes we have made to our production methods to enable bread to be produced quickly and efficiently have resulted in a product which our bodies were not designed to digest. For example, today's production methods which speed up the production time of bread have taken away the natural proving and fermenting part of the process which allows the gluten to structure in the bread and for proteins and enzymes to break down, making the bread easier for our bodies to digest. Equally, we no longer use the types of wheat which were grown a hundred years ago, modifying these to suit farming or baking preferences. In many cases, artisan breads such as sour dough, which can be left to ferment for as long as seven hours, have been eaten by people with an intolerance, or even celiacs, and have caused no issues. Convenience therefore may not be a substitute for quality. Bread was also going through many changes in the period which I shall be analysing, it was one of the main foods to be adulterated and experienced great changes in production methods. But this aside, there was also a debate on which bread was healthier for the public,

and attempts were made to convert the nation to live on wholemeal, which at the time was considered to be a sign of poverty; a white loaf was considered fashionable. The recent BBC programme Victorian Bakers, aired in January 2016, was a great success and highlighted the journey of the production of bread in England, covering the issues of adulteration, quality and price and the problems faced in feeding the nation. Taking four modern bakers, they recreated the adulterated loaves using only the methods and equipment which were available through the period, including recreating adulterated loaves. The programme found that the adulteration in many ways was a response to the demand on the small scale food manufacturer, such as the baker, to produce enough to feed the growing number of consumers reliant upon them as well as to compete on price and cater to consumer demands. Overall, the main fact which I feel the programme highlighted was that traditional food production could not continue, the use of machines, new techniques and additives were the result of the need to produce enough food to feed the nation. It is this move away from the romantic ideas of small rustic production which I also want to study; if bakers had continued to run their small bakeries, odds are there would have been no improvement in sanitary conditions or product quality as they lacked the capital or incentive to do so. Instead, with large companies monopolising the market, such as Hovis, production underwent great regulation and improvement which must be the most important aspect?

I feel it is important to study this period as the late nineteenth century was a crucial period in which the production of food was reorganised to allow the cities to be fed, in a safer and more hygienic manner than the years preceding it. The period saw a greater growth in the choice offered to consumers, a large part of my study centres around the use of 'adulterants' in cocoa; in the same way as the bakers had to produce an affordable loaf which people would want to eat, cocoa manufacturers battled with solubility, consumer preference and price to bring to the market a product which would sell, often resulting in so called 'adulteration' to create this desired product. In many ways I am hopeful that in studying this period and the issues food production faced in it, that we will be able to draw many comparisons with where we stand today and understand why we have the types of products we do. The removal of known harmful ingredients we can agree continues to this day given the stringent testing new products must go through before coming to market, we can also say that there is a scale of product quality and price to reflect a variety of wealth in society, and a range of products to suit our varied tastes. But how did we get here? What happened in the period where production moved away from the individual, for a time making it dangerous to eat? Did the government create the market, or did the consumer and competitive commerce bring us to where we are today through demand and innovation?

Introduction

Adulteration was a prolific problem throughout the nineteenth century. The already poor nutrition of the basic diet of the lower classes was worsened by the addition of substances to food, which proved to be detrimental to the health of the consumer in several ways. On the one hand the adulterant may have been injurious to health, such as the addition of poisonous colourants including copper, lead and iron to sweets, jams and pickles.¹ On the other hand, adulterants were designed to increase profit for the retailer by adding so much bulk that the nutritive value of the food was greatly deteriorated, such as the watering down of milk, or that which inhibited digestion such as Alum², the common adulterant used for making bread appear extremely white.³ This 'harmless' adulteration was the most common issue in the late nineteenth century and one which persisted since there was no real cause to remove it; a report from the Select Committee on Adulteration of Food Act concluded that the consumer was being 'Cheated not Poisoned' by the products they purchased.⁴ This problem was more common at, but not limited to, the lower end of the market and it impacted upon the labouring classes and those who already had a diet lacking in quality and nutrition. For an individuals' main sources of food to consist of bread or milk was one issue, to survive on bread or milk which has been adulterated to add bulk and thus be very diluted was another. Water added to milk was 'harmless' and

¹ Frederick Accum, *A Treatise on Adulterations of Food and Culinary Poisons* (London, 1820), p.217.

² Alum could also be referred to as; potash alum, potassium alum, potassium aluminium sulphate.

³ W.B Gratzler, *Terrors of the Table: The Curious History of Nutrition* (Oxford, 2005), pp.119-120; John Burnett, *Plenty and Want: A Social History of Diet in England from 1815 to The Present Day* (London, 1966), p89; Accum, *A Treatise on Adulterations*, p21.

⁴ Sir William J. Bell, H.S. Scrivener, and C.F. Lloyd. *The Sale of Food & Drugs Acts, 1875-1899, and forms and notices issued thereunder, with notes and cases; together with an appendix containing the other acts relating to adulteration, chemical notes* (London, 1900), p.VIII.

commonplace yet to raise a child on such a weak mix of milk was denying them the full nutrition they thought they were receiving and which they were likely still paying for; in turn taking up the small wage which they received and preventing them for buying any additional sources of sustenance. Yet as this deception was not causing out right health issues it seemed less essential for the government to disrupt the laissez faire system and implement change.

The period to be discussed, 1870 to 1914, will incorporate the revised 1872 Adulteration Act, The Sale of Food and Drugs Act 1875, The Sale of Food and Drugs Amendment Act 1879, The Margarine Act 1887 and the Sale of Food and Drugs Act 1899, which were created and amended throughout the period becoming stricter and more concise. The 1860 Act which falls before the period will be referenced, however due to its lack of strength, it had minimal impact on the prevalence of adulteration in Britain, but was at least the beginning of these changes.⁵ The Act was less focused on the concerns regarding the common adulteration in this period, such as the use of adulterants which were not injurious to health, and instead related heavily to the work of Accum and the earlier advocates of reform. As early as 1820 Frederick Accum's *A Treatise on Adulteration* was highlighting the dangers.⁶ Arthur Hill Hassall continued this work and his findings were published in *The Lancet* during the 1850's.⁷ These men and other reformers had

⁵ P. J. Atkins, "Sophistication Detected: Or, the Adulteration of the Milk Supply, 1850-1914," *Social History*, Vol. 16, No. 3 (Oct., 1991), p.319.

⁶ Accum, *A Treatise on Adulteration* p.222.

⁷ A. H. Hassall, *Food and its Adulterations; comprising the reports of the analytical sanitary commission of 'The Lancet' for the years 1851 to 1854* (London, 1855).

all proven that 'Death was in the Pot,'⁸ that ingredients which were not safe for consumption were widely used, and there was a serious need for intervention, yet these works failed to bring about the immediate reforms they justified. Whilst there are great sources for this period and notable works on it, the period of change came much later. Therefore starting at 1870 will incorporate the later part of the century which was characterised not only by intervention but by themes of consumerism and commercial innovation, which spurred on greater changes and regulations in the food market. There has been a considerable amount of work written on the earlier nineteenth century, particularly by the likes of Arthur Hill Hassall and Frederick Accum, whose scientific findings showed beyond a shadow of a doubt that present in the foods of the nation were an abundance of unpleasant and harmful substances. From snails and floor sweepings to poisonous colourings and preservatives,⁹ so despite the fact that such works eventually highlighted the shocking standards of food and resulting in the 1860 Act, I feel it more beneficial to begin later in the century as even at that point the Government were still cautious and it seems unwilling to interfere too strongly with the trade. The Act has been viewed conclusively as weak and short of any major results.¹⁰ Despite this it must be said that it was the first step in the government intervention which would as time progressed become stronger and more powerful in regulating the food and drugs trade. Therefore I felt it best to focus on the period where the most drastic changes occurred, despite adulteration starting long before this and in many ways continuing

⁸ The biblical reference features on the front cover of the second edition, view Appendix 2. Accum, *A Treatise on Adulterations* p.Front Cover, (Second edition)

⁹ Accum, *A Treatise on Adulterations* p.211.

¹⁰ P. J. Atkins, "Sophistication Detected" p.319.

to the present day. The final reason for starting after the 1860 Act is that by the start of this period the most harmful forms of adulteration had been removed.¹¹ Often the forms of adulteration which remained were fulfilling a purpose, such as making the item preferable to the palate, and was still in high demand from the ‘perverted taste of the public,’ as the Cadbury Brothers had said.¹² Therefore they also had to contend not only with removing adulteration but removing the public’s demand for it. Thus in this later period it is no longer clear exactly what constitutes adulteration; what should the government permit to be sold and what do the public need to know of the products they are purchasing? The phrase ‘Cheated not Poisoned’ was attributed to the period by historical writers and contemporary reporters, since the poisonous forms of adulteration were less of an issue compared to the ‘harmless’ adulteration which by affecting price and quality meant the consumer was more often than not being ‘cheated’ and left out of pocket.¹³ One of the most interesting factors of this period therefore is that ‘adulteration’ has to be defined before it can be controlled, since there was no clear cut answer on how to protect public health, and how far to go to achieve this. All parties who were consulted in the forming of the Acts therefore decided what was acceptable before deciding how to enforce those standards. In doing so the regulations surrounding food production which are set out, can in some ways be seen to legalise some forms of adulteration and in other ways set boundaries to protect the ‘consumer.’ The phrase ‘Cheated not Poisoned’ is also the title of the book by Michael French and Jim Phillips which I ascertain to be the

¹¹ P. J. Atkins, “Sophistication Detected” p.319.

¹² Cadbury, “The Cocoa Question,” *The Grocer*, 30/08/1873, in Mondelez Archives, Cadbury Archives Historical Records: file 023 003224, p.97.

¹³ Michael French and Jim Phillips, *Cheated not Poisoned? Food Regulation in the United Kingdom, 1875 to 1938* (Manchester, 2009)

most relevant piece of literature on the topic which are discussing.¹⁴ Beginning in 1875 French and Phillips confront the issue of adulteration whilst looking at the wider developments of the period including markets, politics, consumerism, and carry the study through to 1938. One credit I must afford the writers is the eloquent explanation they provide on the types of market characteristics and the part played by different interest groups in creating change. The discussion includes ‘past experiences’ and how the nature of a commodity and the following trust or distrust affects future dealings. They also discuss the use of what will eventually be termed ‘branding’ in creating an identity and differentiation in the quality of goods; price brackets are only justified when notable differences are seen or imagined in a product.¹⁵ These are notions I will try to explain using the rise of larger manufacturers and businesses as an example; the products, marketing, advertising and branding are all a reflection of a growing consumerism which may perpetuate change for the better or worse depending on what the consumer is demanding and what the manufacturers are able to produce. They also state that regulation and influence are exerted out of self interest, however I only agree in part. I will hopefully show that whilst it is true of the groups such as the butter producers, who were protecting their interests against the margarine producers, philanthropists such as those behind the Bread Reform League had more interest in improving the diet of the masses than self gain.¹⁶ French and Phillips also comment on how the states commitment to free trade was in part due to its ability to provide cheap goods,

¹⁴ French & Phillips, *Cheated not Poisoned?*

¹⁵ French & Phillips, *Cheated not Poisoned?* pp.3-9.

¹⁶ *Ibid.* pp.6-12.

including food.¹⁷ Therefore, in regulating butter and margarine producers, as I shall discuss later, butter producers were protected and margarine producers were ‘free’ to trade, providing a cheap alternative to genuine butter, thus keeping the cost of living down. They also comment on the streamlining of traders and small shops, who initially sold in small quantities, used credit and opened outside of working hours all for the convenience of workers. This eventually changed, whilst they were able to benefit from the packaging and branding of larger firms, retail outlets changed either becoming broader and selling a larger variety of products or becoming more specialised, such as butchers who benefited from wholesalers prices to make profits.¹⁸ This change was a further benefit to the public who were able to access a wider range of products which were of a better quality, and as mass production develops a lower price may result even further without the need for adulteration. The book as a whole provides the reader with great details of the issues faced by consumers and the changes to the food industry including the Sale of Food and Drugs Acts and the impact on the food trade. They use the ‘Cheated not Poisoned’ notion to explain why there was no decisive action taken against food adulteration. French and Phillips also point out how the consumer was absent from the active debate on the condition of food production, something which I tried to counteract by including the development of consumerism as a factor in causing change. Their effort produces a well rounded overview of the period and continues into the twentieth century to look at the next subject which arises, ‘Preservative Regulation.’ It is not until 1925 that regulations on preservatives are introduced to stop the use of

¹⁷ French & Phillips, *Cheated not Poisoned?* p.11.

¹⁸ French and Phillips, *Cheated not Poisoned?* pp.19-21

substances such as boric acid and formaldehyde.¹⁹ This topic deserves as much attention in its own right as the issue of adulteration, the use of preservatives is a huge topic as although a positive spin would suggest it keeps food safe for consumption, it effectively allows the manufacturers to keep goods longer and gain greater profits but not losing any stock by making food appear fresher than it truly is.

I feel French and Phillips' book is the most prominent work on the period and topic. However John Burnett, being a social historian, offers a more social analysis of the period than French and Phillips, comparing the various degrees of consumption based on social status, and focussing on overall consumption and quality not just adulteration. Writing in the nineteen sixties Burnett tries to make up for a lack of dietary histories and looks to dispel any myths that the period was characterised by plentiful fresh foods and ostentatious meals; proving this was not the reality for many. He covers a broad period from 1815 to the mid twentieth century, which gives a good broad spectrum of comparison. I hope that my study provides a different focus to them by looking closer at individual companies or products, such as Cadbury. I also hope to show how the changes which happened to businesses perpetuated changes in the market as a whole and the effect this had on the consumer. Furthermore, I intend to draw on some parallels between the concerns of the period with the concerns of today; whilst we are not short on choice we can never be one hundred percent sure on what is in the food we consume as production is still out of our hands. The more 'finished' the product is when we buy it the less we know

¹⁹ French and Phillips, *Cheated not Poisoned?* p.155

about it. It should be clean and fresh thanks to packaging advancements, it should be safe to eat due to regulations and preservatives, and we are given some idea of the contents thanks to labelling. However, we can't be quite sure whether the preservatives are pickling us from the inside out, or whether our beef lasagne actually has a hint of horse about it. There will always be a nostalgia and security afforded to home cooked foods, and an equal uncertainty on whether preservatives, flavouring, colourings and additives are beneficial or once again an adulterant of the foods we consume. I just hope we can take the same comfort that French and Phillips attributed to the nineteenth century in that we are not being poisoned.

These popular fears which we share can be seen in contemporary works. Then and now literary works aim to raise the status and awareness of the issue. Notable works of the period include *Tono Bungay* by H.G.Wells and *The Jungle*, by Upton Sinclair, both of which represent the popular fears surrounding food in England and America respectively. *The Jungle* makes for a disturbing read and gives in great detail the hygienic failings of food production. The absolute lack of animal welfare in meat production is only less striking when you compare it to the complete disregard to safety of the men working in the slaughterhouse, it wouldn't be surprising if human bodily parts or fluids had made their way into the food chain. The description takes you from the beginning with the slaughtered meat, (which is hardly fresh at this point as the week old meat trap or drain clogging's are emptied into the new barrels of meat) and are then sent to be processed. The pickling department or processing departments such as those making sausages then simply cover up the rotting and

rancid meat and make it 'fit for sale.'²⁰ *Tono Bungay* offers a different perspective, although one equally shocking since it highlights the blatant lack of regulations and the ability to sell any product, whether safe for consumption or not. It relates to the business side of the issue which ties in with our discussion. The character George Ponderevo and his Uncle set out to make their fortune by selling a concoction which acts as a 'pick me up.' It covers the topics of food hygiene and adulteration, as well as advertising, branding and business monopolies. They imply that with advertising you can take some thing that is worthless and by declaring through every medium that it is the best, it becomes the best. "You can GO for 24 hours on Tono Bungay..." but as he points out; "we didn't say if you could return on the same commodity."²¹ The product according to the character George was a 'damned swindle!' This, according to his Uncle, is 'fair trading.'²² They go on to cover topics such as politics, regulation and morality but overall the fact that the pair are able to sell their product openly characterises the reasons adulteration flourished. Therefore the fears of the nation are evident in the contemporary novels as well as in works expressly written to highlight the issue and trigger change, such as Engels *Condition of the Working Class in England*, which highlights dangers faced by the lower levels of society and reflects the hardships which were worsened by poor diets. I therefore hope that my discussions have will add to the existing literature by further developing the themes of intervention, commercial innovation, and adulteration which have been touched on by many other authors. I also hope that the amount of

²⁰ Upton Sinclair, *The Jungle* (New York, 1906)

²¹ H.G Wells, *Tono Bungay* (London, 2010). p.135.

²² Ibid, p.118.

literature highlighting the issue of adulteration justifies my looking at the subsequent period where the desired changes begin to occur.

Therefore the lower end of my time bracket marks the start of a time where 'consumerism' and 'public interest' began to have an impact and an opportunity to shape the market, as well as when government control and commercial innovation were creating the market which we still experience today. The latter end of the period will conclude before the start of the First World War as the issue of rationing and the types of 'adulteration' which were employed to make food stretch as far as possible should not be mixed up with the dishonest and avoidable forms of adulteration which we will discuss in this period. During the war some foods were made to go further by adding ingredients to rationed foods to make them go further, such as sausages containing less meat and more rusk. This was not dissimilar to the mixing and adulteration of items in the period which we are discussing, however the rationing diet has often been accredited to be extremely healthy, and for the first time people were generally accessing much fresher vegetables, including those which they had grown themselves, resulting in a fairly balanced diet. The food of the First World War I therefore feel deserves its own analysis, and should we conclude in our period that the adulteration by way of mixing and bulking was completely avoidable and unacceptable, it would be an unfair representation of that which happened under the circumstances of war.

The layout of this essay shall initially follow one particular case, featuring the Grocer Mr Kirby, which was present in the courts between August and September 1873, the

details and verdict of which were eagerly reported in the press and thoroughly discussed amongst reporters, manufacturers and other interested parties. My intention is to provide a macro history through the micro history of one particular case, which is representative of the period. The case was regarded to be highly important since it characterised the issues which were common to the many cases and trials of the sale of adulterated articles; such as with whom did responsibility for selling adulterated articles of cocoa lie, what notice should be given to the public of the adulterated article, and was there fraudulent intent in the selling of an 'adulterated' article which is popular with the public? Furthermore, the Magistrate, Mr D'Eyncourt was seen to be 'a common sense magistrate, whose decisions have been very rarely overruled.'²³ The verdict of this case was expected to shape subsequent trials as it was also one of the first high profile case following the revised 1872 Adulteration Act and gained importance since it involved the large manufacturing firms; Dunn and Hewitt whose product was sold by Mr Kirby and was the adulterated article in question, as well as other large firms who gave evidence in the case and who fought hard on the issue of adulteration, furthering the hype around the case.²⁴ *The Grocer* wrote that the case had "an importance beyond the sphere of cocoa drinkers. The application of the Act of parliament to the mal-practice of selling mixtures of cocoa, sugar, and starch, as cocoa, is a crucial test of the efficacy of the Act in deterring the sale of other mixtures, or of a harmful nature,

²³ Unknown Author, Untitled, *The Grocer*, Undated Clipping, Mondelez Archives, Cadbury Archives Historical Records 023 003224 p.94.

²⁴ Unknown Author, "The Cocoa Question" *The Grocer*, Undated Clipping, Mondelez Archives, Cadbury Archives Historical Records 023 003224 p.95

as pure or primary articles of diet.”²⁵ The reasons for this opinion is that if Mr Kirby could not be prosecuted for selling a mixture which contained only 20% cocoa, then the outcome would surely be the same for other cases; perhaps mustard, which had been adulterated with flour or any other combination of substances, which although not harmful could “lessen the value of the article sold.”²⁶ It is for this reason that the case was so heavily reported and why it was allowed to continue in court over many days. *The Grocer* went on;

“...that the decision given will be important to the trade. The manufacturers naturally feel somewhat indignant that their goods should be thus accused of being adulterated. One may well imagine that it is not pleasant for an old established house like DUNN and HEWETTS to have their cocoa ... charged with being a fraudulent admixture and an imposition upon the purchaser. They repudiate, as also do the other respectable firms, most emphatically the idea of adulteration as connected with their cocoa, and intend to fight the matter out to the bitter end.”²⁷

This also highlights the fact that adulteration, particularly the mixing of articles, had been a long established method when preparing articles, and so why should it begin to be regulated now? If the public have been consuming it for years, especially if it proves to be a popular article, is it right that it should be prohibited? This case was therefore a test of the ability of the act to “shut the market against the sale of cocoa

²⁵ Unknown Author, “The Cocoa Question” *The Grocer*, Undated Clipping, Mondelez Archives, Cadbury Archives Historical Records 023 003224 p.95.

²⁶ Ibid.

²⁷ Unknown Author, “The Cocoa Question” *The Grocer*, Undated Clipping, Mondelez Archives, Cadbury Archives Historical Records 023 003224 p.95.

and starch under the name of cocoa,” otherwise there would be nothing to prevent any “reckless person” from becoming a cocoa manufacturer and “reducing the amount of cocoa to a quantity even smaller by degrees than the “soluble” cocoa at 8d or 1s now contains.”²⁸ The case also sparked a range of correspondence from large manufacturers including cocoa manufacturers Cadbury Brothers and J.S.Fry and Sons whose letters regarding the case as well as adulteration in general were published in the press alongside the commentary and articles on the court proceedings. The case also leads us to discussions on points such as the terms used to describe an article, and the specific name used for a type of product. This point cannot be over looked when analyzing adulteration, since adulteration was technically legal if the public were aware of the condition of the article they are purchasing. For example, if the description was present on the label, or to some extent if the name of the article was known to be an adulterated form of a superior product then it may be sufficient notice to the consumer; such will be seen in the case of ‘cocoa’ and ‘soluble cocoa’ but also in the example of ‘margarine’ and ‘butter,’ the latter being a case which resulted in its own Act. In turn this attention to labelling and product description leads to a rise in branding, marketing, packaging and product development as well as the development of the consumer and consumer choice. This gives us the opportunity to look at how commercial innovation impacted upon the presence of adulteration and how this commercial innovation was restricted by government intervention and legislation. The aim of this analysis is to firstly discover which factors had an effect on the presence of adulteration in the period

²⁸ Unknown Author, 'Untitled', *The Grocer*, Mondelez Archives, Cadbury Archives Historical Records 023 003224, p.96.

between 1870 and 1914, either positive or negative. The second, is to discover the extent to which adulteration was removed, or on the contrary in what ways it was actually legalized, did labelling permit the sale of adulterated goods? Did scientific advances make way for new forms of adulteration which were meeting the same ends of 'prolonging shelf life' or making preparation easier? The use of the above court case will enable us to see the difficulties and ambiguities which arose when targeting adulteration and how the legislation could evolve to correct these flaws. It will also enable us to analyse the individual impact from manufacturers and large businesses, and how commercial innovation and other factors shaped the market for 'purity.'

Chapter 1 - Commercial Innovation and Consumerism

The period was characterised by a laissez faire economy in which trade was unhampered and left to 'self regulate.' It was the fact that the government didn't want to hamper trade which really allowed for the commercial innovation to progress, but which prevented them from regulating adulteration quickly or efficiently. Even the Acts which were passed still leave a great deal of room for the manufacturers to maneuver as will be seen later. I mentioned that my interest in food adulteration sprang from the vast amounts of E-number, preservatives, additives and genetically modified wonders that we consume today, and why this is accepted. Although we have a lot of information handed to use by the manufacturer, and by government recommendations for daily consumption, we still experience crises like the recent 'horse meat scandal.' In the period we are analyzing as well as in the present, we rely on the manufacturers of our food to adhere to regulations, and provide articles which are not deceiving the consumer. By allowing the use of ingredients, which to the best of their knowledge at the time were 'non-harmful,' companies could create products which the public would enjoy and would be safe to consume. The firm of Cadbury did say; "everyone knows it is difficult at once to change a perverted public taste, for instance, from bread unnaturally white. We are endeavoring to create a taste for "genuine cocoa," which is not in use more expensive than the mixed," but they were competing against the 'perverted taste' for soluble cocoa.²⁹ Therefore, while the manufacturers were expected to comply with the simple demand of the government that their food articles were safe to consume and being honest in their description,

²⁹ Cadbury Brothers, "Correspondence," *The Grocer*, 30/08/1873

they were still permitted to respond to the demands of the consumers which often were not for 'pure' products but those which had been altered.

The popularity of 'adulterated' articles was a factor in the way the government approached the issue of adulteration and the commercial response to it. To ban popular commodities would not be beneficial to trade. It would also have resulted in many of the items which were affordable to the lower levels of society being removed, creating a severe food shortage. During the proceedings it was questioned whether it was necessary for cocoa to be prepared in the way the sample was to make it soluble, and Mr Wonter believed that the discussion was particularly important "as it affected the whole of the manufacturers of cocoa (or the commodity sold as such) throughout the country," given that two thirds of manufactured cocoa was prepared in the same way as the sample in question.³⁰ This shows just how large the market was for the goods which were the focus of the food adulteration Acts. The environment in which adulteration, including the soluble cocoa thrived, was often attributed to influx of people from the countryside to the city.³¹ This urbanisation also caused local administration and control of food to be abandoned as there was no framework which could cope with the vast task. The state also believed in free competition and from about 1815 there was no general attempt from the government to interfere with the producer, retailer or consumer. Inflation and the French wars had also furthered shortages.³² Firstly the product of food was strained by the

³⁰ Unknown Author, "The Cocoa Question," *The Grocer*, Undated Clipping, Mondelez Archives, Cadbury Archives Historical Records 023 003224 p.93.

³¹ Burnett, *Plenty and Want* pp.81-82.

³² *Ibid.*

increased demand, but the affordability and preparation of items were also key. There was primarily a need for foods which were convenient to prepare at home. In many cases there was a limited amount of kitchen equipment which was available to working class people, along with the long working hours, low wages and cost of fuel there was a serious requirement for meals to be easy and cheap to finish preparing at home. During the case of Mr Kirby, Dr Bartlett was asked what he would do with some cocoa beans which were produced in evidence, to consume them. “He replied that he would grind them in a paint mill, set finely like a coffee mill, mix it with cold water, and afterwards boil it for ten minutes not too fiercely, stirring all the time. Of course he would have to roast the beans if they were raw.”³³ For this he was ridiculed by the court and also later in the papers.³⁴ The thought that a working man would be able or willing to go to this length of preparation was laughable and so this gave weight to the need for ‘soluble’ cocoa. “Mr Wonter ridiculed the idea of a working man going to all that trouble to get a cup of cocoa, and maintained that the mixtures of cocoa as now sold were a great convenience, as it could be prepared for consumption in a few minutes.”³⁵ Furthermore the evidence of Mr John Holm of Dunn and Hewett stated that “in one sense cocoa was not soluble at all, as the whole of the particles of cocoa could never be dissolved. In fact there was really no such thing as soluble cocoa.” He considered that no customers would buy pure ground nibs as they are so indigestible; boiling would not resolve this, it could be made more

³³ Unknown Author, “The Cocoa Question,” *The Grocer*, Undated Clipping, Mondelez Archives, Cadbury Archives Historical Records 023 003224 p.93.

³⁴ Ibid.

³⁵ Ibid.

wholesome if some of the cocoa butter were skimmed off, but adding farina and sugar made it more digestible.³⁶

“As manufacturers of cocoa and chocolate in all their multitudinous forms we can speak without undue bias, and we again assert that mixed cocoa powders are not only the best for general use, but the only possible form in which cocoa can be used as a national beverage for the masses. All the so-called pure cocoa powders (our own not excepted) are indeed exactly pure analogous to skimmed milk, and labour under the disadvantage of being not only so expensive as to be quite out of the reach of the bulk of the population, but also of requiring boiling, as shown by Messrs. Cadbury’s own instructions on their packets - instructions to which we have observed they have recently been obliged to call special attention by means of an additional band round their packets. It was this trouble of boiling which years back was the great obstacle to the popular use of cocoa, and which Mr. Daniel Dunn devoted his energies and talents to render unnecessary. This he accomplished, and the result is seen in the present enormous consumption of raw cocoa in this country, the bulk of which manufactured into “soluble” cocoa; so that this article of commerce has come to rank as one of our staple foods.”³⁷

Therefore soluble cocoa was created by the need for an item which was easy to prepare regardless of whether it was true to how cocoa would act if it was not adulterated. “It was a fact that the majority of poor people preferred these mixtures to

³⁶ Unknown Author, “The Cocoa Trade and the Adulteration Act; important case,” *The Grocer*, Undated Clipping, Mondelez Archives, Cadbury Archives Historical Records 023 003224, p.95.

³⁷ Dunn & Hewett, “Correspondence,” *The Grocer*, 23/08/1873, Mondelez Archives, Cadbury Archives Historical Records 023 003224 p.97.

the cocoa which would take an hour to prepare.”³⁸ Furthermore during the trial it was argued “that the practice of mixing cocoa had been in existence from the earliest times, and had been thus sold for more than 70 years.”³⁹ Therefore manufacturers appear to have been selling soluble cocoa for so long, even after the Acts came into effect and the attention to the issue of adulteration was made public in the press and advertising the public taste for cocoa in this form could not be curbed. Since it not proven to be harmful to health there was no need for the government to stop its production, and therefore the product continued to develop. Even today we still have prepared cocoas to which we can simply add water, the dried milk removing the need to add anything more to achieve a thick milky drink. The fact that the prepared cocoa ‘thickens in the cup’ was given by Cadbury as a way to detect adulteration, however I believe this was probably a more comforting and filling beverage for the working class which would also increase its popularity, especially as it was also sweetened.⁴⁰ Coupling this with the cost of soluble cocoa to pure cocoa we can see another reason for its popularity. While it is claimed that Cadbury Cocoa Essence is better value in the long run since it is a kin to a concentrate and a packet goes further than soluble cocoa, it requires a larger outlay to purchase each packet than it would soluble cocoa. Furthermore you would probably have to purchase sugar to sweeten the article to taste, another outlay which the lower classes couldn’t justify when there is a cheaper alternative not requiring additional ingredients. There was, therefore, an evident desire for manufacturers to take out a lot of the work of preparing an item and for

³⁸ Unknown Author, “The Cocoa Question,” *The Grocer*, Undated Clipping, Mondelez Archives, Cadbury Archives Historical Records 023 003224 p.93.

³⁹ Ibid.

⁴⁰ Dunn and Hewett, “Correspondence,” 23/08/1973, *The Grocer*, Undated Clipping, Mondelez Archives: Cadbury Archive, Historical Records 023 003224 p.97.

them to produced finished articles which were convenient and affordable to the public. The preference for certain tastes and characteristics is also understandable, if we think about the expectation the public had for 'yellowish milk', it may be that it was a nearer representation to cream or the types of milk experienced by those who had moved into cities from the countryside. “Mr Hattersley, Managing Director of the Aylesbury Dairy Co., reported in 1901 that he had been trying for years to stop the practice [of colouring milk] but had received complaints from his customers.⁴¹ In many ways the adulteration was to make the substance more familiar and appealing to the public, and the particular practice was not forbidden until 1912.⁴²

Therefore it seems that the more harmful adulterations had generally been eradicated and the adulterated foods which remained were established out of public taste and the need for cheaper and filling foods. Although Cadburys Cocoa Essence was not a failure, the pure product, along with other pure cocoas from producers such as Fry and Van Houten, never succeeded in pushing the soluble cocoas from the market. margarine, as I will show later, arose out of the need for an alternative to an expensive item such as butter, and was popular, even after the Margarine Act bought in regulation stating that it must be clear that the product is not butter. The fact that it was not genuine butter was not a big enough factor to remove its popularity, it had become a commodity in its own right even though it was an imitation of something else. I believe this shows that the consumer plays a large part in shaping the market, the grades and qualities of food which are available to us to give us a wide range of

⁴¹ Atkins, “Sophistication Detected,” *Social History*, pp.321-322.

⁴² Ibid.

choice, and shows us that many different products can survive along side each other, as many different people require different characteristics from their food. Mr Wonter said that an adulteration “is to do something to an article that would spoil it; but [the manufacture of soluble cocoa] is nothing of the kind.”⁴³ Mr D’Eyncourt even agreed that the evidence in the trial of Mr Kirby showed that should cocoa be manufactured and sold as pure it would not be desired.⁴⁴ This preference for foods which were once termed ‘adulterated’ is the reason why commercial innovation must be discussed in regards to the course of adulteration. Messrs Dunn and Hewett and Messrs Taylor brothers were present at the trial of Mr Kirby as they both “confident in the assurance that the prosecution was a most unjust one, and that the article sold was a perfectly genuine commodity.”⁴⁵ There was a genuine belief from the manufacturers that the products they were creating were in no way a fraud. The manufacturers continued to enjoy great success despite the negative press and reports surrounding their products.

However, that the public had a taste for adulterated products, and that these products were not curbed under the Acts could also be seen as a negative. Taking any product which is an admixture, “we have no guarantee that the quantity may not be reduced to one per cent.”⁴⁶ This is no different to the watering down of milk, the primary ingredient is still being deteriorated with no safeguard against the degree if

⁴³ Unknown Author, “The Cocoa Trade and the Adulteration Act; important case,” *The Grocer*, Undated Clipping, Mondelez Archives, Cadbury Archives Historical Records 023 003224, p.95.

⁴⁴ Ibid.

⁴⁵ Unknown Author, “Grocers and the Adulteration Act,” *The Grocer*, Undated Clipping, Mondelez Archives, Cadbury Archives Historical Records 023 003224 p.94.

⁴⁶ Unknown Author, “Correspondence,” *The Grocer*, Undated Clipping, Mondelez Archives Cadbury Archive Historical Records 023 003224 p.96.

adulteration. In the case of cocoa the argument for solubility allows for some justification for the mixing of other ingredients, it masks the fact that in many ways it is still the price which benefits most, by becoming more affordable and giving a greater profit margin. “Milk that is diluted is usually served so to meet a lower price offered, just as the deteriorated or adulterated cocoa...” but “...the poor milkmen, ... have been offered up a holocaust to public vengeance and sacrificed by an exacting people to please some Mawworm sentimentality of retribution.”⁴⁷ Milk was one of the longest running adulterations to continue, with efforts still being made beyond the end of our time period to stop the addition of harmful preservatives and to regulate quality in as far as it not being diluted.⁴⁸ Therefore in many ways the Acts did not remove the negative factors perpetuated by consumer demands. A taste for adulterated products and the need for cheap foods meant that a market existed for foods which although not being harmful were of a low quality.

There are positives and negatives to the fact that during the period the increased consumerism saw the large business growth, resulting in production resting in the hands of far fewer manufacturers than previously. On the one hand this allows for brands to develop and allows for advancements in technology and science as larger profits enable more developments. On the other, it could allow for businesses to be successful from selling less wholesome items, because the brand and product is popular.

⁴⁷ Unknown Archives, “Correspondence,” *The Grocer*, Undated Clipping, Mondelez Archives Cadbury Archive Historical Records 023 003224 p.96

⁴⁸ Atkins, “Sophistication Detected,” *Social History*, pp. 317-339.

The first advancement which we should look at is the better conditions which resulted from large manufacturers. According to F B Smith, ‘until the 1870s bread production was centred in small, primitive bakeries, where bakers were often locked in the kitchen through the night, in 80 degree heat, with no privy or washing facilities.’⁴⁹ It was known that bakers would wash in the water intended for making the bread and would relieve themselves in the room where the food was being prepared. The recent BBC programme *Victorian Bakers*, took four modern day bakers and using an old bake house, with the technology and ingredients of the time, asked them to recreate recipes and quantities expected of the nineteenth century bakers. One of the main issues the bakers faced was kneading the vast quantity of dough by hand, resulting in them sweating profusely into the dough mixture, and being unable to knead the dough to the extent that a modern mixer would achieve. I spoke to one of the bakers, Mr John Swift, who commented that the bakers were effectively 'killing themselves to produce enough bread to feed the local people, and were unable to do so cheaply enough which resulted in adulterations to allow people to afford the loaves and for the bakers to make enough profit to feed themselves.' He was saddened by the conditions and what he felt was a fear of the smaller bakers to lose their jobs to machines, but concluded that there was no way this type of production could have continued. The developments in baking equipment were delayed compared to other industries, but it was only the introduction of machines to mix the dough, large temperature controlled ovens and efficient factory conditions which allowed bread production to become safer and to respond to demand.⁵⁰ Thus

⁴⁹ F.B.Smith, *The Peoples Health 1830-1910* (London, 1979), pp.208-9.

⁵⁰ John Swift, Telephone interview conducted February 2016

with large companies such as Lyons or Hovis, mass production turned out thousands of loaves per day. The factories were therefore much larger and in the hands of fewer companies. The regulation of ingredients and conditions was therefore easier to maintain, as both the company had an interest in its standards, and government boards had much more chance of assessing large producers standards in a limited number of factories, than they did years previously of attempting to locate numerous private bakeries. In the realms of cocoa, “progress in science and mechanism rendered this antiquated plea (of adding sugar/farina) unnecessary... By expressing the excess of butter from the cocoa, ... the necessity of adding starch is dispensed with, and consequently the proportion of nitrogenous and alkaloid principles is considerably increased, instead of being diminished.”⁵¹ Cadbury feature so heavily in this analysis as they were prominent figures in the period, not only were their advertising campaigns so eminent but they also had involvement in the creation of the Act. With manufacturers being responsible for their items, they had a motive to increase quality and to put their names to their items. As I will mention in the next chapter, Hovis embossed their loaves with their name as a way to ensure the public only bought their genuine article as opposed to imitations. Whilst the intention here could be attributed to avoiding adulterated and imitated articles, this was actually one of the first instances of branding.

Advertising and branding rose out of other forms of adulteration too. Pears soaps for example have often been credited with one of the strongest and earliest advertising campaigns. ‘In 1862 Thomas Barratt, often described as the father of modern

⁵¹ Cadbury Brothers, “The Cocoa Questions,” *The Grocer*, 21/03/1874, p.98.

advertising, saw a way of turning a little known quality product, Pears soap, into a household name by replacing the traditional understatement with a simple, attention-grabbing message.⁵² For Pears there was a ‘threefold formula for success: spotting a gap in the market, developing a high-quality product to fill it, and convincing as many people as possible to buy that product by the use of extensive promotion and advertising.’⁵³ The advertising of Pears Soaps is extremely relevant to the case as Barratt decided to play on the growing public concern for health and quality by using the support of prominent medical persons to put their name to a brand or product. Using eminent figures to endorse a product would become a common practice in the period and a vast amount of adverts, including for many years those of Cadbury and other cocoa manufacturers, would feature testimonies from medical professionals just like celebrity endorsements we experience today. The Pears adverts featured Sir Erasmus Wilson, President of the Royal college of surgeons, and members of the pharmaceutical society of Great Britain.⁵⁴ Soap was experiencing similar issues to food in terms of adulteration; therefore since ‘products actually contained harmful ingredients such as arsenic, the medical men were happy to endorse Pears because it was ‘without any of the objectionable qualities of the old soaps.’⁵⁵ Through the use

⁵² Cadbury, *Chocolate Wars* p.1145.

⁵³ Mike Dempsey, (ed) *Bubbles, Early Advertising Art from A&F Pears LTD* (Glasgow, 1978) p.3.

⁵⁴ Cadbury, *Chocolate Wars*, p.1145.

⁵⁵ Cadbury, *Chocolate Wars*, p.1145.



of beautiful women and children the message from Pears was that their product could make you beautiful and not harm your complexion.⁵⁶

For Cadbury and subsequently others, the message would effectively be the same; consume our product and you will be healthy. They used this method in promoting their Cocoa Essence, by

showing their support for the anti-adulteration campaign they perpetuated the presence of ‘purity’ in the press by making it the basis of all their adverts. Their first step towards this was by winning over the medical press; they did this by visiting doctors with samples of their products and the *British Medical Journal* published that ‘Cocoa treated thus will, we expect’ prove to be the most nutritious, digestible and restorative drink.⁵⁷ *The Lancet* and *The Grocer* both showed their support for the product and in 1867 Cadburys began their genius advertising campaign which would rebrand their image and make their name stand out as a supporter of purity. ‘For the first time, they were effectively rebranding the whole image of cocoa. Their Cocoa

⁵⁶ See example image above, Published 1885, History of Advertising Trust, location 20/2/45/40

⁵⁷ Cadbury, *Chocolate Wars* p.1138.

Essence was honest, and they intended to shout it from the rooftops.’⁵⁸ Their slogan, ‘Absolutely Pure, Therefore Best’ was thought up by Richard Cadbury and was printed in newspapers, posters, and even plastered on London buses. Soon the Cadbury name, synonymous with the purity of the company’s product, was everywhere. ‘Given half a chance, the Cadbury brothers would have covered the dome of St Paul’s,’ protested one writer.⁵⁹

However it was this level of advertising which benefited the campaign against adulteration as for the first time the message was truly accessible to every man woman or child who ventured anywhere near a shop. No longer confined to papers or medical journals, the message that not all products were the same in quality, was being spread. We mentioned that the Acts did nothing to guarantee the quality of an item, especially as there was a public demand for adulterated tastes. Cadbury, however, were showing that there was an emerging consumer market that should and was being given a choice between quality and quantity. It may not have changed immediately what people could afford to buy or change their preference for certain products, but it was showing that there was competition and with the creation of branding companies would have to answer for what their products were offering. It made you question what the products you purchased were offering you in comparison to theirs. Cadbury made the decision which truly made the most of this branding; all other lines of Cadbury cocoa were removed, despite many of them

⁵⁸ Cadbury, *Chocolate Wars* p.1181.

⁵⁹ Ibid.

being their best selling products.⁶⁰ This therefore pushed not only Cadbury's Cocoa Essence to the forefront but as unadulterated cocoa was the only product Cadbury's would sell, the company as a whole stood for purity and became a brand which could be trusted. This also gave impetus to their standing in the political campaign surrounding adulteration. Dunn and Hewett had on one occasion attempted harm their reputation in the press by pointing out that the majority of their products were 'adulterated' or mixtures.⁶¹ However Cadbury removed this possibility and also made their competitors answer to their own qualities. "The Food Adulteration Acts, and George Cadbury's involvement in it generated acres of publicity for Cadburys Cocoa Essence, and a flood of advertisements from Cadbury's competitors protesting that they only mixed cocoa with the most wholesome ingredients."⁶² However since Cadbury's competitors were on the defensive, against not only Cadbury but government legislation, and the advertising which ensued only heightened public awareness of the matter, it made people very aware of the companies which openly defended adulteration and those which did not. Cadbury continued to promote its integrity in the 'Absolutely Pure, Therefore Best' campaign, (see appendix one for example adverts) which ran for thirty years, all the while keeping the issue of adulteration fresh in the public eye, in more obvious places than just newspaper articles, making it more accessible to the lower levels of society who were affected by it the most.

⁶⁰ Bradley, *Cadburys Purple Reign* p.13; Appendix One: See four images in appendix one, showing the typical wording and imagery used in Cadbury advertising, including 'Absolutely Pure' guarantees of purity and health benefits.

⁶¹ Dunn & Hewett, "Correspondence," *The Grocer*, Undated Clipping, Mondelez Archives, Cadbury Archives Historical Records 023 003224, p.97, (date unknown but published between 03/08/1875 and 09/08/1875)

⁶² Bradley, *Cadburys Purple Reign* p.13.

However every coin has two sides and on the flip side to Cadbury's pure intentions, lays the notion that even their pure 'Cocoa Essence' was 'adulterated'. For years, "the result of boiling cocoa nibs or ground cocoa-nibs [was] to produce a clear liquid with a large amount of sediment."⁶³ The pure cocoa nib was so "indigestible that people would not have it," and the fat would have to be skimmed off.⁶⁴ Cadbury's Cocoa Essence was manufactured in this way; the fat was removed thanks to the advancements of the Van Houtens Press. But it was claimed that the cocoa fat was actually a valuable part of cocoa, and that to remove it was an adulteration in itself.⁶⁵ Could an intention so pure actually be detrimental? In many ways it does seem that you could describe the process as an adulteration if you had the motive. It was deteriorating the condition of an article by removing part of it, just as much as 'soluble' cocoa was deteriorated by using starch and sugar to soak up the excess fat and form a more miscible product. Therefore, in one way Cadbury could be named as an adulterator, however, they are only removing one part of the cocoa, and it is a part which is often attributed to causing indigestion and giving the article a bitter taste. Cadbury do not seem to have a fraudulent motive in using the Van Houten press to remove the Cocoa Butter, instead they are trying to remove the need for adulteration by adding 'sugar and farina'. It seems there is a question of motive to be considered if we want to conclude whether large producers were helping or hindering the creation of a better food market. To use Cadbury as an example, their intentions show a genuine belief that adulteration is an evil which needs to be removed. The

⁶³ Unknown Author, "The Cocoa Trade and the Adulteration Act; important case," *The Grocer*, Mondelez Archives, Cadbury Archive Historical Records 023 003224, p.95.

⁶⁴ Ibid.

⁶⁵ Ibid.

archive of private correspondence between Cadbury and other retailers, manufacturers, customers and company representatives shows on many occasions that they take the matter of adulteration very seriously.⁶⁶ There are numerous letters which firstly attempt to justify the merits of removing cocoa, and which explain methods of preparation. Others discuss pricing between manufacturers and show some attempt at cooperation, in an attempt to keep prices similar among manufacturers such as themselves and Frys. They would swap price lists before they were published. There are also mentions to the use of alcohol in products from other manufacturers, such as in a type of eating chocolate, their response being that it is a terrible adulteration and must be stopped before it harms children who may consume them! “We are writing to yourselves and Messrs Rowntree to consult you as to whether you think any further action can be taken to check the trade in an article as injurious to the children & young people who form the majority of the consumers.”⁶⁷ Their Quaker principles including temperance as well as their philanthropic interest show strongly, and I believe that they genuinely were crusaders for the removal of adulteration, the company letters being vital clues as to the motives which drove the company revealing more about the intent to provide unadulterated products. As much of the adulteration of the period affect the lower classes, it would be beneficial if more retailers had philanthropic interests like Cadbury. However, philanthropic interests can only go so far. The product must be a desirable one or no amount of advertising, press and good intention could make it work. The Standard Bread

⁶⁶ Cadbury Brothers, "Cocoa Manufacturers Letter Book 1891-1898", Mondelez Archives, Cadbury Archive Ref 023 002006 ; Mondelez Archives Cadbury Archive Historical Records, 812 001532; Mondelez Archives Cadbury Historical Records, 023 003224.

⁶⁷ Cadbury Brothers, "Cocoa Manufacturers Letter Book 1891-1898" Mondelez Archives, Cadbury Archive 023 002006 p.134.

campaign is more than proof of this. In an attempt to remedy the perceived poor nutrition and ‘deleterious effect’ from white flour, the *Daily Mail* published a campaign for ‘standard bread.’ “The *Daily Mail* pushed home the message; it was necessary to have a legal standard for the purity of bread, ordinary white bread caused ill effects on the teeth, standard bread was more digestible and had greater bone and tissue building properties than its white counterpart.”⁶⁸ It also focused on the value of the germ and grain, believed to be beneficial to the brain and nerves. However, the rough brown bread could not compete with the preference for white bread and the campaign failed.⁶⁹ Therefore ideas of purity and the pushing of health benefits could not be a success without the product suiting public tastes. This suggests that commercial innovation and product development were key in producing popular items. If we want the public to consume wholesome unadulterated food, we have to find a way to offer them a product that fits this description as well as ticking all the boxes for taste, texture and appearance.

⁶⁸ Mark Weatherall, “Bread and Newspapers: The Making of a Revolution, in the Science of Food.” Harmke Kamminga and Andrew Cunningham (eds), *The Science and Culture of Nutrition, 1840-1940*, (Atlanta, 1995) p.183

⁶⁹ Weatherall, “Bread and Newspapers,” p.185.

PRESS COVERAGE

We have already touched on the issue of press coverage, however, mentions of adulteration occurred religiously in newspaper articles, or in advertisements. The publication of the details of the trial of Mr Kirby sparked a large amount of correspondence which was published in *The Grocer* correspondence columns. The letters came in from many manufacturers but most eminent in the discussion was of course from Messers Cadbury Brothers who wrote prolifically on the subject either to defend their business from comments which would depreciate the value of their products or out of their genuine concern for adulteration and the health of the public. Even outside of the court room they continued the debates raised in the trial, the following being an example of the many letters they wrote either directly to *The Grocer* or in reply to other manufacturers letters;

“The main part of the evidence [of the defense] was to show that the addition of sugar and starch to cocoa is necessary and that they improve its dietetic value, also that the removal of the cocoa butter is taking away “what is the most valuable part” of the cocoa. We have evidence of many eminent men to show that an admixture of and starch with cocoa does not improve its dietetic value, because it is simply adding heat-givers, which genuine cocoa already has in excess, and diminishing the proportion of flesh forming constituents and of theobromine, rendering it a thick, heavy and (to thousands of persons) an indigestible compound; whereas the cocoa-nibs, or the nibs from which two thirds of the fat has been extracted, is a thin and refreshing beverage.”⁷⁰

They took every opportunity to comment on the issue of adulteration, and their adverts reflected the same sentiment; that adulteration should be removed at all costs.

⁷⁰ Cadbury Brothers, “Correspondence,” *The Grocer*, 16/08/1873, Mondelez Archives, Cadbury Archive Historical Records 023 003224, p.95.

This however was not the only way in which the press covered the issue of adulteration. *The Grocer* Newspaper published a column entitled ‘Notes of Novelties and New Manufactures’ which was “designed to inform tradesmen on the subject of new and improved manufacturers. Nothing can be here noticed that does not possess a distinct claim to speciality.”⁷¹ The column commented heavily on the cocoa trade and with particular reference to the advances in Cocoa manufacture of which Cadbury were at the forefront. They sing the praises of the Cadbury's Cocoa Essence both as a product and for its health benefits. “Messrs. Cadbury Brothers have stepped forward to supply the two wants. They have, without the addition of any foreign substance, rendered their “Cocoa Essence” sufficiently soluble for the whole to be taken.⁷² Other papers such as *The Lancet* and *Medical Mirror*, also publish on the success of the Cocoa essence;

“Anybody who can produce at a cheap rate an article of diet of an important kind is deserving of thanks from the public, and especially from those among the public who are striving to benefit the social and moral condition of the wage classes, and who are trying to check the deterioration of race that our overcrowded manufacturing towns, and that the paucity of cows milk is bringing upon the rising generation....⁷³

The press coverage goes some way therefore to exemplifying unadulterated products and attempts to create an air of standard which retailers, manufacturers and where possible consumers should strive to obtain. “There are thousands of shopkeepers who

⁷¹ Unknown Author, “Cocoa Essence,” *The Grocer*, 6 July 1867, Mondelez Archives, Cadbury Archive Historical Records 012003224, p.31.

⁷² Ibid.

⁷³ Unknown, “Cadburys Cocoa Essence,” *Medical Mirror*, 01/02/1868

will be glad of the opportunity of retailing cocoa which is guaranteed to contain nothing but the natural constituents of the berry, while there are thousands of invalids who would prefer a “concentrated” to an amalgamated cocoa.”⁷⁴ The support of the papers was important as firstly being in the press for positive reasons is ‘free advertising’ for businesses or products. The levels of society who were reading these articles were more like to be able to afford the unadulterated products and exercise consumer choice, therefore it was providing a platform to a the market for the manufacturers to utilise. The press also increased the awareness among the public of the issue of adulteration, whilst there were articles on the issue of adulteration in political or social ways, having articles written about specific problems is offering a solution to the public by showing them products which they could benefit from. On the other hand, there was negative press as well as positive press. As we have mentioned Cadbury put their competitors on the defence and they had to respond the cries of adulteration against them. Among the correspondence from Cadbury and their fellow manufacturers that was published was a series of at least six letters between Dunn & Hewett and Cadbury on their views of the terms cocoa and chocolate, and the addition of starch in relation to the amount of nitrogenous and carbonaceous material which should be consumed or be present in one article. This was using the scientific knowledge at the time to attempt to justify the composition of various articles, just as the analysts had been during the trial.⁷⁵ As well as this there was great debate over Cadbury’s use of the word starch, which they used to

⁷⁴ Unknown, “Cocoa Essence,” *The Grocer*, 6 July 1867, Mondelez Mondelez Archives, Cadbury Archive Historical Records 012003224, p.31.

⁷⁵ Personal Letters between Dunn and Hewett and Cadbury, Mondelez Archives, Cadbury Archive 012003224, p.97.

describe to the public that there were additional ingredients added to soluble cocoa.⁷⁶ However Dunn and Hewett felt that this was immoral on the part of Cadbury since with the public it would conjure thoughts of the substance used in laundry rather than something fit for consumption.⁷⁷ This was not dissimilar to the arguments surrounding the term 'soluble' and highlights once again the term used when communicating with the consumer were very important.

⁷⁶ Personal Letters between Dunn and Hewett and Cadbury, Mondelez Archives, Cadbury Archive 012003224, p.97.

⁷⁷ Ibid.

Chapter 2 - The Case of Mr Kirby

The case of the grocer Mr Christopher Kirby, of 212 High Street, Camden Town, summoned to the Marylebone Police Court and brought before Mr D'Eyncourt, by Mr William Rouch, the inspector of the Vestry of St Pancras on grounds of selling adulterated cocoa, reveals a many of the issues faced in regulating adulteration. Mr Rouch stated the quantity of Cocoa sold by Mr Kirby and tested by himself contained 'sugar, starch, sago, and arrowroot, with intent to increase the bulk.'⁷⁸ The defending party denied any intent to increase bulk or any fraudulent activity, instead stating that the article was manufactured for its solubility. The first two hearings consisted of Mr Rouch's evidence, along with the comments of the solicitor to the Vestry, Mr Cooper, and then that of Mr Bartlett, analyst of South-Square, Grays Inn. Mr Wontner, Solicitor for the defendant used the third hearing to present evidence from works such as Johnsons "Chemistry of Common Life," as well as Encyclopedias and other works to discuss the nature of cocoa and its preparations with "the view to shew chiefly that those preparations had been known and sold as soluble cocoa for the last 60 or 70 years."⁷⁹ The aim of Mr Wontners' evidence was to show that cocoa powder 'in its original form' was not soluble and would not dissolve in water regardless of how long it remained there, he demonstrated this by presenting on two occasions a clear bottle containing cocoa and water. The cocoa particles could be seen 'floating about' when it was presented to the court on two different occasions, in his view proving that cocoa could not be soluble unless it was

⁷⁸ Unknown Author, "The Cocoa Question" *The Grocer*, 1873, Historical Records 023 003224 p.93

⁷⁹ Unknown Author, "The Pall Mall Gazette on the Cocoa Prosecutions in St Pancras," *The Grocer*, August 1873, Mondelez Archives, Cadbury Archive Historical Records 023 003224 p.93.

mixed with other ingredients, and should therefore not be considered an adulteration.⁸⁰ As the article of 'soluble cocoa' had been sold for many years, (even if not for as many as the defense claims), and in some ways could be seen to serve the purpose of creating an easily prepared 'soluble' drink, it was not a straight forward case to prosecute.⁸¹ There were no specific guidelines on the limits to which an article could be mixed before it is adulterated; should any amount of additional ingredients be prohibited? If not, who should decide on the point where an article stops being 'cocoa' for example and starts being 'cocoa flavoured starch', and how should they decide this? The question is a huge one, to say that no product should be mixed with any other ingredients could in many ways prevent a vast amount of the most commonly consumed foods being sold. Is there a market for products in their pure state? Would people willingly choose to buy pure ground cocoa nibs which were not sweetened, laborious to prepare and for some, unaffordable? All these factors go some way to showing how important an example this case is of the problems and factors which had to be considered in the early days of the government intervention in the food market. As we progress with the proceedings of the case we shall look at each question as it arises and see how it was tackled at the time and throughout our period.

⁸⁰ Unknown Author, "The Cocoa Question" *The Grocer*, Undated clipping published 1873, Mondelez Archives, Cadbury Archive Historical Records 023 003224 p.93.

⁸¹ During this essay 'soluble' shall be used firstly as it was by the writers at the time, and secondly if used by myself to represent the type of cocoa being questioned for adulteration. I do not intend to make a conclusion on whether or not the term 'soluble' is correct in describing the behaviour of the cocoa.

The Power of a Name

During the opening of the appearances in court it was explained that Mr Kirby had been summoned to court for selling a mixture of cocoa, sugar and farina, with fraudulent intent. Following the case laid out by the prosecution, Mr Wonter came forward to start the defense, which rested primarily on the fact that cocoa was not soluble until it had been mixed with other ingredients. He explained that sugar and starch were added “for a certain purpose and to meet a certain demand. The cocoa bean, after being ground fine, would not mix with water, and the admixture of farinaceous substances and sugar absorbed the smaller particles of cocoa and kept them suspended in the water.”⁸² The selling of admixtures which were not harmful was still permitted under the Food Adulteration Acts, however, the resulting mixture of which was sold by Mr Kirby, according to Mr Wonter, was “something that could be drunk, and that was called soluble cocoa.”⁸³ Mr Cooper immediately replied however that the article purchased from Mr Kirby was “sold as chocolate.”⁸⁴ Therefore the first theme which arises in this case is that the name or term for an article is essential in whether the article is deemed to be ‘adulterated.’ The 1860 Act first laid out that any “person who shall sell warranted as pure or unadulterated, any Article of Food or Drink which, to the knowledge of such Person, is adulterated and not pure,” shall be convicted.⁸⁵ This policy of honesty and information continued with the subsequent acts; ‘adulterated’ (or mixed) goods that were not injurious to

⁸² Unknown Author, “The Cocoa Question” *The Grocer*, Undated Clipping - 1873, Mondelez Archives, Cadbury Archive Historical Records 023 003224 p.93.

⁸³ Ibid.

⁸⁴ Ibid.

⁸⁵ “A Bill for Preventing the Adulteration of Food and Drink 1860,” Mondelez Archives, Cadbury Archive Historical Records 023 003224, p.147.

health were still permitted to be sold providing that the consumer was informed of the condition of the article. The following Acts laid out the boundaries in much greater detail the same principle of giving notice and therefore not deceiving the purchaser stood. The Margarine Act was an example of this in its own right, the sale of Margarine was not prohibited but the Act protecting the manufacturers of Butter by stopping the sale of 'Margarine' as 'Butter'. Therefore the term or name given to an article was an essential factor in deciding if its sale was permitted under the Acts. Mr Kirby claimed to be unaware of the 'adulteration' of the cocoa which he sold, which may be the reason why there was no notice given of its condition, however as we return to the case we shall see how much rested on the detail of the name of a product.

The admixture of certain articles was the most common form of adulteration. Initially it may have arisen out of the need for products which were easily prepared, to mask the taste of an article, or because a lack of scientific advancement hindered any other preparation methods. Cocoa, or soluble cocoa, as sold by Mr Kirby comes under all of these points. Since Mr Kirby was not the manufacturer of the article, and given the high profile of the case, the manufacturers of the sample came forward to aid the defense. The defense provided by Dunn and Hewett rested on two main points. Firstly, that cocoa was only soluble when it had been combined with other ingredients and therefore these added ingredients aided the preparation, taste and texture of the drink. Secondly, this preparation had been manufactured without challenge for the majority of the century and was popular with the consumer. Providing evidence on this was Mr Morris of Morris and Stephens manufacturers,

who was formally a traveler for Messrs Dunn and Hewett for 30 years. He said that “soluble cocoa was being mixed with sugar and sago and was not a fraudulent manufacture. Cocoa in its original form was sold in small packets formerly at four shillings per pound, and was only within the reach of the higher classes.”⁸⁶ He continued to say that in his 30 years pure ground cocoa nibs [were] recognised as cocoa and the present preparation in question by Messrs Dunn and Hewett had been recognised as ‘soluble cocoa.’⁸⁷ This point was also reiterated by Mr Holm, who said that “it was a fact that for the last 60 or 70 years the general term ‘soluble’ was applicable to the preparations prepared and sold as soluble cocoa.”⁸⁸ According to Dunn and Hewett “the public have never been under the delusion, when buying prepared cocoa powders, that they were buying the cocoa bean pure and simple, [which] is amply shown by the various names under which cocoa is asked for, according to the form in which it is desired.”⁸⁹ There is no specific proof that the public recognised ‘soluble cocoa’ as the item sold by Mr Kirby, or whether the public knew that the ‘soluble cocoa’ was an admixture, however it seems that very few people desired cocoa in its pure form and soluble cocoa was an incredibly popular product.⁹⁰ Dunn and Hewett claimed that Mr Dunn created ‘soluble cocoa’ in 1820, until which point sales equated to 276,321lb for the year, “it has progressively increased to 4,470,372 lb for the first six months of the present year,

⁸⁶ Unknown Author, “The Pall Mall Gazette on the Cocoa Prosecutions in St Pancras,” *The Grocer*, August 1873, Mondelez Archives, Cadbury Archive Historical Records 023 003224 p.93.

⁸⁷ Ibid.

⁸⁸ Ibid.

⁸⁹ Dunn & Hewett, “Cocoa and its preparations,” *The Lancet*, 30/08/1873, p.322. Mondelez Archives, Cadbury Archive Historical Records 023 003224 p.100.

⁹⁰ Unknown Author, “Cocoa and Mustard Adulteration,” *The Medical Press and Circular*, Mondelez Archives, Cadbury Archive Historical Records 023 003224 p.100.

[1873] equal to nearly nine millions of pounds per annum.”⁹¹ Given this popularity for the article Mr Kirby had been under the impression that ‘soluble cocoa’ was a description enough to warrant selling the article without added notice of its mixture. The term given to an article was an important factor, since the act did not prohibit the sale of ‘adulterated’ articles providing notice was given. In most cases adulterated articles are the impersonation of another, possibly superior article, such as ‘soluble cocoa’ for ‘cocoa,’ or ‘margarine’ for ‘butter’. Therefore, the name given to an article was extremely important in deciding whether or not it amounted to fraudulent adulteration.

A great deal of attention during the trial was given to the term ‘soluble’ as a descriptive tool for selling the mixed article known as ‘soluble cocoa.’ First, analysts for both sides argued if cocoa was indeed ever soluble when it was pure and when mixed with other ingredients. “Mr D said: “It will be a great deal of trouble if it is admitted that the ingredients mixed in the cocoa are not necessary to make it soluble.”⁹² Alternatives to the term ‘soluble’ were also discussed, “perhaps the word ‘emulsive’ would be better, as used by Mr Bartlett,” since the actual cocoa itself will never be soluble in the scientific term but can be held in suspension by other ingredients.⁹³ The term ‘soluble’ is less essential in describing the characteristic of the product and its behaviour, it is more important that it is representing the group of products which are all prepared in a certain way, and which the public can associate

⁹¹ Dunn & Hewett, “Cocoa and its preparations,” *The Lancet*, 30/08/1873, p.322. Mondelez Archives, Cadbury Archive Historical Records 023 003224 p.100.

⁹² Unknown Author, “The Cocoa Trade and the Adulteration Act,” *The Grocer*, Mondelez Archives, Cadbury Archive Historical Records 023 003224, p.95.

⁹³ Unknown Author, “The Cocoa Trade and the Adulteration Act,” *The Grocer*, Mondelez Archives, Cadbury Archive Historical Records 023 003224, p.95.

with. Mr Wonter then quoted “that this admixture in the manufacture of cocoa was known and generally recognised as lawful; that is was in no way considered to be an adulteration; and that it rendered the article more useful, cheap, and wholesome for the consumption of the public.”⁹⁴ The production of mustard experienced the same issue of mixtures being popularly known by other terms. “Mr Colman, the well-known mustard manufacturer, in the course of a long examination, said that there are two processes for the manufacture of mustard, one of which produces pure mustard, and the other, mustard mixture, or what may be termed ‘mustard condiment.’”⁹⁵ This mustard condiment was the target of many adulteration cases in the same way as the ‘soluble cocoa.’ I believe that it is undeniable that the admixture of cocoa was intended to lower the cost of the article, as it is continually admitted that there was a desire for affordable cocoa. Whether it is ‘adulteration’ or ‘fraudulent’ is a matter of opinion, the mixture was creating an article in its own right which consumers should be able to choose to buy. I also believe that the ‘soluble cocoa’ would be a close kin to the ‘hot chocolate’ drink which is sold today. Cocoa powder today is desired more for the purposes of baking and requires further preparation, whereas hot chocolate is an instant drink. One present day example of a Cadburys instant Hot Chocolate contains; “Sugar, Cocoa, Dried Whey, Glucose syrup, Vegetable oil, Dried skimmed milk, Milk Chocolate, Dried glucose syrup, Salt, Thickener (E466), Milk Proteins, Anti-Caking agent (E551), Emulsifier (E471), Stabiliser (E339), Flavourings.”⁹⁶

Some of the most popular products we consume contain a variety of different

⁹⁴ Unknown Author, “The Cocoa Trade and the Adulteration Act,” *The Grocer*, Undated Clipping, Mondelez Archives, Cadbury Archive Historical Records 023 003224, p.95.

⁹⁵ Unknown Author, “Cocoa and Mustard Adulteration,” *The Medical Press and Circular*, Mondelez Archives, Cadbury Archive Historical Records 023 003224 p.100.

⁹⁶ Unknown Author, “Cadbury; Products Information, Instant Hot Chocolate” online www.Cadbury.co.uk/products/hot-chocolate-instant-2422?p=2422, accessed 1/08/2015

ingredients, including E numbers which few people would be able to understand without looking up; E466 for example is Carboxy Methyl Cellulose, a derivative of plant cells which fulfills the same purpose as the starch in the soluble cocoa.⁹⁷ Therefore it is not the products which are being sold that are being regulated but the name under which they operate. The government was not going to stop the fair consumption of a popular product if there was no risk to the public health, all they could therefore do was help give the public the information to make an informed decision should they be interested in what they were consuming.

Further evidence that the name of the product was essential to regulating trade can be seen by a response to the case of Mr Kirby from Messrs. Cadbury Brothers who wrote into *The Grocer*; the letter appeared in the *Correspondence* section of the paper, in it they stated ‘the necessity for some radical change in the way the trade [was] conducted.’ According to Cadbury’s grocers often asked “what is the difference between cocoa and chocolate?” but that manufacturers were unable to “give a satisfactory answer when they supply precisely the same kind of article in 14-1lb tins as chocolate powder, and in small packets as cocoa.” Therefore labelling and product descriptions had not been set in stone at the time of the case. As the Acts develop they become much more specific, with the 1887 Margarine Act detailing down to the font size how a product should be presented.⁹⁸ The lack of labelling may have stemmed from the way in which grocers at the start of the period would have

⁹⁷ Unknown Author, “Carboxy Methyl Cellulose,” in Food Additives: European Commission Food Additives database. online at www.webgate.ec.europa.eu/sanco_foods/main/?event=substance.view&identifier=191 accessed 1/9/2015

⁹⁸ Cadbury Brothers, “The Cocoa Question,” *The Grocer*, 2/8/1873 Mondelez Archives, Cadbury Archive Historical Records 023 003224

sold articles from wholesale containers rather than selling individually packed items.⁹⁹ It was not until individual manufacturers began to portion their articles in individual packets that there is chance to utilise the wrappings and presentation surfaces to convey both information and advertising to consumers. Cadbury remind readers that Cocoa is the term used for the imported product, and “the word Chocolate is derived from the Mexican word “chocolatl” which is taken from the resulting sound of the stones between which the cocoa is bruised and mixed with sugar and spices, and is thus understood in every civilized country.”¹⁰⁰ The point which Cadbury Brothers are making in their article is that they took the earliest opportunity following the act to change their labels to call “all genuine articles ‘cocoa’ and all admixtures ‘chocolate’ or ‘chocolate powder.’”¹⁰¹ Their logic being that to call an article ‘cocoa’ and then contradict it at the end of the label with a statement identifying it as an admixture would not benefit the public, who in their opinion had ‘been satisfied’ with the method of ‘cocoa’ and ‘chocolate’ terms which Cadbury adopted.¹⁰² Cadbury therefore seem to suggest that the different grades of products would be happily represented should universal terms for both the pure and ‘adulterated’ articles be employed. Messrs Dunn and Hewett explain in their letter to *The Grocer* “the terms cacao, cocoa, cocoa, and chocolate are by most of the scientific writers on the subject used as identical terms, and applied by them indiscriminately to the cocoa tree and cocoa bean.” However the terms when applied

⁹⁹ This is also a reason why adulteration was so prolific during the earlier half of the century, there was nothing to stop an article first being adulterated by the manufacturer and then adulterated again by the grocer, both attempting to increase profit.

¹⁰⁰ Cadbury Brothers, “Correspondence,” *The Grocer*, 02/08/1875, Mondelez Archives, Cadbury Archive Historical Records 023 003224, p.97

¹⁰¹ Ibid.

¹⁰² Ibid.

to manufactured articles, “from time immemorial,” chocolate has been used to “signify cake and fancy chocolate and *only* the finer preparations in powder; while the word “cocoa” has been applied, formerly only to the commoner preparation, but of later years, as manufacturing skill has advanced, also to some of the finer preparations of the cacao bean.”¹⁰³ Dunn and Hewett therefore disagree with Cadburys suggestion to term the ‘commoner’ preparations of cocoa “chocolate” since it would be a misrepresentation whereby popular thought would identify it with a prepared cake or good quality powder. This confusion is believed to stem from the fact that cocoa beans are “quoted and sold as cocoa in the markets” while the general public associate cocoa only with manufactured articles.¹⁰⁴ However it seems that both manufacturers would feel that products could be amply represented by the term given to them, this term just needed to be made universal. Neither manufacturer had a problem with the existence of the mixed articles, even Cadbury, who after years of failing business decided to do away with the manufacture of any mixed articles. They marketed their pure ‘Cocoa Essence’ and focused on the use of purity in all their advertising campaigns, something which we shall look at again later. Dunn and Hewett suggested “the word ‘soluble’ (that is, the term as popularly understood) is amply sufficient to protect all honest preparations of cocoa.”¹⁰⁵ They felt that the case of Mr Kirby was evidence of this. It seems that one of the reasons ‘adulteration’ was an issue is that manufacturers of higher quality goods wanted to protect their business. It also seems that manufacturers of ‘adulterated’ goods believed in the

¹⁰³ Dunn, Hewett and Co, “Correspondence,” *The Grocer*, Undated Clipping, (published between 03/08/1875 and 09/08/1875) Mondelez Archives, Cadbury Archive Historical Records 023 003224, p.97.

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*

products they were selling and provided the Acts permitted them to continue did not oppose the introduction of requirements such as labelling since it did not prohibit their trade.

What the manufacturers and government were both working towards therefore was the removal of fraud; if the public wanted to buy an 'adulterated' article, that was not harmful to health, there was no strong reason to stop them providing it was an informed decision. Mr Bartlett's definition of Adulteration was "anything added to any substance which will increase the bulk, without any corresponding pecuniary advantage. Corruption may be included, by the introduction of deleterious matters, but not necessarily. To add water to milk was adulteration, although nothing deleterious to health was added."¹⁰⁶ Therefore it seems that the only thing the Acts prevented was deception, items were only classed as adulterated when they were pretending to be something else or a different quality. By calling a mixture of 1% cocoa, 10% sugar, 89% starch anything other than pure cocoa you could still sell what is effectively cocoa flavoured starch as its own product. Dunn and Hewett in *The Lancet* suggest that there was never any fraud at all regarding 'soluble cocoa' for which they take credit;

"These preparations were never represented as being unmixed cocoas, and in the earliest advertisements credit is taken for the ingenuity of the mode of combination of sugar and arrowroot,

¹⁰⁶ Unknown Author, 'The Cocoa Question,' *The Grocer*, Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.93.

rendering the article more convenient and wholesome. As years advanced, and our firm had to guard itself from unfair competition, a statement of what the cocoa powder consisted of was mane on many of our labels...”¹⁰⁷

Therefore if the public were truly aware that soluble cocoa was not pure, the Acts were protecting the manufacturers as much as they were the consumer. Dunn and Hewett retain the view that the cocoa bean which has been prepared for sale using ingredients such as sugar and starch is a wholesome and favoured product which does not count as adulteration. However they accept that labelling would solve the issues regarding the uncertainty of the nature of a product and would defend the manufacturer of the article against legal action as well as allowing manufacturers of genuine articles to continue operating with a distinction in products.

This is clearly demonstrated by the creation of the 1887 Margarine Act which was designed to protect the dairy industry from imitations of butter which were generally cheaper substitutes not made from dairy at all but commonly vegetable oils. Today margarine is a well known and frequently consumed product in its own right. However when it was introduced to British markets butter producers were seriously damaged by the competition. Product names over the period became synonymous with standard and therefore manufacturers of higher end products such as butter wanted to defend its business against imitations of their product. They were

¹⁰⁷ Dunn & Hewett, “Cocoa and its preparations,” *The Lancet*, 30/08/1873, p.322 Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.100

defending the value, reputation and name against inferior or adulterated products, which may take the opportunity to use the same name, such as ‘margarine’ sold as butter. The history of margarine is actually very interesting as it was commissioned by Napoleon III, who requested that an alternative to butter should be invented to ensure an affordable supply of fat to the poor.¹⁰⁸ Two forms were created, one from animal fat, usually beef suet, and one from vegetable oils.¹⁰⁹ Therefore margarine arose from the need to better the diets of the poor who could not afford to purchase more expensive items such as butter. It was invented to imitate another product but its initial intentions were not ‘fraudulent’ attempting to deceive the public and steal the customers who already purchased butter. It was designed as a separate product, an alternative to a product out of reach to many. However as the years progressed and other manufacturers in Europe began to introduce margarine to the market of large cities with a poor who would welcome affordable products, dishonest traders sold it under the name of butter and the dairy trade was greatly affected. The result was mounting pressure from the dairy farmers on the government to help protect their sales and industry. The result of the pressures from the dairy farmers and Irish MPs who had interests in the dairy industry culminated in the 1887 Act for the Better Prevention of the Fraudulent Sale of Margarine.¹¹⁰ Once again the Act did not prohibit the sale of margarine, instead it was created as “a further provision should be made for protecting the public sale as butter of substances made in imitation of

¹⁰⁸ W.H Heick, *A Propensity to Protect: Butter, Margarine and the Rise of Urban Culture in Canada* (Ontario, 1991), p.1.

¹⁰⁹ Heick, *A Propensity to Protect* pp.1-2

¹¹⁰ W.J.Bell, and H.S.Scrivener, *The Sale of Food & Drugs Acts, 1875-1899, and forms and notices issued thereunder, with notes and cases : together with an appendix containing the other acts relating to adulteration, chemical notes,* (London, 1900) p.85.

butter, as well as of butter mixed with any such substances.”¹¹¹ The Act referred to “Butter” as a the substance made from ‘exclusively milk or cream’ and to “Margarine” as “all substances, whether compounds or otherwise, prepared in imitation of butter, and whether mixed with butter or not, and no such substance shall be lawfully sold, except under the name of Margarine.”¹¹² Therefore this commodity was not banned, but was regulated through the introduction of labelling, and was given impetus as a commodity in its own right. “The outlawing of fraudulent trade in margarine, ... clearly operated in the interests of the consumers who though they were buying one article but were actually receiving the other. At the same time it worked in the interests of butter producers whose sales were undermined by the fraudulent trade in a rival product.”¹¹³ Furthermore those who enjoyed the commodity of margarine were free to continue purchasing it and may have experienced financial benefits, if margarine was not sold as butter it was not being sold at the general price of butter, and therefore would have fitted in with the general price of a commodity designed to be affordable.

The Margarine Act reveals a lot about the government intervention in the period as it shows how the government had to react to commercial as well as consumer interests. The commodity had been created to assist the lower levels of society, but it was also being sold deceptively and ‘cheating’ the consumer. Furthermore this deception was having a huge impact on a large sector, the dairy industry, across the UK. Therefore the government was forced to introduce legislation to regulate this, and the Act was

¹¹¹ Bell and Scrivener, *The Sale of Food and Drugs Act*, p85.

¹¹² *Ibid.*

¹¹³ French and Phillips, *Cheated not Poisoned?* p.11.

created within ten years of the initial invention of margarine. Given that Hassall and Accum were writing in the early part of the nineteenth century and the first Adulteration of Food Act was not introduced until 1860, the government had certainly sped up their ability to introduce legislation! Irish MP's were one of the major driving forces in securing the Act, as they had personal or constituency interests in Dairy Farming and Butter production. In the view of French and Phillips, whose book *'Cheated not Poisoned,'* is one of the leading works on the period, "Margarine was regulated, ... not just because it was a large business with many customers, but because its operations interfered to some extent with another business, butter production, which enjoyed greater political strength."¹¹⁴ The book discusses the characteristics of adulteration in the period, writing around the concept of *'Cheated not Poisoned'* which was written in a government report on adulteration. French and Phillips look at the interests which resulted in the government intervention in the market as such as the pressures from the dairy industry to secure protection for the trade in butter. The authors give the following example of a response to the introduction of the Margarine Act; "critics of the President [of the Board of Agriculture] retorted that in placing restrictions on margarine producers he was more interested in increasing the comparative attraction of butter, responding to pressure from dairy farmers, than defending the interests of working class margarine consumers."¹¹⁵ Whilst I agree that the Act was a response from pressures from dairy farmers, I feel that there was some element of protection for the consumer too as the sale of the more affordable Margarine was not in any way prohibited and it removed

¹¹⁴ French and Phillips, *Cheated not Poisoned?* p.11

¹¹⁵ Ibid.

any deception in its sale. Although it is unlikely a separate Act would ever have been created for the purpose of consumer as it has been for the dairy industry. French and Phillips themselves say that the above quote highlights their “two basic themes... that regulation emerge from a combination of public and private interests, and that different pressure groups of food traders sought different things from the regulatory process.”¹¹⁶ This is certainly true, in the case of Mr Kirby there was a great deal of interest in the Adulteration Acts from businesses who may benefit from them, such as Cadbury, as well as public interests, not simply a need for pure products but a desire to keep purchasing the affordable ‘adulterated’ products such as soluble cocoa they desired. The Margarine Act followed the same characteristics as the previous acts which demanded the use of labelling as the primary way of avoiding deception.

“Every package (f) whether open or closed, and containing margarine (a), shall be branded or durably marked “Margarine” (a) on the top, bottom and sides, in printed capital letters, not less than three quarters of an inch square; and if such margarine (a) be exposed for sale (b) by retail (c), there shall be attached to each parcel thereof so exposed, and in such manner as to be clearly visible to the purchaser, a label, (d) marked in printed capital letters not less than one and a half inches square, “Margarine”; (a) and ever person selling margarine (a) by retail (c) save in a package duly branded or durably marked as aforesaid, shall in every case deliver the same to the purchaser in [or with] (e) a paper wrapper...”¹¹⁷

¹¹⁶ French and Phillips, *Cheated not Poisoned?* p.11.

¹¹⁷ Bell and Scrivener, *The Sale of Food and Drugs Acts* p.86.

In following these regulations the public were informed of the item they were purchasing, the manufacturers were protected as they were not competing unfairly with deceptive goods, and retailers were protected from accusations providing they followed the above regulations as they had no responsibility for the manufacture of the good and like wise were not deceiving the public.

All of this evidence amounts to the fact that manufacturers are not questioning whether adulteration is wrong, or arguing whether additions of sugar and starch are actually adulterations at all. They merely wish to be able to manufacture a product and sell it, especially in the cases where they know the product has popular demand from the public. Labelling was the ideal way to allow all parties to continue their business. Those who are selling pure products can shout their superiority from the roof tops, (or side of a bus in the case of Cadbury)¹¹⁸ and those who want to keep up with trade demands can manufacture the mixtures which appeal to the public through ease of preparation, appearance or taste regardless of what is added to achieve this.

However the introduction of labelling and was no guarantee of quality for the consumer. The proportions or specific ingredients need not necessarily be displayed, the notification of a product being a 'mixture' and that it contained 'starch' would be enough notice to be lawful under the Acts. Thus whilst notice was being given, quality was not being assured. Yet I would argue labelling and packaging were two factors which hand in hand helped improve the quality of foods sold. Initially as we

¹¹⁸ Deborah Cadbury, *Chocolate Wars, From Cadbury to Kraft 200 years of Sweet Success and bitter rivalry* (London, 2010) p.60.

have discussed trade would take place involving a grocer and large wholesale sacks of products. These would be sold in small quantities to the public in proportions which they could afford to buy or safely store without the product deteriorating before it was used. This in turn gave the grocers the opportunity to tamper with the products to further increase bulk. However, as the need for labelling was introduced, manufacturers began to take the opportunity to use the space available on the packaging of their items, to convey the necessary information as well as anything which may increase their sales. While the labelling did not necessarily have to be on a packet specifically, (a sign would suffice), packaging stopped the tampering of goods and also reduced the chance of the retailer incorrectly labelling the product. These factors become particularly apparent after the 1899 Act since it was no longer required that retailers have to sell products which are not packaged. “*Articles sold in tins or packets* - ... where any article of food or drug is exposed for sale in an unopened tin or packet duly labeled, no person shall be required to sell it except in the unopened tin or packet in which it is contained.”¹¹⁹ This provides a great push on the part of both manufacturers and retailers to ensure that adequate packaging is created for products, and was caused by a case of confusion following the sale of a portion of, rather than a whole item. “This provision was inserted in consequence of a recommendation of the Select Committee of 1894-6 who called attention to the unfairness of asking for a portion of the contents of a properly labeled tin or package, and then instituting proceedings because no declaration of admixture was made.”¹²⁰ This should also have ensure a great level of hygiene was achieved if packets

¹¹⁹ Bell, Scrivener, and Lloyd. *The Sale of Food & Drugs Acts, 1875-1899* p.113.

¹²⁰ *Ibid.*

remained unopened. However the labelling of products did not go far enough, there is no guarantee that the consumers were influenced by the labels, nor whether they could afford to buy an alternative. Still today it is not essential that quantities of ingredients be disclosed, although products are listed in order of content with the highest first.¹²¹ Therefore the extent to which the Food Adulteration Acts benefited the consumer is questionable, it is agreeable that the Acts put in place regulations to end harmful ingredients, and attempted to stop fraudulent sales ‘cheating’ the consumer, but many of the same products continued to be sold, and quality was not forced to increase. Proportions could remain low should the manufacturers make it so. Even if ‘pure’ products had been enforced its unlikely the lower classes would have been able to afford the price increase.

¹²¹ Unknown Author, “Food labelling and packaging,” date unknown, online <https://www.gov.uk/food-labelling-and-packaging/ingredients-list> accessed 6/5/2015

Pleading Innocence and Taking Responsibility

During one session of court Mr Cooper called as a witness Mr Bartlett, analyst of South Square Buildings, Grays Inn. Mr Cooper was under the impression that a conviction would be made if he proved that the substances were added to increase bulk and was therefore fraudulent, even if the vendor did not know of the adulteration.¹²² It could be that even if the defendant was not aware of the adulteration of the article being sold he could be prosecuted, there was an expectation that grocers should go to reasonable lengths to know if their products were fit for sale under the act, for example obtaining any proof that the manufacturer has that the article is pure at the time of purchase. The grocer could also have a sample analysed and obtain a certificate of purity that way, it would otherwise be hard to prove that there was no knowledge of the adulteration of the item. Under the 1875 Sale of Food and Drugs Act, section five on the ‘proof of absence of knowledge,’ states that ‘if he shows to the satisfaction of the justice or court before whom he is charged that he did not know of the article of food or drug sold by him being so mixed, coloured, stained, or powdered as in either of those sections mentioned, and that he could not with reasonable diligence have obtained that knowledge,’ then they shall not be liable to conviction.¹²³ In terms of prosecution this made it easier for the prosecution to secure a conviction as it removes the task of proving that the defendant did have knowledge of the adulteration and instead leaves the defendant to prove that there was no guilty intent. Furthermore, it is also left to

¹²² Unknown Author, ‘The Cocoa Question,’ *The Grocer*, Mondelez Archive, Cadbury Archive, Historical Records 023 003224 p.93.

¹²³ Bell, Scrivener, and Lloyd. *The Sale of Food & Drugs Acts, 1875-1899* pp.7-8.

the defendant to prove that it was not possible to obtain knowledge on the condition of the article sold. Bell, Scrivener and Lloyd discuss this wording in the Acts and the responsibility of the defendant to prove his innocence, as comparatively the 1872 Act, was not worded as successfully as those which followed it and contained the words “to the knowledge of” which gave less emphasis for the defendant to prove innocence and pressured the prosecutor into proving an intent for fraud.¹²⁴ On the following occasion of the court case the proceedings were again left open, as Mr D’Eyncourt referred to the third section of the 1872 Act which implied fraud. The article in question had been sold for many years, and had been recognised in the trade as ‘soluble cocoa.’ His point was that admixture of course increased bulk, but ‘the question was whether it was fraudulent. He felt that it was impossible to convict the retail vendor in this case, as he had no clear fraudulent intention,’ as the he was continuing to sell an item which he had sold for many years previously and was under the impression that the name of the product declared its condition.¹²⁵ *The Grocer* also supported Mr D’Eyncourt’s view that he could “not see anything in the third section of the act which made the retail vendor guilty of fraud, supposing he knew nothing of the fraud,” calling his comment “distinguished for its truth and justice.”¹²⁶ Although Mr D’Eyncourt was unable to comment or prove any fraudulent intent on the part of Mr Kirby, who had failed to give the necessary notification of the condition of the article he was selling, I feel that it would have been easier to prove the fraudulent intent of the manufacturers. Mr Holm for Dunn and Hewett who

¹²⁴ Bell, Scrivener, and Lloyd. *The Sale of Food & Drugs Acts, 1875-1899* pp.7-8.

¹²⁵ Unknown Author, “The Pall Mall Gazette on the Cocoa Prosecutions in St Pancras,” *The Grocer*, August 1873, Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.93.

¹²⁶ Unknown Author, “Grocers and the Adulteration Act,” *The Grocer*, Undated Clipping, Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.94.

attended the trial would not comment on the proportions which they used to create soluble cocoa as they were a trade secret, although he assured the court their quantities were ‘not at all deteriorating.’ He felt that a preparation was adulterated if ‘red ochre or deleterious substances’ had been used but not when sugar or farina was present.¹²⁷ However it was his comment in court that “the samples bought from Mr Kirby were [of] their manufacture, one of them being of the lowest class of soluble cocoas made by them. There was a demand for the cheap cocoa,”¹²⁸ which implies that several grades of cocoa were manufactured to suit different price brackets and therefore adulteration was used to reduce the cost of an item. If they were adding the starch for the sole purpose of solubility, would they not stop once it reaches a soluble level to keep the article as true to ‘cocoa’ as possible? Furthermore “Dr Stevenson, analyst and medical officer for St Pancras, analysed the two samples of cocoa produced by Mr Rouch, and agreed the quantity of sugar was in excess.”¹²⁹ Therefore, this was one weakness of the earlier Acts which was altered by the following legislations to give the Act more power. Being unable to convict the retailer under the third section of the Act was also a reason why the blame was moved to the manufacturer, it was hard to convict based on the workings of the Act, so the focus shifted to the person who was responsible for the creation of the item in the first place. “They should first of all attack the wholesale manufacturer, and if he were guilty of mixing the article so much as to become an adulteration, let him bear

¹²⁷ Unknown Author, “The Cocoa Question” *The Grocer*, August 1873, Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.93.

¹²⁸ *Ibid.*

¹²⁹ *Ibid.*

the punishment, and not the retailer.”¹³⁰ The implications of this development in the subsequent Acts meant that both the retailer and manufacturer became responsible for providing notice of the condition of an article. The retailer has the responsibility to check that all items stocked are either pure and require no notice under the act, or if the manufacturer admits to it being ‘adulterated’ to provide ample notice in his shop so to avoid prosecution. The manufacturer in turn has greater need to provide the purchaser with the information they require under the law, therefore declaring whether their product is an admixture or not. One way to ensure this would be to include the information on the packaging of an item, therefore all parties are aware of the situation and the public should in no way be deceived by the product they are purchasing. For the manufacturer to provide notice of the condition of an article at the point of sale would also be beneficial to them as it removes the possibility of further adulteration occurring at the hands of the grocers who could further adulterate an article between the purchase and sale, to increase profit. This would protect the manufacturers reputation which is important as the period progresses and factors of branding and brand awareness come in, people become accustomed to using certain brands of food as well as other commodities, especially with the rise in advertising. The proof that an article is genuine and pure is essential to the success of some larger businesses in the period. Companies such as Hovis go as far as providing their stockists and outlets with tins embossed with their names on, to ensure that people are only purchasing the genuine article.¹³¹ Therefore under the Acts between 1875 and 1899 there was a greater motivation for the manufacturer and retailer make

¹³⁰ Unknown Author, “The Cocoa Trade and the Adulteration Act,” *The Grocer*, Undated Clipping, Mondelez Archive, Cadbury Archive Historical Records 023 003224, p.95.

¹³¹ French and Phillips, *Cheated not poisoned?* p.17.

known the condition of an article, although there was no pressure to stop selling these products.

As early as 1844 Engels *Condition of the Working Class in England*, noted the issue of deception was relative to the reputation of a manufacturer and would consequently be a more serious issue for the poor than for the rich;

“The rich are less deceived, because they can pay the high prices of the large shops which have a reputation to lose, and would injure themselves more than their customers if they kept poor or adulterated wares; the rich are spoiled, too, by habitual good eating, and detect adulteration more easily with their sensitive palates. But the poor, the working-people, to whom a couple of farthings are important, who must buy many things with little money, who cannot afford to inquire too closely into the quality of their purchases, and cannot do so in any case because they have had no opportunity of cultivating their taste—to their share fall all the adulterated, poisoned provisions. They must deal with the small retailers, must buy perhaps on credit, and these small retail dealers who cannot sell even the same quality of goods so cheaply as the largest retailers, because of their small capital and the large proportional expenses of their business, must knowingly or unknowingly buy adulterated goods in order to sell at the lower prices required, and to meet the competition of the others.”¹³²

This supports the idea that manufacturers and retailers taking pride in their products and being held accountable for their wares was a vital factor in improving the

¹³² Freidrick Engels, *Condition of Working Class in England*, trans. David Price, (London, 1843) pp.70-71.

condition and quality of foods offered to the public. Manufacturers taking responsibility for the goods they were creating was also a great spur for commercial innovation as increased sales would come from bettering their products, consequently making them more popular with the public. If this occurred grocers would be more likely to stock popular products which were not giving them legal issues. *The Grocer* had expressed that the view that for a grocer such as Mr Kirby to be summoned to court as he was and “to undergo the ignominy attaching to a police prosecution, when he is entirely innocent of anything approaching adulteration, is a monstrous injustice to which no respectable body of men ought to be subjected.”¹³³ Although *The Grocer* often showed great support for the efforts against adulteration they felt that Mr Kirby was not responsible for the adulteration. Instead it seems they were of the same opinion as myself that “the retailer is unquestionably not the proper person against whom to make these charges... they ought to be brought against the manufacturers, and, if adulteration be proved, the actual offending parties should be severely punished.”¹³⁴ For manufacturers to be held responsible for the articles they design seems logical, taking responsibility for an article would in theory encourage healthy competition, product advancement and brand loyalty. The cases of adulteration were often making up for a lack of technical advancement or covering up an inferior article to make it more preferable to the public. For example, the adulteration of cocoa with sugar and starch was employed to counteract the high amount of fat, or ‘cocoa butter’ which remained after the product was prepared. This need was eventually counteracted by some manufacturers such as Cadbury and Van

¹³³ Unknown Author, “Grocers and the Adulteration Act,” *The Grocer*, Undated Clipping, Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.94.

¹³⁴ Ibid.

Houten, whose press removed the excess of fat making the drink more palatable. Colourants were added to make foods look more appealing, for example watered down milk was coloured and thickened to look a 'creamy yellow' to suit public tastes.¹³⁵ However as technology advanced, and manufacturing businesses grew larger and therefore had more time and money to invest in product development, foods could be developed which suited a public taste or counteracted certain problems without the addition of harmful ingredients. Cadbury are a prime example of commercial innovation which removed the need for adulteration of cocoa and their product 'Cocoa Essence' became a great success, bringing them back from near closure.¹³⁶

The idea that manufacturers could improve the standards of food was touched upon by Mr Holms in his evidence at the trial of Mr Kirby, he stated that "the people who adulterate are our worst enemies, because we are unable to compete with them, as our things wont suit the market."¹³⁷ He thought that adulteration was over represented and that it was not as prevalent as it seemed, however, that an "actual adulterator," should not be fined, "(he can bear that), but send him to gaol for a little time."¹³⁸ Therefore manufacturers seemed happy that adulterations such as those which were harmful to the public, being injurious to health, or those not disclosed and deceiving purchasers, should be regulated. In doing this it would allow the manufacturers of articles popular with the public that were permitted under the act to

¹³⁵ Accum, *A Treatise on Adulteration* p.222.

¹³⁶ John Bradley, *Cadburys Purple Reign, The Story Behind Chocolates Best Loved Brand*, (West Sussex, 2008), Chapter 1

¹³⁷ Unknown Author, "Grocers and the Adulteration Act," *The Grocer*, Undated Clipping Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.94.

¹³⁸ *Ibid.*

operate without unfair competition from adulterated goods and to develop products which suited the public taste and were not harmful to health. They could it seems continue to manufacture admixtures providing the labelling of a product represented this, and would thus be able to develop a range of items which were perhaps easy for the public to prepare, safer to consume, or with a good shelf life and hopefully affordable.

Analysing the Analysts

As we have seen already the Acts have given a leeway to the retailer by the use of labelling and making the consumer aware of exactly what they are purchasing, the government intervention does not seem too strict on the manufacturers by allowing them to continue making the articles they did before the Acts were created. margarine producers were allowed to continue under the Margarine Act provided it was not pretending to be butter. Therefore if health was not at risk from a product, and it was not deceptive, it could continue under the Acts, which seems entirely reasonable terms and regulations to imply. The government did not want to hamper trade, but were forced to protect the public given the poor quality of food in the period, as well as the lack of any regulation of sanitary conditions, something which we expect today. Yet it was questioned why the authorities were willing to have such an impact on the grocers and ‘respectable’ people by publishing the names of grocers who had sold adulterated goods in papers or involving them in court cases, damaging their reputations. The following passage from *The Grocer* expresses this dissatisfaction with the way the retailers are being treated under the Act and questions the intent of the analysts:

“Supposing they [the retailer] buy cocoa from one of the old and well known firms, they naturally and truly consider that the article they purchase is unadulterated; but forsooth, under the new Act, **some enterprising analytical gentleman, (of whom there are many wanting work just now)** signs a certificate stating merely upon his own *ipse dixit* that the article is atrociously “adulterated” with sugar

and farina! It is quite unimportant that the article has been sold thus made for years, that the manufacture has been recognised by the highest authorities, and that to the public it is a real boon. Such truths as these are not mentioned, but the grocers are summoned and are obliged to enter that most undesirable of all undesirable places - a police-court. Even if the case is dismissed, as it generally is, and the presiding magistrate is good enough to assure the defendant that he leaves the court without a stain upon his character, it is anything but satisfactory that respectable grocers should be subjected to such undeserved annoyance.”¹³⁹

Perhaps the retailers were not the right persons to be targeting, but as the final point of sale it is logical that the government would begin here, if a grocer refused to sell adulterated products or refused to buy from manufacturers who did not provide the correct labelling, the product would not succeed. Were the Local Government Boards, Vestries and Analysts acting within reason, was it beneficial to the consumer and to trade for the government to inflict guidelines on producers and retailers? During the proceedings of the Kirby case this question arose when Mr Wontner accused the inspector who purchased the sample of showing ‘the greatest possible venom in the matter, as though he had an interest in it.’¹⁴⁰ Had the fears of the public and the press created an environment for unscrupulous men to gain fame by convicting honest retailers or pushing the boundaries of what constitutes ‘fraudulent’ adulteration? In the majority of cases inspectors purchasing samples for testing would not have made their intent known and would have purchased the samples as if

¹³⁹ Unknown Author, “The Cocoa Question,” *The Grocer*, Undated Clipping Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.95.

¹⁴⁰ Unknown Author, Untitled, *The Grocer*, Undated Clipping, Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.93.

they were a customer, or indeed used other customers to purchase the samples. This was designed to prevent shop keepers from switching to unadulterated articles to avoid detection and to test whether notice was given either verbally or in writing that the articles were adulterated. Therefore innocent grocers may not have known that the products they sold were being tested and were for obvious reasons never going to be happy to accept the cases of adulteration against them as it could damage their trade and reputation. As the retailers were not the manufacturers of the item they did not feel it was legitimate that they should be held responsible. It also seems that the proofs used against them had the possibility to be manufactured and based on the opinion of the analysts rather than facts and guidelines. It was commented in *The Grocer* that “the competition in the [analyst] business just now is very severe, and the enterprising analyst cannot afford to miss an opportunity of pushing himself to notoriety.”¹⁴¹ Science and analytical application had grown considerably in the period, the concepts of nutrition were being developed and the methods of detection of the contents of an article were becoming more sophisticated to keep up with the more sophisticated forms of adulteration.¹⁴² Therefore a new class of professionals had arisen and were able to make their names by being part of the campaign against adulteration. During the trial it was questioned why Dr Bartlett was present as it was implied he did not have any relevant skills or expertise to add to the case. “...Another analytical chemist came forward - a Mr Bartlett who although had nothing whatever to do with the matter, was kind enough to attend the court on three occasions with the charitable intent of doing all he could to prove that soluble cocoa was an

¹⁴¹ Unknown Author, Untitled, *The Grocer*, Undated Clipping, Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.94.

¹⁴² P. J. Atkins, “Sophistication Detected,” p.319.

atrocious adulteration.”¹⁴³ I will not judge whether Mr Bartlett himself was a fraud who was willing to give as much weight as he could to prove the adulteration of the article, as the evidence provided on both sides of the case seem as passionate and also flawed as each other. “But he got his name in the papers, and doubtless for an analytical chemist that is a great deal.”¹⁴⁴ Perhaps the analysts were able to represent either side of a case that they were asked to represent; perhaps neither side were conclusively right or wrong and therefore would present all the information they could gather. Mr Bartlett wrote after the case that he had been invited and had every reason to be present.¹⁴⁵ Yet another article stated that “if, therefore a scientific opinion is wanted, or even if it is not wanted, the enterprising analyst is on the spot, and is ready at the shortest notice to condemn anybody’s goods as being abominably adulterated, when in point of fact they are nothing of the kind.”¹⁴⁶ I believe that this opinion of the analysts arises from how open the Acts were to interpretation. Labelling allowed for the production of mixed articles, and therefore there were no set guidelines in how ‘mixed’ or ‘adulterated’ an article could be. Thus there was no absolute rule which the analysts could compare a sample to. In theory 1% cocoa and 99% sugar and starch would be permitted so long as the public were aware of it. Thus once an adulterated product is not labeled and liable to be called fraudulent regardless of the mixture, as it is technically sold deceptively; it is down to the analysts to prove this.

¹⁴³ Unknown Author, Untitled, *The Grocer*, Undated Clipping, Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.94.

¹⁴⁴ Unknown Author, “Grocers and the Adulteration Act,” *The Grocer*, Undated Clipping, Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.94.

¹⁴⁵ H.C.Bartlett, “Correspondence,” *The Grocer*, Undated Clipping, Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.95.

¹⁴⁶ Unknown Author, “Grocers and the Adulteration Act,” *The Grocer*, Mondelez Archive, Cadbury Archive Historical Records 023 003224 p.94.

The fact that two sides can completely disagree on whether and how cocoa can be made soluble should be a fairly straight forward argument, which perhaps a third party could conclude on when if representing either the defense or prosecution, but the fact that two analysts can disagree so strongly does suggest some element of bias. Perhaps the government analysts could have decided on a boundary for the amount of sugar, starch or similar which would aid its solubility and then prosecute any cases found to be higher than necessary which must in turn be present to increase profit. However because there is no set guideline on the proportions of admixture which constitute adulteration it was up to the analysts to try and prove fraudulent intent, if they personally believed it was adulterated they would have to give as much weight to their argument as possible and it may seem as though they had a vested interest in it. If we look at the Acts and its workings we can analyse if the analysts were indeed being malicious or simply trying to secure prosecution within a broad frame. In regards to the Kirby Case, the article in question was one of the lowest qualities manufactured by Dunn and Hewett and therefore was very likely to be viewed as adulterated as the amount of cocoa present was greatly less than the amount of added ingredients. If it was true that it was added to aid solubility, it seems that there would only need to be one soluble product, which achieved solubility and then did not receive any more additional ingredients. Moreover if this was the case with all manufacturers there would probably appear a universal level that all producers found achieved solubility. The fact the government were not imposing this level themselves showed that there was no desire to control trade to that degree as that would have an impact on profit margins and production costs. Therefore this means that primarily it was down to the analysts to prove fraudulent intent, as well as being open to

interpretation in deciding what equals adulteration, and that secondly adulteration by way of mixture must exist as these different grades of soluble cocoa exist which cater to different price ranges. Mr Wontner felt it “was impossible to render cocoa soluble or emulsive without the infusion of some other substance,” and Mr D’Eyncourt believed that the addition of sago and sugar was not fraudulent unless ‘carried to excess.’¹⁴⁷ Thus the grounds for ‘fraudulent’ adulteration are not set in stone; the additives were not ‘harmful’ but the pure form of cocoa had been ‘deteriorated’ because of it. This shows that the analysts were operating within the guidelines of Acts which allow for the prosecution of adulteration but did not detail how to prove adulteration. Thus each case was taken on its own merit resulting in many different forms of evidence and some witnesses or analysts may have appeared to be over emphasising the severity of a case in an attempt to get conviction.

¹⁴⁷ Unknown Author, “The Cocoa Question,” *The Grocer*, Mondelez Archives, Cadbury Archives Historical Records 023 003224 p.93.

CHAPTER 3 - Government intervention

The government intervention in the period I feel offers a well balanced solution to the problem of food adulteration. While protecting both the consumer and the producer it forms the basis of the market which operates today; the consumer is informed by the manufacturer about the product they are purchasing, and in return the consumer exercises his choice and as the popularity of a product rises and falls, his opinion is shown to the manufacturers. Whilst price may still not be a perfect guide to quality, we are offered for the most part a varying scale of quality from different manufacturers, with lower prices being a more reliable indication of a lower quality, than a higher price being a higher quality. The labelling regulations which were implemented in the period were the first step in giving the consumer an informed choice. "Cocoa with starch and sugar, or mustard with flour and turmeric, may each be better than the pure article. They may be more palatable, cheaper, and more nutritious, and if so, they will be bought in preference to the genuine article, and there is less necessity for misrepresenting their ingredients, and less hardship in requiring the manufacturer to sell them openly and honestly."¹⁴⁸ If the consumer was happy to purchase an adulterated article then he should have that freedom, providing he was aware of what his purchase was and that it was fit for consumption. As the period progresses the Acts become more advanced and take on wider issues which are becoming a concern, for example the 1899 Act has to incorporate the importation of produce, which are manufactured by parties outside of the control of the British government. Therefore it is decided that the responsibility for products which are

¹⁴⁸ Unknown Author, "Cocoa and Mustard Adulteration," *Medical Press and Circular* p.100.

imported lies with the person importing them.¹⁴⁹ There is also special reference again to margarine, including imported margarine, and adulterated or impoverished butter.¹⁵⁰ To impose stronger regulations and regulate innocent products or prices would be an upheaval of capitalism and trade and would result in a much bigger change to commerce. It would remove popular products and would give the government much great control over the production of food. There seems little reason for them to desire this regulation as they have nothing to gain from it besides the dissatisfaction of the public and manufacturers. The government were also unable to make some changes without having to change regulations for other industries such as the navy;

“Your committee have had under their consideration the sale of mixed articles of food and condiments; amongst them great prominence has been given to mustard and cocoa. ... the compounds are frequently made quite as much to suit public taste as to increase the profit of the manufacturers... It is also due to the manufacturer to record that mixed mustard and prepared cocoa are and have long been manufactured at the Deptford Yard for the supply of the Navy. Your committee therefore came to the conclusion that the sale of such mixtures or compounds is allowable, and indeed needful to meet the public requirements, provided the fact of their being mixtures is plainly indicated outside of each package in which, or vessel from which such mixture is sold. A verbal declaration at the time of sale is impracticable, and if practicable could be unnecessary, when a proper label is used.”¹⁵¹

This passage sums up the same issues as the case of Mr Kirby; firstly the manufacturers were simply continuing to manufacture articles which had previously

¹⁴⁹ Bell & Scrivener, *The Sale of Food and Drugs Acts* p.96.

¹⁵⁰ Ibid p.95.

¹⁵¹ “Report from the Select Committee on Adulteration of Food Act (1872), 3 July 1874,” (London, 1874) online at <http://babel.hathitrust.org/cgi/pt?id=umn.319510009337881;view=1up;seq=11>, accessed 20/08/2015 p.V.

been approved and which the government had no justification in regulating if the ingredients were not injurious. Secondly these products were popular with the public and therefore it was a response to demand that the articles were manufactured. Furthermore, the use of labelling was considered enough information to remove the issue of deception and to justify the selling of a product which was essentially a very poor quality. The Select Committee of 1874 reporting on the 1872 Act concluded that the “it will afford some consolation to the public to know that in the matter of adulteration they are *cheated* rather than *poisoned*.”¹⁵² Their report suggested that the government had no motive to ‘hamper’ trade, regulate prices, or attempt to ‘assist the consumer in ascertaining the real money vale of any marketable commodity.’¹⁵³

Meaning that the only area the Government were left to intervene in was ensuring food was safe for consumption, not that it was a wholesome product offered at a price which reflected its qualities. Although this would have been to the benefit of the consumer I believe that the manufacturers would have resisted as strongly as possible, that it may have resulted in a black market, and that it would have required far greater enforcement and monitoring than the government could easily implement. It would also have been highly unlikely to happen since capitalism and politics often cross over, as we saw in the case of Butter producers, the MP's all had an interest in the Dairy farming and therefore a free market was favoured. We can therefore conclude that providing the threat of harmful ingredients was removed the government had done all they were required to do in providing regulation.

¹⁵² "Report from the Select Committee on Adulteration of Food Act," p.VIII

¹⁵³ Ibid.

Conclusion

The case of Mr Kirby was dismissed primarily as Mr D'Eyencourt was not convinced of the fraudulent intent of Mr Kirby. This reflects the way in which the responsibility for the condition of an item shifted from the retailer to the manufacturer. The shift happened between the creation of the 1872 Act and the 1875 Act. This shift of responsibility increased the interest on the part of the retailer to know and display the condition of an item. There was no harm to them in selling popular adulterated products providing the correct notices were met, which was also being made easier for them by the manufacturers who were providing more information and beginning to state facts on the items themselves. Therefore, under the later Act the manufacturers had the responsibility for giving details of the condition of their article. Together this allowed the public greater access to information regarding what they were consuming. However this information did not necessarily enable the lower classes, who were most seriously affected by the issue of Adulteration to afford better quality items. The Acts therefore were fore mostly about creating choice not ensuring change, being able to exercise this choice was dependent on how much you could afford to spend. The case also highlighted how the removal of injurious items was the main concern of the Government. The products which were of a poor quality or of a weak constitution such as mixed cocoa or mustard, were popular with the lower classes and were permitted to continue as to remove them would be detrimental to trade and to supply. Substitutes such as margarine which were imitations of other products were given their own identity and

became popular commodities in their own right. This again reflects the notion that consumer choice was a vital influence in the period, if the consumer demanded it, and it was safe, it should be available, and so it was.

Finally, the case of Mr Kirby also highlights that there were two key players in the fight against adulteration. Firstly, the Government was imposing its regulations to promote food safety, all be it with difficulties and in cases limited success. The second is that commercial innovation was encouraged by the fact consumerism and free trade were not hampered by the regulations, and the manufacturers were therefore able to use competition as a way of improving quality. Many manufacturers commented on or were present at the hearing, and it shows that there was competition between them to establish superiority of their product. These characteristics which are revealed by the case of Mr Kirby also reveal much about the markets we experience today. The labelling which was introduced gave the consumer choice and the manufacturers a chance to develop. Today we experience a scale of many different grades of quality for the same commodity, either sold within the same manufacturer or by a range of producers all competing to corner the market. We too can refer to the label to try and gauge the quality of the item we are buying, and if able to afford superior products, have the choice to do so. Thus whilst the important issue of harmful adulteration was the target of the government intervention in the period, the 'adulteration,' or perhaps the better term of 'quality' was left to develop under the pressures of competition. Further, the increase in products being packaged in single portions for sale, rather than from a larger batch served to the customer by the retailer saw an increase in hygiene standards and ensured that

products were sold in the state they had left the manufacturers, helping to prolong shelf life and protect the product. Therefore, it could also be said that the Kirby Case and the introduced regulations changed little in terms of the specific products which were sold but clarified the way in which food was advertised and presented. Solubility was harnessed by adulterated cocoa products as a selling point, for Cadbury Brothers, purity and health benefits were highlighted; all products began to talk to the consumer and convey the reasons they are the best. Mr Kirby was not convicted for selling a product which he did not make, and this highlights how the retailer and manufacturers in some ways moved away from each other, but in others began to have a better relationship; retailers were point of sale contacts who were selling greater and greater varieties of products on behalf of many manufacturers. The public in turn were exercising their consumer choice in the larger retail outlets, and manufacturers were striving to develop their products for greater successes within this competitive environment. Business empires such as Hovis prove that it is entirely possible to build a product and reputation which continue through to this date, doing so by competing with other bread manufacturers, not by being the only baker serving one street.

Therefore the case of Mr Kirby has, I hope, offered greater explanation of the course of adulteration, and through this micro history I believe I have shown how changes in production, consumerism and regulation saw vast improvements in the quality of the food market, without it being demanded by the Acts which were introduced. In other ways it seems that the products which consumers demand stopped the absolute removal of 'adulteration,' be it by mixing, using preservatives, or so on, and that the

consumers require specific tastes, specific characteristics or product life spans and providing these can be catered for in a 'safe' manner there was no way or reason to ensure its removal. In comparison to other writers on the topic I do not feel my conclusions differ vastly, but my methods in getting there have afforded greater attention to individual accounts of the issue. In some ways it could be argued that French and Phillips application of the term 'Cheated not Poisoned' could be further implied to today, as we still have products of inferior quality and this is not always reflected by price.¹⁵⁴ Yet on the other hand, by the introduction of labelling, advertising and consumer choice, you could argue both the cheating and poisoning ended as we have become more aware of which products are likely to be inferior in quality. John Burnett's social account of the consumption of food and adulteration are again reflective of today; generally those products which are inferior in quality are at the cheaper end of the market and consumed by those who are budgeting as opposed to necessarily preferring the product.¹⁵⁵ In comparison to both French and Phillips and John Burnett I feel that by looking at a much shorter period I have focused on the particular point where production and regulation swung from hopeless to hopeful, where consumption began to shape the market and where advertising and branding saw businesses grow from corner shops to vast empires.

¹⁵⁴ French and Phillips, *Cheated not Poisoned?*

¹⁵⁵ Burnett, *Plenty and Want*.

Bibliography

Primary Sources

Archives:

19th Century British Newspapers, Gale Database, <http://www.cengage.com>

Birmingham Council, Bournville Village Turst, Cadbury Archives, Library of Birmingham, Birmingham

Cadbury Brothers, Cocoa Manufacturers Letter Book 1891-1898, Mondelez Archives, Cadbury Archives location 023 002006

Cadbury Historical Records, Mondelez Archives, Cadbury Archives location 023 003224

The Daily Mail Historical Archives, 1896-2004 Gale Databases, <http://www.cengage.com>

The Grocer, Cadbury Historical Records, Mondelez Archives, Cadbury Archives 023 003224

Cadbury Historical Records, Mondelez Archives, Cadbury Archives 812 001532

Historical Press and Magazine Advertisements, Mondelez Archives, Cadbury Archives 520 003370

House of Commons Parliamentary Papers, 1715-2005, National Archives. Available online at <http://parlipapers.chadwyck.co.uk/marketing/index.jsp>

The J. Walter Thompson (JWT) archives, The History of Advertising Trust Norwich, location HAT50

The Lancet, Mondelez Archives, Cadbury Archives: Cadbury Historical Records 023 003224

Letter from Elizabeth Adlington to Anne Adlington, 1860, Mondelez Archives, Cadbury Archives 812 001462,

Letters from James Cadbury to John Cadbury, Mondelez Archives, Cadbury Archives 812 001391

Letters re enquiries made by Mrs Cadbury into the History of the firm in 1929, Mondelez Archives, Cadbury Archives 812 001445

Letters from Richard Cadbury to his Brother 1867, Mondelez Archives, Cadbury Archives Cadbury Historical Records, 812 001483

Mondelez Archives, Cadbury Archives Photographic Box No.5A

Public Acts of Parliament, 1801-Present <http://legislation.gov.uk/ukpga>

Rowntree Collection, York Castle Museum, York

The Sunday Times Digital Archive, 1822-2006, Gale databases,

<http://www.cengage.com>

The Times, Digital Archive Gale Databases, <http://www.cengage.com>

Publications:

Accum, Frederick, *A Treatise o Adulterations of Food and Culinary Poisons*
(London, 1820)

Cadbury Brothers, "Articles of Partnership," Mondelez Archives: Cadbury Archives
190 003914

Chesterton, G.K. "The Soong Against Grocers," printed in Palmer, Roy. (ed) *A
Touch on the Times, Songs of Social Change, 1770-1914*, (Hammondsworth, 1974)

Engels, F. *The Condition of the Working Class in England* (London, 1844)

Hassall, Arthur Hill. "Adulteration, and its Remedy," *The Cornhill Magazine* 2
(1860): 86-96.

Hassall, Arthur Hill, *Food Adulteration Detected; or, Plain instructions for the
discovery of Frauds in Food and Medicine* (London, 1857)

Hassal, Arthur Hill. *Food Adulterations; Comprising Reports of the Analytical Sanitary Commission of 'The Lancet' 1851 to 1854 Inclusive* (London, 1855)

Pearce, W.T. *Frys Works Magazine 1728 to 1928*, Bicentenary edition

Report from the Select Committee on Adulteration of Food Act, 187, together with the proceedings of the committee, minutes of evidence, and appendix / ordered by the House of Commons. (London, 1874)

Rosetti, Christina. "The Goblin Market," (1862)

Rowntree, Seebohm. *Study of Poverty* (1908)

<https://archive.org/details/povertyastudyto00rowngoog>

Sale of Food and Drugs Act, 1875

http://legislation.gov.uk/ukpga/1875/63/pdfs/ukpga_18750063_en.pdf

Sinclair, U.B. *The Jungle* (New York, 1906)

Swift, John, Telephone Interview on Bread Adulteration

Unknown Author, "Adulteration, Examples of Fraudulent Manufacture, Inadequate Legislation, Some Proposed Reforms." *The Times*, 8 June 1914 p.28

Unknown Author, Punch XXXV (1858) in *The Victorian City: Images and Realities*, Volume 2, (eds) Harold, James Dyos, and Wolff Michael, (London, 1973)

Wells, H.G. *Tono Bungay* (London, 2010)

Secondary:

Acland, Neville James. *Accland's account of the Bristolian Bread Association 1829-31*, (Colchester, 1977)

Atkins, P.J. 'Sophistication Detected: or, the Adulteration of the Milk Supply 1850-1914,' *Social History*, Vol 16, No.3 (Oct., 1991,)pp. 317-339

Baker, T.C., McKenzie, J.C. and Yudkin, J. *Our Changing Fare, two hundred years of British food habits* (London, 1966)

Bell, William James, and Scrivener, H.S. *The Sale of Food and Drugs Acts, 1875-1899, and forms and notices issued thereunder, with notes and cases: together with an appendix containing the other acts relating to adulteration, chemical notes* (London, 1900)

Bell, William James, *The Sale of Food and Drugs Acts, 1875 and 1879: with notes and cases, also practical observations bearing upon legal and chemical questions which have arisen in the working of the acts.* (London, 1886)

Beard, John A.S. "A Review of Allinson, Thomas. "A system of Hygienic Medicine" (1886) and "The Advantages of Wholemeal Bread (1889) *BMJ: British Medical Journal*, Vol.336. No.7651 (3 May 2008)

Bird, Peter. *The First Food Empire: A History of J Lyons and Co* (Chichester, 2000)

Bradley, John, *Cadbury's Purple Reign, The story behind Chocolates Best Loved Brand* (West Suseex, 2008)

Bradley, John. *Frys Chocolate Dream* (London, 2013)

Brown, L.R. *Our Daily Bread* (New Yor, 1875)

Burnett, John. *Plenty and Want; a social history of Diet in England from 1815 to The Present Day* (London, 1966)

Cadbury, Deborah. *Chocolate wars, from Cadbury to raft 200 Years of Swett Success ad Bitter Rivalry* (London, 2010)

Charnley, Berris. "Arguing over adulteration: the success of the Analytical Commission," pre-print, <http://ipbio.org/pdfs/adulteration-pre-print.pdf>. Accessed 1/1/14

Crosfield, John.F, *A history of the Cadbury Family* (London, 1985)

Davis, A. *Packaging and Print, The development of the container and label design* (Kent, 1967)

Dempsey, Mike. *Bubles; Early Advertising Art from A&F Pears LTD* (Glasgow, 1978)

Drummond, J.C. and Wilbraham, A. *The Englishmans Food; A History of Five Centuries of English Diet* (London, 1939)

Dyer, Bernard and Ainsworth, Mitchell, *The Society of Public Analysts: some reminiscenses of its first fifty years and a review of its activities* (Cambridge MA, 1932)

Filby, F.A. *A History of Food Adulteration and Analysis* (London, 1934)

Fisher, J L., "Tea and Food Adulteration, 1834-75" in BRANCH: Britain, Representation, and Nineteenth-Century History, http://www.branchcollective.org/?ps_articles=judith-l-fisher-tea-and-food-adulteration-1834-75 accessed 12/4/2014

Fitzgerald, Robert, *Rowntree and the Marketing Revolution, 1862-1969*, (Cambridge, 2007)

Freke, Alan, *J.S Fry and Sons, A Rough Guide to the Family and Firm, Chocolate and Cocoa* (Bristol, 2010)

French, Michael and Phillips, Jim, *Cheated not Poisoned? Food Regulation in the United Kingdom, 1875 to 1938*, (Manchester, 2000)

French, Michael and Phillips, Jim, "Sophisticates or Dupes? Attitudes towards Food consumers in Edwardian Britain." *Enterprise & Society*, Volume 4, Number 3, September 2003

Gardiner, A., *Life of George Cadbury* (London 1923)

Gratzer, W. B., *Terrors of the Table: The Curious History of Nutrition*, (Oxford, 2005)

Gregory, James, "Corkling, Mary Ann Yates" Oxford DNB <http://www.oxforddnb.com/templates/article.jsp?articleid=74770&back> accessed 25/10/2014

Hartley, Nicholas, *Bittersweet - The story of Hartleys Jam*, (Gloucestershire, 2011)

Heick, W H., *A Propensity to Protect: Butter, Margarine and the Rise of Urban Culture in Canada*, (Ontario, 1991)

Johnson, P. "Class Law in Victorian England," *Past & Present*, No. 141 (Nov., 1993), pp. 147-169

Johnston, James F. W., *The Chemistry of Common Life*, (Edinburgh, 1855)

Johnston, J.P., *A hundred years of eating*, (Dublin, 1977)

Mayhew, Henry, *London Labour and the London Poor*, (Dover, 1861)

Mitchell, John, *Treatise on the Falsification of Food and the Chemical Means Employed to detect them*, (London, 1848)

Oddy, Derek. "Food Quality in London and the Rise of the Public Analyst 1870-1939," in *Food and the City in Europe since 1800*, (eds) Peter Atkins, Derek Oddy, Peter Lummel, (Hampshire, 2007)

Oddy, D. and Miller, M. (eds.) *The making of the modern British diet*, (London, 1976)

Opie, R., *Packaging Source Book - Visual Guide to a Century of Packaging Design* (London 1989)

Orr, John Boyd, *Food, health and income; report on a survey of adequacy of diet in relation to income*, (London, 1936)

Palmer, Roy. (ed) *A Touch on the Times: Songs of Social Change, 1770-1914*, (Harmondsworth, 1974)

Paulus, Ingeborg. *The Search for Pure Food. A Sociology of Legislation in Britain*, Eds. C. M. Campbell, W. G. Carson, P.N.P. Wiles. (London, 1974)

Petersen, Christian, *Bread and the British Economy, 1770-1870*, ed, Andrew Jenkins, (Aldershot, 1995)

Pilcher, J.M. (ed) *The Oxford handbook of food history* (New York, 2012)

Rees, James Frederick, *A social & industrial history of England, 1815-1918*, (London, 1920)

Robinson, Ainslie. "Invoking the Bard: The "Cornhill Magazine" and "Revival" in the Victorian Theatre," *Victorian Periodicals Review*, Vol. 32, No. 3, *Cornhill Magazine* (Fall, 1999), pp. 259-268

Rotberg, R. and Rabb, T. (eds), *Hunger and history : the impact of changing food production and consumption patterns on society*, (New York, 1985)

Ryan, A.P., *Lord Northcliffe*, (London, 1953)

Scott, R., *Elizabeth Cadbury 1858-1951* (London, 1955)

Searle, G R., *Morality and the Market in Victorian Britain*, (Oxford, 1998)

Smith, F B., *The Peoples Health 1830-1910*, (London, 1979)

Stern, Rebecca F., "Adulterations Detected": Food and Fraud in Christina Rossetti's "Goblin Market", *Nineteenth-Century Literature*, Vol. 57, No. 4 (March 2003), pp. 477-511

Stranz, Walter, *George Cadbury Lifelines* (Ayelsbury, 1973)

Tames, R., *Our Daily Bread, Food and standards of living C14th to Present Day* (London, 1973)

Tames, R., *Feeding London: A Taste of History*, (London, 2003)

Thompson, J. Lee, *Northcliffe : press baron in politics, 1865-1922*, (London, 2000)

Trentmann, Frank, *The Oxford handbook of the history of consumption*, (Oxford, 2012)

Unknown, "Allinson Flour: How it All Began", <http://www.allinsonflour.co.uk/history/> accessed 16/1/2014

Unknown, "Standard Bread In History", *The British Medical Journal*, Vol. 1, No. 2779

Unknown, "Cadbury Instant Hot Chocolate; Ingredients", www.Cadbury.co.uk/products/hot-chocolate-instant-2422?p=2422

Unknown, "Food Additives: European Commission Food Additives database", www.webgate.ec.europa.eu/sanco_foods/main/?event=substance.view&identifier=191 accessed 1/9/2015

Unknown, "Food Labelling and Packaging" <https://www.gov.uk/food-labelling-and-packaging/ingredients-list>

Unknown, "The fight against food adulteration", <http://www.rsc.org/education/eic/issues/2005Mar/Thefightagainstfoodadulteration.asp>

Vincent, David, *Bread, knowledge, and freedom: a study of nineteenth-century working class autobiography*, (London, 1981)

Vincent, Julien. "The Moral Expertise of the British Consumer," in *The Expert Consumer: Associations and Professionals in Consumer Society*, (eds) Alain Chatriot, Marie-Emmanuelle Chessel, Matthew Hilton, (Aldershot, 2006)

Waters, C., "Commodity Culture in Dickens's Household Words: The Social Life of Goods", *Victorian Studies*, Vol. 51, No. 4 (Summer 2009), pp. 769-770

Weatherall, Mark. "Bread and Newspapers: The Making of a Revolution in the Science of Food" in *The Science and Culture of Nutrition, 1840-1940* (eds) Kamminga, H. and Dr Cunningham, A. (Atlanta, 1995)

Wohl, A.S. *Endangered Lives: Public Health in Victorian Britain* (London, 1983)

Williams, Iolo A. *The Firm of Cadbury 1831-1931* (London, 1931)

Windsor, D.B. *The Quaker Enterprise, Friends in Business* (London, 1980)

Wright, Clarissa Dickinson. *A History of English Food* (London, 2011)