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Is food and nutrition knowledge the proof in the pudding?: the Jamie Oliver effect

Abstract:

The cliché, ‘The proof is in the pudding’ is a shortened version of the original phrase ‘the proof of the pudding is in the eating’. It means that the true value or quality of something can only be judged when put to use; results are what count. In this regard ‘the pudding’ can be represented by nutrition knowledge (i.e. information) and the ‘proof of the eating’ as the influence or effectiveness of how this knowledge is applied. As this paper will show, food and nutrition knowledge has the potential to affect eating behaviour, health and the food supply, and it is the process in which knowledge is communicated that is of relevance to this discourse. Mass media can profoundly shape our perceptions about the world, including attitudes towards how we feel about food and nutrition, what we eat and drink, and consequently, our health. Popular entertainment, such as television, provides an ideal vehicle for sharing health information and influencing behaviour. This paper explores how Jamie Oliver, a media celebrity, is using mass media to affect the food supply and promote healthier eating practices.

Biographical note:

Since the early 1980s, after migrating to Australia, Holly has had a diverse and challenging career. She has worked in a variety of areas, including the fitness industry, clinical dietetics, community nutrition, food service management, as a consultant to industry, and on local talk back radio. She is now lecturing in food and nutrition at Southern Cross University in Northern NSW, Australia. Holly's qualifications include a Bachelor of Science (CSULB, USA), a Graduate Diploma in Nutrition and Dietetics (SydUni), a Master of Research (SCU), and she is currently working towards a Graduate Certificate in Higher Education (SCU). Her interests include foods as medicines, scholarship in teaching, facilitating healthier eating practices, and raising awareness of ethically conscious foodways.

Keywords:

Mass media or media – celebrity – education – nutrition – health behaviour

Introduction

The cliché, ‘The proof is in the pudding’ is a shortened version of the original phrase ‘the proof of the pudding is in the eating’. It means that the value or quality of something can only be judged when put to use, that it is results that count. In this regard ‘the pudding’ can be represented by nutrition knowledge (information) and the ‘proof of the eating’ as the influence or effectiveness of how this knowledge is applied. Two questions emerge: ‘Does food and nutrition knowledge influence eating behaviour, health, and the food supply?’; and ‘How do people use food and nutrition knowledge to achieve their ends?’ In other words, is this knowledge the proof in the pudding?

Does food and nutrition knowledge influence eating behaviour, health and the food supply?

Food behaviour is complex and multi-factorial, with internal and external determinants playing a role (Curry & Jaffe 1998; Holli *et al.* 2009). Internal factors include a person’s motivation, self-efficacy, attitudes, values, beliefs, knowledge, interests and emotions. Support of others, external rewards, role models, culture, food availability, food pricing, time to buy, prepare and eat food, advertising, and the media are examples of external determinates of dietary behaviour. Nutritional requirements, and factors that impede the ability to shop for food, prepare food or limit food intake, as well as age, gender, and taste preferences, also play a role.

Food is central to our daily lives. People engage in food in one way or another, whether through its production, purchase, preparation or consumption (orally or through the media). Despite an abundant food supply in the West and attempts to educate consumers about healthy eating, diet related chronic diseases, such as obesity, type 2 diabetes, heart disease and cancer are still prevalent. There are mixed opinions as to whether food and nutrition knowledge on its own can impact the health and food behaviour of individuals and populations. Some research has shown knowledge to be positively associated with healthy eating (Taylor, Evers & McKenna 2005; Wardle, Parmenter & Waller 2000). Others believe that the relationship between what people know about food and health and what they eat is tenuous (Holli *et al.* 2009; Worsley 2008). This is because of the wide range of factors determining food behaviours. Most social-psychological behavioural change models recognise that inaction is the result of a failure in understanding, recognising, and overcoming one or more of these elements (Darton 2008). Raising awareness of an issue does not always lead to change, but it can be the first step in advancing change. While knowledge is only one ingredient of a very multifaceted food behaviour menu, knowledge secondary to advances in the food and nutritional sciences does affect the food supply.

Farmers, food manufacturers, caterers and retailers are the principal groups who control the commercial food industry. The degree to which food and nutrition knowledge impacts on these stakeholders depends on other competing interests such as their profit margins, government food and nutrition policy, consumer opinion and demand, and their own philosophy towards the production of foods based on health, sustainability, ethical grounds, etcetera. Raising these players’ awareness of nutrition

health issues has the potential to positively change the food supply. There are a number of groups who disseminate nutrition knowledge and information to and within the food industry, either directly or indirectly, which can, and do, influence what and how foods are produced and sold in the marketplace.

Governments, inclusive of politicians and experts in research, health, medicine, and food and nutrition, publish nutrition and health related taskforce reports that inform food and nutrition policies. In Australia, these policies are administered by regulatory bodies such as the National Health and Medical Research Council (NHMRC 2003) and Food Standards Australia New Zealand (FSANZ n.d.). Within the food industry are experts, such as food scientists, market researchers and other specialists (e.g. nutritionist), to act as advisors regarding new nutrition discoveries, and changes to food legislation, trends in the marketplace, consumer opinion, or other information. This knowledge can be used to make decisions, for instance, about food production methods, the sourcing and choice of food ingredients, and reviewing existing, or in developing new products.

How do people use nutrition knowledge to achieve their ends?

Advertisers and marketers are used by the retail food industry and by some health organisations to generate interest and demand in food products. The retail food industry is motivated by a desire to sell products. Consumer demand for healthier options provides opportunity to promote existing foods (for example, fresh fruit and vegetables) or new food products. Health organisations may be motivated by more altruistic reasons, such as helping consumers to identify and buy healthier foods by use of an endorsement logo (such as the Heart Foundation Tick and the GI symbol schemes).

Beyond advertising and marketing, mass media, such as television, radio, print media (newspapers, magazines, books in the popular press, leaflets), and the internet can profoundly influence a person's perceptions about the world. Some believe that the mass media plays a role in defining normality and accepted practice (Gerbner *et al.* 1969), while others argue that it only influences what topics we think about, not how we think about them (Donovan & Henley 2003). It is how the media is used that is of relevance to this paper, and in particular the recent phenomena of the television celebrity (for example, actress, chef, trainer) to promote healthy eating by providing nutrition and health advice, food information, as well as cooking tips on screen. Although the media celebrity may not directly influence the food supply, they have great potential to shape, to some extent, how we feel about food and nutrition, what we eat and drink, and consequently, our health. This discourse commences with an exploration of the use of television media to sell/endorse health, followed by the role of the media celebrity to sell a product or service. It concludes with a case study of Jamie Oliver that looks at how he is using mass media to influence the food supply and promote healthier eating practices.

The aim of mass media is to communicate with a large audience in a very short time. It can be used for various purposes such as portraying reality (actual or distorted) (Pollay 1986) and different worldviews, providing entertainment and information, as

well as promoting business and social concerns via the art of persuasion (e.g. marketing, advertising, political and health) (Worsley 2008). To this end, mass media with its broad reach has the potential to be used to communicate health messages.

In 2009 the global television market included 1217.2 million households with at least one television, with the Asia/Pacific region having the largest number of TV households (IDATE 2010). Clearly television is well placed to communicate information about food and nutrition. Television arouses attention; it can play a modelling role by reinforcing existing behaviour or demonstrating new behaviour; and it can evoke powerful emotions (CDC 2009; Egger *et al.* 1999). However, television is often criticised for its biases towards dramatisation of events, the display of emotional outbursts, the use of graphic images, and presenting a single point of view or a distorted outlook of reality (Donovan & Henley 2003; Noelle-Nuemann 2009; Pollay 1986).

A wide range of television programs are aired each week that address weight loss, cooking and general health issues. For instance, twenty-seven programs were telecast on free to air non-digital channels from the first to the seventh of September out of the Sydney area (Daily Telegraph 2010). There are also two dedicated channels to food and health for subscribers of paid television on AUSTAR. It is evident that there is a keen interest in this type of information-cum-entertainment. Some of these programs have been criticised by health professionals for their unhealthy and unrealistic approaches to weight loss. A good example of this is *The Biggest Loser*, a type of reality show that combines competition with a self-improvement format. Such is the popularity of some of these programs that the recent Australian election debate was rescheduled so not to compete with the finale of the hit cooking show *MasterChef*, as noted in a story headline—‘*MasterChef* cooks election debate’s goose’ (Fordham 2010; Maiden 2010).

Despite the criticisms of reality television, social marketers are using television to share health information in the form of ‘edutainment’—that is, entertainment designed to educate as well as to amuse. According to the US Center for Disease Control and Prevention (CDC) (CDC 2009), 88% of Americans learn about health issues from television. As such, the CDC believes that prime time and daytime television offers opportunities to include educational content. These messages can be incorporated into existing programs or in programs specifically developed for this purpose. The production of these edutainment vehicles usually involves input from academic, public health, and advocacy organisations. The Sentinel Award is given annually to programs for ‘exemplary achievements of television storylines that inform, educate and motivate viewers to make choices for healthier and safer lives’ (Norman Lear Center 2010). Examples of three finalists and their storyline topics in 2010 include *Grey’s Anatomy* (ABC) for obesity and patient sensitivity, *Sesame Street* (PBS Primetime Special) for financial stress, and *El Cartel 2* (Caracol TV) for folic acid and healthy pregnancy. *What’s Good for You*, a health and lifestyle program on the Nine Network, is an illustration of an Australian edutainment series.

Celebrity advertising is the use of a public figure, a person who has achieved a certain degree of fame in the public sphere (for example, actor, sports person, politician, etc),

for the purpose of selling a product or service. This endorsement may take the form of a written (print advertisement) or spoken statement (commercial advertisement), or more subtly, as an association with the product. Sikka and Hari (2010) relate the benefits of celebrity advertising to the Four Q's: quick saliency, quick connect, quick shorthand for brand values and a quick means of brand differentiation. Celebrities are already well known; they are efficient at connecting with consumers; they can quickly communicate a brand message; and may help to differentiate a product from another if one becomes the first in its category to use celebrity endorsement. They also state that a celebrity should have certain attributes, which include credibility (such as expertise and trustworthiness), attractiveness (for example, familiarity, similarity and likability in terms of physical appearance, behaviour or other traits) and power to influence others to respond to what is being advocated. Advertisers will select the celebrity with the 'best fit' for the product or service they are trying to promote. In this regard, the celebrity can be seen as a role model, a person whose behaviour, example or success is or can be emulated by others, especially by younger people.

When food or nutrition related products are endorsed by public figures in Australia, they tend to be prominent sports figures, for example, George Foreman (ex-American boxer) and his George Foreman Grill, Ricky Ponting (current test cricket captain) and Swisse Vitamins, and Libby Trickett (Olympic swimmer) and the Cayan chicken range from KFC. This is consistent with the high adulation Australians have towards sports figures who are often attached a hero status. Celebrity endorsements imply that the celebrity uses the product or service they are endorsing; therefore, the product or service must be good, and it contributes in some way to the celebrity's success. As association with one product in a range of many may give the impression that if one is healthy, then all are healthy, a ploy being used by KFC in the advertising of its Cayan chicken range. Advertisers will also use experts to legitimise products, such as the use of a nutritionist to endorse an Uncle Toby's muesli bar.

Oprah Winfrey, a 'cultural and financial icon', is thought to be one of the most influential celebrities of our time and any endorsement that she makes is likely to result in phenomenal popularity (for example, of a person, product or cause) ('Oprah Effect' 2007; CNBN 2009). This ability to persuade is coined the 'Oprah Effect'. But more relevant to this discussion is her ability to start trends. The Nielsen Wire, a consumer marketing trends service, has been tracking the purchase of products with attached health claims in an attempt to attribute if an increase in sales of these products is a result of a discussion of healthy foods (such as olive oil, and specific foods containing antioxidants, omega-3 fats and fibre) as part of her Dr. Mehmet Oz segment in January 2009 (Nielsen Wire 2009).

People access information about food and nutrition from a variety of sources, and according to research (Worsley & Lea 2003) the least credible source of food and nutrition information is from the mass media, although it is also the source used most often by consumers. Given the interest in health and the number of television programs targeting health, and food and nutrition issues today, the need for effective edutainment has never been higher.

The case of Jamie Oliver

Jamie Oliver is a chef, restaurateur, and media personality. He could be described on one hand, as being boyish (but now approaching middle age at 35 years old), unpretentious, enthusiastic, altruistic and a likeable rogue, while on the other, as being too well-meaning, overly ambitious, arrogant and trying too hard to appeal to the masses with his ‘mockney’ (mock cockney) accent, despite being raised in Essex England and attending a private secondary school to the age of sixteen years. He is most widely known for his television cooking shows and the food-focused campaigns that attempt to change unhealthy eating and cooking practices. These latter programs target schools and the general consumer.

Since 1998, Oliver has been involved in eighteen television multi-series programs which are shown in forty countries (Jamie Oliver Enterprises Ltd 2010a; Wikipedia 2010a). While most of them feature cooking in some capacity, a number have focused on raising awareness of healthy eating principles, unethical food production methods, and trying to improve the quality of the foods in schools, and consumer cooking skills. These include *Jamie’s School Dinners* in 2005 and 2006, *Eat to Save Your Life* in 2007, *Jamie’s Fowl Dinners* in 2008, *Jamie’s Ministry of Food* in 2008, *Jamie Saves our Bacon* in 2009, *Jamie Oliver’s Food Revolution* in 2010, and *Jamie Does* in 2010.

Jamie’s School Dinners was a 2005 four-part series that aimed to improve the nutritional value and food quality of the lunches sold at a typical school in England (Gilbert 2005; Wikipedia n.d.). There was no doubt that he had major obstacles to overcome: insufficient government funding for nutritious lunches (37 pence per meal, the equivalence of AUD\$ 0.75 cents today), the lack of cooking skills amongst the lunch staff (‘dinner ladies’), the children’s usual eating habits (at school and at home) that included an abundance of high fat, high sugar, nutrient poor foods lacking variety and general ignorance about vegetables other than chips, the need to achieve an income from the school tuck shop (sold primarily unhealthy foods), and lastly overcoming the objections of the staff, students and their parents. The documentary showed Oliver’s efforts to try and triumph over the issues.

Two years after his initial involvement, Oliver returned to the school in 2006 to see whether the introduced changes had been sustained (such as the banning of a fried turkey product and other junk foods, introducing a new cost efficient menu that the children would enjoy, and anecdotal reports of improved behaviour in the children) (Channel4 2006). Not surprisingly despite efforts by the school, and without Oliver’s constant input, problems became evident, including an end-of-year deficit of nearly £15,000, staff working overtime without compensation, the new menu losing popularity, and the children falling back to their previous eating habits. In response, Oliver initiated a number of interventions to revive interest in and opportunity for healthier eating in the schools. Ultimately his endeavours raised political awareness of the problem and as a result the British Government pledged £280 million over three years to improve the quality of food offered in the schools (Jamie Oliver Enterprises Limited 2010b; Wikipedia n.d.).

Naik suggests, contrary to public opinion, that Oliver did not place school dinners on the government agenda, but rather nudged the policy along (Naik 2008). He argues that the UK government had been working on the issue of healthy foods in schools since 1997, and formal policy statements in the form of Green and White Papers were published in 1999, 2000 and 2004. The 2004 UK White Paper *Choosing Health* set out the most comprehensive approach to addressing healthy eating issues in the schools, the most important ones being a commitment to improve the nutrition standards of school meals and to consider nutrient-based standards, banning junk food in vending machines, and expanding the role of the Office for Standards in Education, Children's Services and Skills (OFSTED) inspectors to look at healthy eating in schools. He goes on to say that there was scant media attention given to the healthy eating agenda from 1997 to 2005; however, this all changed in 2005 when the Jamie Oliver documentary was shown on national television. Shortly after the program aired Tony Blair made a re-commitment to earlier promises and announced additional initiatives, such as the funding discussed earlier. Other new initiatives included a ban on junk food advertising to children, training kitchens for school cooks and the funding for building kitchens. The Food School Trust, a non-departmental public body parented by the Department for Education, was formed in 2005, its role being to administer the food standards by giving independent support to schools and parents to improve the quality of the school meals (School Food Trust n.d.).

The notion that the policy required some impetus is reinforced by a comment in the UK government food policy framework publication, *Food Matters* (Cabinet Office 2008: 97), which states 'A transformation in the quality of food is already under way in schools, driven by the Government's reintroduction of common standards and renewed investment'. Recent research regarding the introduction of the new standards for school food in 2008 suggests this has improved the quality of the meals in English primary schools (Haroun *et al.* 2010). Despite this improvement it seems that Andrew Langsley, the British Health Minister, is now rejecting Oliver's approach on health and is blaming the drop in the uptake of school lunches on the healthier meals (Triggle 2010). Langley's comments appear incongruent with the government's food policy.

Most recently *Jamie Oliver's Food Revolution* was shown in the USA in an attempt to try and replicate his success in the UK (ABC 2010; Preblick 2010). This program relied on a similar format as *Jamie's School Dinners*. In this six-part series he attempted to change the eating behaviour of Huntington, West Virginia, in the USA, claimed to be one of the unhealthiest cities in the country and the most obese in the world. As well as spending time in one of the public schools, he also offered free cooking classes to the community. While the Jamie Oliver website portrays the campaign as a general success, it has been criticised on the grounds that student participation in the school lunch program declined, milk intake decreased, and labour and ingredient costs increased (WVU Health Research Center 2010). Hall (2010) further critiques Oliver's efforts from a public health perspective. She believes his campaign had little regard for psychological reactance; it used fear tactics; it relied on the outdated Health Belief Model—that is, a behavioural change model that attempts to explain and predict health behaviour in individuals (Rosenstock 1974).

In addition, my personal observations identified that the new menu did not meet the school lunch nutritional policy guidelines and there was resistance from the community. I felt Oliver's frustration about a meal being criticised by the Food Services Manager as it did not appear to contain 1.25 cups of vegetable and/or fruit. However, a meal containing a burger and french fried potatoes did—the fries, being made from a potato, were considered a vegetable despite being a poor choice. This frustration continued when he was also told that it was better to get the calcium from flavoured milk than to worry about the sugar it contains (sugar content in the milk surpassing what is found in soft drink). Further, as in the UK, the children were not able to identify common vegetables, in this case, tomato, beetroot, and potato, but they could easily identify chicken nuggets and pizza, and had no idea that fries came from potato.

One of the criticisms of Oliver's approach to changing behaviour is the use of fear tactics in the guise of sensational demonstrations to illustrate the point he is trying to make. For instance, he includes a presentation of what goes into chicken nuggets and an autopsy (to show fat distribution) of a 25 stone man who ate himself to death. A favourite of his is representing a year's intake of a food in one form or another (e.g. oil—to represent fat intake—poured over a participant sitting in a bath tub and watching it overflow the sides of the bath on to the floor; a mountain of junk food piled up on a plastic mat) in an attempt to shock the program participants and the TV audience. My personal favourite was the use of a steaming compost heap to represent a potential year's output of faeces of one participant who surprisingly ate a low fibre diet and very little vegetables despite being a lacto-ovo vegetarian, compared to that of a high fibre intake typical of an indigenous African person.

Fear appeals have been used in public health campaigns in the belief that the shocking display will scare the individual into changing their actions (Guttman & Salmon 2004). In Oliver's case, he suggests that eating too much of a bad substance (e.g. fat, sugar, junk food, etc) is bad for health and if the behaviour isn't stopped 'something bad could happen to you'. Fear campaigns have not been demonstrated to be a useful way to motivate people to engage in healthier behaviour. Rather, approaches that motivate people to want to change through evoking positive emotions (e.g. fun, love, hope, excitement, energised) have been found to be more effective (Hastings, Stead & Webb 2004). I doubt the participants felt good about themselves after their negative behaviours were pointed out so blatantly for all to see. While the English school children were disgusted with the display of what chicken nuggets were made of, and gladly grabbed the baked chicken Oliver provided, I wonder if they were influenced to stop eating them. The shocking revelation compelled me to investigate the chicken nugget myself (Lawrence 2002; thegymmonkey 2010). Oliver was visibly upset when his supposedly foolproof chicken nugget presentation failed to deter the US school children from wanting to eat them. This is an example of habit bias—that is, when it is hard to change entrenched patterns of behaviour, even when new information is presented (Cabinet Office 2008).

Jamie Oliver has been the force behind many campaigns across several nations to improve people's eating habits and cooking skills, and to also raise awareness about food quality. He has been recognised for outstanding achievements in the form of a

MBE in 2002. He was voted by the British public as the ‘Most inspiring Political Figure of 2005’, and named the most influential person in the UK’s hospitality industry in 2005 and 2010. Recently he was awarded the 2010 TED Prize for his campaign to ‘create a popular movement that will inspire people to change the way they eat’ (Wikipedia 2010a).

In reviewing Oliver’s ‘performance’, let us return to the original questions. ‘Does food and nutrition knowledge influence eating behaviour, health, and the food supply?’; and ‘How do people use food and nutrition knowledge to achieve their ends?’ Oliver endeavoured to change the food supply through the passing on of knowledge/information in the form of cooking skills that incorporated more fresh foods rather than the fatty, sugary and salty, processed, versions the children preferred. However, many impediments obstructed his success, which would not surprise public health interventionists. Despite Oliver’s initial good intentions, it was only by politicising the problems found in the schools via the mass media that he was able to get the Government to take notice. Six years after the initiation of the Jamie’s School Dinners campaign, the *Guardian* (Williams 2010) reported the findings of a study conducted by Oxford University researchers who compared test score data and absenteeism from sickness between the years 2002 and 2007 in school authorities surrounding, and including the area (Greenwich, South London) in which Oliver was involved. They found that absenteeism from sickness declined and test scores improved, although the improvements in test scores were not seen in the poorest students. The researchers believe that these findings are associated with the introduction of the healthier meals introduced by Oliver. If this deduction is correct, the application of nutrition and food knowledge, amongst other elements, has influenced the food supply for the better.

Studies investigating the benefits of the introduction of nutritional standards in English primary and secondary schools in 2008 and 2009, respectively, to improve the quality of the lunch meals, are only just emerging. In addition to the benefits noted in the Oxford study, there are anecdotal claims that students are healthier, calmer, better behaved, and have improved concentration. Some of these benefits may be explained by looking at research into school children investigating the benefits of consuming breakfast. Skipping breakfast is associated with poor health, poor overall nutritional status, and adverse effects on cognition (e.g. memory and concentration). A recent systematic review (Hoyland, Dye & Lawton 2009) of the effects of breakfast on the cognitive performance of children and adolescents suggest that school breakfast programs can improve academic performance, although this may be in part explained by increased school attendance that these types of programs encourage. Further, habitual breakfast consumption is more beneficial than skipping breakfast; however, this effect is more evident in children with a compromised nutritional status.

A trial of a primary school free healthy breakfast program in Wales has provided the first strong evidence to show substantial positive cognitive benefits from this type of feeding program; the study was a result of collaboration between government policy makers and academics (Moore *et al.* 2007a). Breakfast is the most commonly missed meal among children, especially those who are obese or those who are from socially disadvantaged households, compared with their wealthier peers (Moore *et al.* 2007a).

Socially disadvantaged children are also more likely to consume unhealthy foods at breakfast and are also less accepting of eating breakfast (Moore *et al.* 2007b). Recent results from this intervention study (Murphy *et al.* 2010) indicate that breakfast avoidance was not reduced—students ate breakfast at school rather than at home—and as a result there was an improvement in nutritional intake. These students also had more positive attitudes towards eating breakfast. Although the discussion here is focusing on breakfast, in particular free school breakfast programs, students who qualify for government subsidised meals (breakfast and/or lunch) appear to have much to benefit from. In the Oxford study students from lower social economic backgrounds did not benefit academically from the changes to the school menu. Why this occurred is currently being investigated. While the reasons are likely to be quite complex, it may be that some of these students are not eating the healthier lunches?

Oliver's programs have been televised to forty countries. Most recently was the Food Revolution campaign in the USA, viewed nationally on the ABC. Despite the initial negative response to his efforts, after appearing on the *Oprah Winfrey Show*, more than 600,000 people have signed an online petition supporting his campaign to provide better food in the schools (Jamie Oliver Enterprises Limited 2010b). Although Oliver has limited credibility with consumers in the US, this is likely to change in view of his most recent acknowledgements: a TED award, his affiliation with Oprah Winfrey, and the *Food Revolution* TV series being awarded an Emmy for Outstanding Reality Program (BBC News 2010). This combination of recognition and the 'Oprah Effect' is likely to raise political awareness of the situation regarding the US schools, as occurred in the UK. While Oliver's campaigns appear to be based on a real desire to evoke people to eat and cook healthier foods, one can't help feeling somewhat cynical. Would he have had the same passion and success if it were not for mass media? Was he motivated by the further celebrity it could bring him? Or did he use the mass media to his advantage in order to get the message across? Should we ask Oliver to come to Australia to reenergise the NSW Healthy School Canteen Strategy that was put into place to reduce obesity risk in children (NSW Health 2004)? It seems that the once removed pies from the school canteens are magically reappearing (McDougall 2009).

Conclusion

To conclude, in order to support individuals and populations in initiating healthy behaviour, in this case healthy eating in schools, an understanding of the food supply, human behaviour and behaviour change is paramount. Jamie Oliver's production company would be familiar with the food supply; however, they had little idea of the principles of health promotion or how to effect wide scale change, and his television series documents some of the mistakes you can make if you really try. Food and nutrition knowledge has the potential to affect eating behaviour, health and the food supply, and it is how this knowledge is communicated that is of relevance to this paper. Mass media has been used by Oliver to bring the problem of the poor quality foods provided to school children in the UK and the US to the political forefront. While this has prompted the UK government to put into action previously planned and

new initiatives to address the issue, the US situation appears to be idling. Furthermore, mass media has been shown to profoundly shape a person's perception of the world; therefore, it is a powerful vehicle for conveying health messages via edutainment programs on television. If Jamie is truly committed to producing 'entertaining programs that can change [people's] lives for the better' (Fresh One Productions n.d.), imagine what he could accomplish, with his celebrity status and influence, if he collaborated with social marketing experts and academics in their development. What is the proof of the pudding for Jamie? Is it another Emmy for an Outstanding Reality Program or should he aim higher—that is, a Sentinel for Health Award?

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