Nutrition claims in British women's magazines from 1940 to 1955

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Abstract

Background

The present study examined dietary messages conveyed in articles and advertising in two popular British women's magazines, *Woman and Home* and *Woman's Own*, between 1940 and 1954.

Methods

A qualitative analysis of written content was performed, focusing on regularities evident in content, and addressing the construction of the role of women in relation to food provision, as well as assertions for nutritional health. The setting comprised a desk-based study. The study sample encompassed 37 magazines, and yielded a corpus of 569 articles concerned with food or dietary supplements, of which 80.1% were advertisements.

Results

Ministry of Food dietary advice featured prominently up to 1945 and advocated food consumption according to a simple nutrient classification. Advertising and article content also used this classification; advocating consumption of food and supplements on the grounds of energy, growth and protection of health was customary. Providing food to meet nutritional needs was depicted as fundamental to women's war effort and their role as dutiful housewives. Advertising in 1950s magazines also focused on nutritional claims, with a particular emphasis on energy provision.

Conclusions

These claims reflected the prevailing food policy and scientific understanding of nutritional health. This analysis of food messages in women's magazines provides lessons for contemporary nutrition policy.

Introduction

General statement

Magazines have for a long time been a key component of popular culture, and a source for information about all manner of aspects of social life. The content of women's magazines has been a longstanding target of attention within the social sciences. Some studies have focused specifically upon food content, seeing such materials as articulating a clear message about the role of women in relation to food provision (Parkin, 2006) or, more generally, as indicating values used to inform food consumption (Warde, 1997). Despite their richness as a possible resource for both contemporary and historical material, such magazines have been under-explored in relation to food.

Although this material cannot tell us anything directly about the foods that people consume in a given period, it provides a window onto some of the issues at stake in relation to food, including the discourses in circulation at a particular time. The content of an advertisement, or the text that accompanies a recipe, certainly offers a sense of what it is that a person is supposed to be pursuing, achieving and avoiding through providing food for themselves or others. At a time when food restrictions were in place (during and after the Second World War), such issues are brought into especially sharp relief.

The British food policy context

The time period encompassing the Second World War (1939–1945) and the post-war years to 1954 saw extensive government control of the food supply. Ensuring an adequate food supply and a healthy civilian population was germane to the war effort.

A central strand of food control was food rationing. This was founded to meet calorie requirements and to distribute food in an egalitarian way, with extra rations for those with greater physiological need (young children, teenagers and workers in heavy industries). The premise of the rationing scheme was that bread, fresh vegetables, flour and potatoes were not restricted and their price was kept low through price control (Burnett, 1989). At the

beginning of 1942, the main commodities rationed were: fats (butter, margarine and cooking fats), bacon and ham, sugar, meat, tea, cheese, jams and marmalades, eggs, canned meats, milk and onions. As the war progressed, more foods were rationed. Rationing continued after the war ended, and even bread joined the ration books in 1946 for a 2-year period, when there was a worldwide cereal crisis (Zweiniger-Bargielowska, 1993). Food rationing continued up to 1954 because of continued food shortages, and was particularly frugal in the early post-war period (Burnett, 1989; Zweiniger-Bargielowska, 1993).

Dietary education was an important strategy in the effort to adequately feed the nation. The Food Advice Division of the Ministry of Food was specifically created to proselytise the importance of following a good diet. Mass food education of the civilian population was achieved through poster and leaflet campaigns, newspaper and magazine articles, radio and cinema (Farmer, 2008). A daily BBC radio programme, *The Kitchen Front*, featured cooking tips, advice on nutrition and use of unfamiliar foods, and suggested recipes in response to vagaries of the food supply. These exhortations were supported with Food Education Memos, which again included recipes and advice. Some recipes had suitably jingoistic names, such as *Victory Flan* or *Dunkirk Delight* (Le Gros Clark, 1945). Food Advice Centres were set up and some 15 000 volunteer 'food leaders' (teachers of domestic science, dieticians, school meals organisers, hospital caterers and public health workers) were trained to educate British housewives about food and nutrition, and how to cook nutritious meals from limited and sometimes esoteric ingredients (Drummond & Wilbraham, 1957; Minns, 1980). Mass media (posters, film, and song) featured two comic strip characters, Dr Carrot and Potato Pete, who proclaimed the nutritional advantages of consuming carrots and potatoes in light-hearted vignettes (Wilson, 2006).

Women were charged with feeding their families in the face of privations such as severe food shortages, long queues for food, limited fuel for cooking, as well as meagre quantities of meat, eggs, onions, butter and sugar. The provision of scientifically balanced meals to support the war effort was presented as an essential womanly duty. Government propaganda continually extolled culinary ingenuity and economy as patriotic; saving food was literally equated to saving lives (Zweiniger-Bargielowska, 2001).

Food choice in the immediate post-war years was even more curtailed than during the war. There was a dearth of food as a result of poor harvests, extreme winter weather in 1946/47 and near-famine situations in other European countries (Zweiniger-Bargielowska,

1993); monotony, austerity and rationing prevailed. These food shortages prompted much public outcry, and the British Housewives League was founded in 1945 primarily because of the meagreness of the food supply (Zweiniger-Bargielowska, 2000). Government was literally accused of starving the nation in both the popular and medical press (Bransby & Magee, 1947; *Food cuts and vitamins*, 1947).

The machinations of government in ensuring a dietetically adequate national diet and its effects on consumption during and following the war have been documented (Zweiniger-Bargielowska, 2000; Wilt, 2001). It is recognised that nutritional objectives underpinned war-time food policy. Printed media, specifically women's magazines, have been suggested to be important as conduits of dietary education and government food policy to British housewives (Zweiniger-Bargielowska, 2000), although empirical data are limited. The present study seeks to examine claims made for food and dietary supplements in two popular women's magazines in the context of war-time and post-war food policy.

Materials and methods

The analysis that follows is based upon a corpus of magazines collected as part of the Leverhulme-funded *Changing Families, Changing Food* Programme (F/00118/AQ). The overall corpus totals almost 150 issues *Woman and Home* (WH) and *Woman's Own* (WO) spanning the period 1940–2006. WO is a weekly magazine, which had circulation figures of 35 000 in 1938, 670 000 in 1946 and about 1.7 million in 1950 (White, 1970), ranking amongst the top three best-selling women's magazines of this genre (one of which is now obsolete). WH is a monthly magazine, which had circulation figures of 301 000 in 1938, 430 000 in 1946, and over 950 000 in 1950, making it the top seller of this genre over the period.

The corpus comprises 2544 magazine items (adverts, editorials, articles, and recipes) explicitly concerned with food. This analysis focuses upon items between 1940 (when rationing policy was introduced) and 1954 (the year it ended). This time span encompasses 35 of the magazines, and yields a corpus of 538 items, 80.5% of which are advertisements. A total of 381 items are from WO and 157 are from WH.

A qualitative content analysis focused upon patterns evident in the food content. Attention was given to types of nutritional claims made for foodstuffs and diet supplements, as well as the magazines' more general construction of the role of housewives. A series of

questions were posed: How did the printed media represent food policy? Was war-time and post-war food advertising underpinned by claims for nutritional health? Were nutritional claims in keeping with contemporary scientific understanding?

Results and discussion

Energy-giving, body-building, health-protecting

Up until 1945, the magazines regularly included Ministry of Food dietary advice. Foods were discursively represented and advocated according to three key functions: provision of energy, protein for building and renewal of tissue, and protection of health through vitamins and minerals. For example, WH (June 1944: 8) included the following Ministry of Food advice:

Evening Meal Here again, try to get in a builder, a protector and an energiser. For example, an omelette or scrambled eggs, made with dried eggs is a first class builder. Add some lightly cooked green vegetables or a salad – some watercress or mustard and cress is excellent and some fried potatoes or bread and margarine and you have a perfect meal ...

The magazine health feature writers often repeated Ministry of Food advice. Nurse Hale, writing in WO, in her regular column *Our Baby Circle* (WO, 6 July 1940: 15) used these nutritional categories:

The Ministry of Food had produced a simple classification of foods. Body Building Foods: Cheese, eggs, meat and fish. Energy foods: Bacon, ham, butter or margarine, cheese, dried fruit, dripping or suet or lard, honey, oatmeal, potatoes, rice or sago and sugar. Protective foods: milk, butter or margarine, cheese, eggs, liver, herrings or salmon (canned or fresh), green vegetables or salads, tomatoes, wholemeal bread. Protective foods build up a resistance to infection.

During the war years, advertising in women's magazines was quantitatively limited by government restrictions (White, 1970; Corley, 1987). Nevertheless, from the limited food adverts, it is evident that selling foods on attributes of energy provision, body building and

health protection was ubiquitous. Advertising copy for Ovaltine emphasised all three nutritional virtues of building, energy provision and health protection (WO, 13 July 1940: 5):

[...]Nutriment for body brain and nerves

Ovaltine provides in scientifically correct proportions and in easily digestible form the nutritive elements required for building up the perfect fitness of body, brain and nerves.

Energy-giving properties

Ovaltine provides in abundance the carbohydrates, proteins and other nutritive elements that create ample reserves of energy and vitality.

Protective food elements

Ovaltine provides the important vitamins A, B₁, B₂ and D and other protective food properties so necessary for maintaining robust health and physical fitness.

Meeting energy needs through communal feeding (eating at 'British restaurants' and using work canteens) was a key strand of food policy and featured in Ministry of Food advice (WO, 2 June 1944: 23). This emphasis on consuming adequate energy was not new to popular culture, the previous decade had seen much press coverage as to energy needs of working men (Bufton *et al.*, 2003). The issue of having sufficient calories for optimum work performance was an emotive one, and war-time policy had largely avoided differential rationing allowances according to occupation (Hammond, 1956).

Emphasis on energy provision was also evident in 1950s magazines. Keeping warm and surviving the winter were portrayed as logical extensions of adequate energy consumption (advert for Scott's Oats: WH, November 1952: 93; Weetabix advert: WO, 8th December 1955: 60). Quaker Oats advertising (WO, 26 December 1950: 4) stressed the necessity to get thiamin daily in order to convert food to energy. This was in keeping with understanding of thiamin's role as an enzyme co-factor in carbohydrate and protein catabolism. Indeed, thiamin recommendations were per unit of dietary energy, as well as per unit of nonfat calories in the 1950 British Medical Association (BMA) Nutrition Report (BMA, 1950).

Such an emphasis on energy was not surprising; Britain had suffered from some of the worst winter weather on record in 1946/47 and public discontent about food shortages had reached fever pitch. Difficulties in obtaining sufficient food had particularly affected

women, who had often sacrificed their own share of rations to other family members (BMA, 1950). Confronted with extended food rationing, and after years of acquiescence to the restraints of food policy, women became vociferous about the paucity, drabness and sameness of the food supply (Zweiniger-Bargielowska, 2000; Humble, 2005). There were press claims of starvation, and controversy in the medical literature and at a policy-making level of the effect of food rationing on health (Bufton *et al.*, 2003). Food or, more specifically, its lack, became a political hot potato; food advertising focusing on assimilation of energy clearly resonated with housewives new-found post-war voice, which expected and demanded plenty after years of want.

In particular, in 1950s magazines, there were many adverts for tonics, which claimed to boost energy, stymie fatigue and restore vitality of jaded women (Phosferine Tonic Wine: WO, 8 February 1951: 35; Sanatogen Tonic Wine: WH, January 1954: 74; Wincarnis Tonic Wine: WO, 28 December 1950: 42; WH, January 1954: 5; WH, November 1952: 8). Restoration of energy, vitality, charm and appetite for life were often invoked as upshots of food and supplement consumption. Such apparent metamorphoses may be seen as reflecting the prevailing spirit of the 1950s, which embraced a carefree, buoyant and optimistic existence in the wake of the anxieties and exigencies of war. More specifically, 1950s culture witnessed a reinvention of housewives as young, attractive and fulfilled (Humble, 2005); adding sparkle, energy and vigour to their lot by consumption of food and tonics was par for such a course.

The need for protein for renewal or building of body tissue and for growth was the basis of the message about protein, and adverts often used these terms explicitly. An advert for Scotts Midlothian Oat Food emphasised its body-building aspects (WO, 2 June 1944: 16). Similarly, body-building protein was extolled in a Quaker Oats advert (WH, January 1954: 1). Differences in the amino acid content of various proteins and the notion of indispensable or essential amino acids had been established (Cuthbertson, 1946). As for energy, protein requirements varied by age, sex and level of activity (Cuthbertson, 1944), with a greater need during growth and in pregnancy and lactation. Animal protein had special nutritional cachet because of its complement of essential amino acids. This understanding was reflected in nutritional messages about protein foods for body building, with special emphasis on the need for protein for growing children. In line with war-time policy to increase liquid milk consumption, milk was widely advocated as a building food. Ministry of

Food advertising entreated women to make sure young people in their family were getting their half pint milk quota on the grounds of milk's high quality protein content and its effects on body building (Ministry of Food Advert: WH, June 1944: 8):

Young people up to 18 were entitled to half a pint a day. Up to this age too, they should be able to get National Milk Cocoa where they work at a price of not more than 1 d. per cup. If they're not getting it, urge them to ask about it. Milk and National Milk Cocoa are valuable building foods. Please do your best to make sure your young people have their full share of them.

Dietary recommendations (Bransby *et al.*, 1947) were precise as to the quantity of milk: 1937 recommendations advocated two pints of milk per day for expectant and nursing mothers, one or two pints per day for children and half a pint of milk daily for other adults. Milk featured in magazine content as a health-protective and a building food, especially important in toddlers' ('one and a half pints needed per day') and children's diets ('one pint per day in conjunction with a good mixed diet') (WO, 6th July 1940: 15) The third tenet of diet advice from the Ministry of Food was to consume health-protecting food, and health protection was also invoked in advertising. St Ivel Cheese (WO, 27 July 1940: 26) was glorified as for its health-protecting effects, being made from milk and containing vitamins A and D. Similarly, Marmite was marketed on its health-protective qualities arising from its riboflavin content (WH, November 1952: 17). The notion of health-protective foods, which were rich in vitamins and minerals, had been introduced by McCollum, a leading North American nutritional scientist, in the 1920s (Day, 1974). At first milk and green leafy vegetables were designated as health-protective being rich in calcium and vitamin A but then the designation had been broadened to include foods plentiful in vitamin C and riboflavin, namely, milk, fruit, vegetables and eggs (Sherman, 1941). The emphasis on vitamin content reflected a proliferation of studies in the 1920s and 30s with respect to the roles of vitamins in preventing deficiency disease and their use in therapeutic situations (Bicknell & Prescott, 1942). The consumption of minerals was also recognised as crucial; the most important protective minerals were iron and calcium as a result of their dietary lack (Pyke, 1946).

Both advertising and Ministry of Food copy emphasised consumption of health-protecting vitamins for prevention of infections, including the common cold. *Virol*, a tonic advertised for children, would bring about 'a vigorous germ-resisting *Virol* constitution' (WH,

November 1952: 71), and Crookes Halibut Oil (WH, January 1954: 72) was advertised on its anti-cold and anti-influenza properties. Studies had also tested the effect of vitamin C as an anti-infective agent, and Ribena (WO, 28 September 1950: 40; WH, January 1954: 64) was sold on this characteristic. This advice around combating infection through consumption of health-protective foods stemmed from substantial scientific interest, with some 30 clinical trials of vitamin A as an anti-infective agent (Semba, 1999). However, interest in vitamin A as an anti-infective agent waned in the 1940s with the use of antibiotics to treat infection.

The advent of advertising of multivitamin supplements was apparent in 1950s magazines. For example, advertising for Rexall Plenamins cited better health associated with taking the supplement (WH, December 1954: 88). The predominant message in this advertisement was that dietary adequacy of an array of vitamins had benefits for health, fitness as well as energy provision.

Good nutrition and the kitchen front

The prominence of Ministry of Food dietary education, its duplication in magazine articles and the strong nutritional emphasis within food advertising reflects the significance ascribed to meeting nutritional needs as part of war-time food policy. Women's magazines were clearly an important media for educating housewives about a diet to meet physiological needs for energy, protein, vitamins and minerals, and advertisers also chose to use nutritional attributes for marketing of the limited food products available.

Implicit in much of the writing was the premise that housewives had a duty to fill their families' stomachs with nourishing food for the country's good. Food, as in the Great War, was firmly depicted as a weapon of war (Minns, 1980; Neuhaus, 1999; Kirkman, 2001). Housewives were instructed to nourish their families with nutritionally correct foods: good family health, vitality and optimum growth and development of children were rallying calls of the battle on the 'Kitchen Front'. In keeping with such overtones of patriotism, food advice in the magazines during the war years tended to be couched in militaristic language. For example Ministry of Food copy stated that:

Today we're all on the front line. Today we have all got to be fighting fit. Nothing helps more than the right food (WH, December 1940)

Advertising copy for food also embraced nationalism, with the economic benefits of drinking Ovaltine extending not only to housewives, but also to the country. Provision of food to meet nutritional ends was depicted as fundamental to women's role as dutiful war-time housewives. Neuhaus (1999), in an analysis of North American cookbooks published during and after the Second World War, notes that emphasising that a women's place was in the kitchen was an antidote to the cultural challenge of collapsing gender norms invoked by women's participation in paid war-time work.

It is to a degree speculative as to how the magazine readers received this plethora of diet advice. Contemporary studies show that women's magazines are a valuable source of lay knowledge about health and illness (Kirkman, 2001) and rank amongst the top three sources of information about healthy eating (Goode *et al.*, 1995). Opinion is divided as to the efficacy of the diet propaganda. War-time social surveys of housewives reported that: *'large numbers of people have no scientific knowledge of dietetic food values. They consider the foods which made up their traditional diet as those which are good for them'* (Zweiniger-Bargielowska, 2001). By contrast, the BMA committee on nutrition (BMA, 1950) judged the ministrations of the Food Advice Division to be effective, *'only a housewife who was a moderately skilled cook and also had a fair knowledge of nutritional values and requirements would have been able to provide a satisfactory diet for her family'*.

Conclusions and lessons for contemporary policy

Throughout the period under study, nutrition claims for foods and supplements were commonplace within women's magazines, and reflected scientific understanding of the nutrient value of food: meeting energy needs, ensuring growth, and protecting health, including preventing infections, were to the fore in both articles and advertising. Women were urged to supply their families with a nutritious diet to fulfil their patriotic duty in a time of war.

Our analysis of nutrition and health claims in the context of war-time and post-war food policy raises a series of issues that have bearing on debate about contemporary nutrition education and food policy. Contemporary policy is largely founded on information provision, in which the individual is responsible for decision-making about food, although policies that are more interventional such as guiding choice by financial incentives or disincentives has been heralded (Department of Health, 2010).

By contrast, war and post-war food policy coupled provision of information with stringent interventionist methods, namely food price control and food rationing. Draconian policy measures of food rationing and differential food pricing through food subsidies were accepted by the British public in the face of food insecurity, whereas, today, freedom to choose food is seen to be fundamental to individual rights (The Nuffield Council for Bioethics, 2007).

Fiscal measures, such as taxing fatty food, have been mooted by government as a contemporary public health measure to curb obesity levels in Britain (House of Commons Select Committee, 2003; The Guardian, 2011). However, the acceptability and efficacy of such measures have been contested (Caraher & Cowburn, 2005; Tiffin & Arnout, 2011), although subsidising healthy food in closed systems such as canteens may be of value (Caraher & Cowburn, 2005). The war-time model of subsidised food being available in British Restaurants and work canteens may be appropriate. However, the general notion of 'the nanny state', dictating food choice for public health ends is controversial (McKechnie, 1998); fiscal intervention smacks of authoritarianism and may be seen to infringe civil liberties.

War-time policy was founded on positive reinforcement, because pricing policy and food rationing echoed dietary advice. There was a clear strategy to link strands of policy; for example, to improve food security through expansion of home-produced food, particularly production of health-protective foods at the same time as importing energy-rich food (Wilt, 2001a, 2001b). This coherence across policy sectors is noteworthy.

A distinguishing feature of war-time nutrition information provision was that nutrition information was conveyed in a scheme which followed a simple overall structure with dietary advice centring on only three themes of energy-giving, body-building and health-protecting. The scheme was positive and straightforward, exhorting increasing, as opposed to limiting or avoiding, consumption of food from these three broad categories. Around these three information categories, a more complex set of dietary advice could be delivered; for example, increased requirement for building foods in pregnancy and youth, the need for supplementary health protecting foods in infancy and childhood, as well as more precise recommendations for consumption of some foods (milk in particular). The names of categories in the scheme educated in their own right; technical nutrition terms were not used, providing easily assimilated information. This scheme is far removed from

contemporary diet public health messages in the era of chronic disease, which have focused on a series of individual nutrients (e.g. fat, saturated fatty acids, trans-fatty acids dietary fibre, sugar, salt, omega-3 fatty acids) and targeted individual foods and food groups (e.g. for fat reduction: red meat, dairy products, spreading fats).

Further divergence with contemporary policy is apparent in the dissemination of diet advice. Diet advice was strongly endorsed by government and placed in popular national print media aimed directly at women; this was backed at local level by Ministry of Food's 15 000 volunteer food leaders who again targeted women within the community. In a war situation, it was acceptable for the state to be paternalistic and to create a role for women as responsible for the nourishment of their family and address women as such. Although women's magazines in particular, have been identified as an influential information channel for public health messages about diet today (Hansard, 2010), targeting of women through overt intervention is unlikely. On the other hand, the war-time model of harmony between central government and local communities in dissemination of public health messages has contemporary relevance (Department of Health, 2010).

Finally, there is a lesson to be learnt from the food industry's espousal of Ministry of Food's nutrition education scheme with delineation of foods into three groups, giving a specific but broad health message for each group. This provided opportunity for the food industry to incorporate clear and unambiguous messages into their advertising, thereby reinforcing government nutrition policy. Dietary advice messages from the Ministry of Food were so defined that advertisers could invoke government policy by using the key words of energising, body-building and health-promoting, without the need for the specific endorsement of an advertising message. The plethora of nutritional claims for single nutrients in relation to a range of health outcomes seen in food advertising today is a stark and unfavorable contrast.

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MB conceived and designed the study, conducted the analysis, carried out the literature search and wrote the first draft of the manuscript. JB drew up the corpus of magazines, identified and collated all items concerned with food and nutrition, advised on the qualitative analysis and critically revised the manuscript for important intellectual content. All authors critically reviewed the manuscript and approved the final version submitted for publication.

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