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SOCIAL MARKETING-BASED STRATEGY FOR OBESITY INTERVENTIONS

REPORT PREPARED FOR THE SOUTH WEST PUBLIC HEALTH OBSERVATORY

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Terms of reference for this project

We were requested by Dr Julia Verne to provide a literature-based, judgement-based (*i.e.* no new primary research) draft social marketing strategy for addressing the rising rates of obesity within the South West region.

Public health professionals should note that the strategy in this document emphasises how marketing techniques can be used for preventative approaches aimed at the general population. Curative approaches for the morbidly obese with acute health problems are outside our terms of reference.

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Executive summary – key judgements

The evidence base suggests that, if carefully created and deployed, social marketing can make an important contribution in combating obesity. We found limited exemplars to illustrate, but one such is the US VERB programme aimed at 'tweenies'. The lack of exemplars is due to the low level of social marketing expertise applied to health interventions to date. In our view, the key missing link has been insufficient attention paid to the idea of "customer value". People need personal motives to change behaviour – reasons to change that outweigh the benefits of their current behaviour.

However, social marketing on its own is not predicted to be sufficient to shift BMI levels without large scale help from environmental changes. Intensive one-to-one programmes have been shown to work well (but are costly), but the limited success of US Stanford, Pawtucket and Minnesota trials illustrates that obesity is possibly the most difficult of all health problems to solve at a 'population level'. Social marketing should be seen as part of the solution: to be deployed with appropriate budget support, alongside other approaches. It is also a long term option: the success of anti-smoking and anti-drink drive programmes is down to a determined, multi-faceted public health approach over many years.

Social marketing is not about advertising or promotion. It is a process of steps that identifies what will motivate citizens to change behaviour, and makes them 'offers' or propositions that will encourage that change. Communications is an important part of that process, but is only a part.

SWPHO can use social marketing to undertake some specific, long term tasks. Over time, social marketing can encourage identification and self reflection of unhealthy lifestyles; and it can also offer alternative lifestyles packaged in an attractive way.

Designing successful programmes to combat obesity is not easy to do. Our view is that the following social marketing principles will significantly enhance health interventions: a concentration on 'customer value' that is offering products of interest to the target audience such as tasty food, exercise as fun and pleasure; adjusting these offers to fit in with acceptable social norms; incentives; and 'dramatising' benefits with creative communications.

Our work with a South West based healthy workplace initiative (Ginsters in North Cornwall) indicates that a key component of a successful scheme is having a highly motivated work based manager with good communication skills to enthuse employees directly. The best chance of success from larger interventions such as this will come from an amalgamation of the following group activities, one-to-one approaches, provision of appropriate facilities, and educational projects aligned to attractive offers and persuasive communications. The lack of success of any of these in isolation suggests the need for inter-disciplinary 'joining up' as a priority.

Our work on the 'Active Bristol' project in deprived wards indicates the need for local channels of delivery in the shape of experienced neighbourhood based workers. Remote media driven programmes can support but on their own will almost certainly fail.

SWPHO is advised to emphasise behaviour changes in any objectives set. We note with concern that reduction in BMI levels as a result of health programmes has been rare. This may be due to insufficiently long measurement times, or measurement that is at too aggregated a level. On the other hand desirable behaviour changes have been observed with some interventions: healthier diets, or some shifts in exercise levels. SWPHO objectives could be set around the latter behaviours, rather than overly focusing on BMI.

Segmentation will be vital to the success of your programmes. Lifestage (age) and social class/income are important segmentation variables. The DH are quite rightly prioritising families with young children, with an emphasis on changing meal behaviours at home, with the aim of achieving changes to diet (and to a lesser extent exercise) at young ages. However families with young children represent only one of a number of lifestage segments that make up the people of the South West. It seems to us quite legitimate that your own work can be directed at other priority segments of the population: other segments include teenagers and young adults, adults in deprived communities, and 'older mainstream'. Within these groups there is an opportunity to further segment by income and socioeconomic group to pinpoint higher priority groups.

The food industry probably cannot be 'attacked' in the same way as the tobacco industry. There is no such thing as 'good tobacco', but there is plenty of good food. However, commercial food marketing, at the moment, remains very much 'part of the problem'. There is nothing wrong with convenient, cheap food but at present most of these products are also extremely unhealthy, especially if eaten as a regular and sizeable part of peoples' diets. Appropriate lobbying to build pressure for voluntary change, and further legislation on labelling, are useful next steps.

Studies have indicated that programmes tend to be more successful when behavioural theories are deployed. In this report we discuss the use of lesser known communications theories such as the Foote, Cone and Belding Model, the Rossiter-Percy Motivational Model, and the need to consider emotional causes of obesity to supplement cognitive models such as The Theory of Planned Behaviour.

How this report is organised

We have adopted a well tested management planning process to divide up each section in such a way that a logical planning process is followed:

ANALYSIS
- Understanding / insights into drivers of behaviours
- Identification of appropriate models and theories

▼

OBJECTIVES
- Behaviour change sought from each segment
- Measurement and control

▼

STRATEGIES
- Overall strategy
- Upstream policy and lobbying
- Segment specific strategies

▼

TACTICS
- Social marketing interventions
- Communication platforms and channels
- Segment-specific messages

The first section which follows, offers an analysis of the current state of knowledge. This sets the platform for our strategies later in the report.

Part 1: Analysis

Obesity: summary of current knowledge and implications for social marketing

Obesity prevalence and trends in adults

Modern life is built for obesity. If we were designing an obesogenic environment from scratch, we would pretty much be at optimal conditions right now. Obesity trends in the UK and the South West region are the cause of much concern.

At present, approximately 65 per cent of men and 56 per cent of women in England are overweight (that is, have a body mass index of 25-30) or obese (body mass index of over 30) and according to the DH (2004 figures) it is a problem that has increased by almost 400 per cent in the last 25 years. Roughly seven million people in the UK are obese[1]. If this growing trend of obesity continues, it is predicted that the present generation of children will be the first for whom life-expectancy will fall for over a century[2 + 3].

Figure 1: Proportion of working-age people who are obese
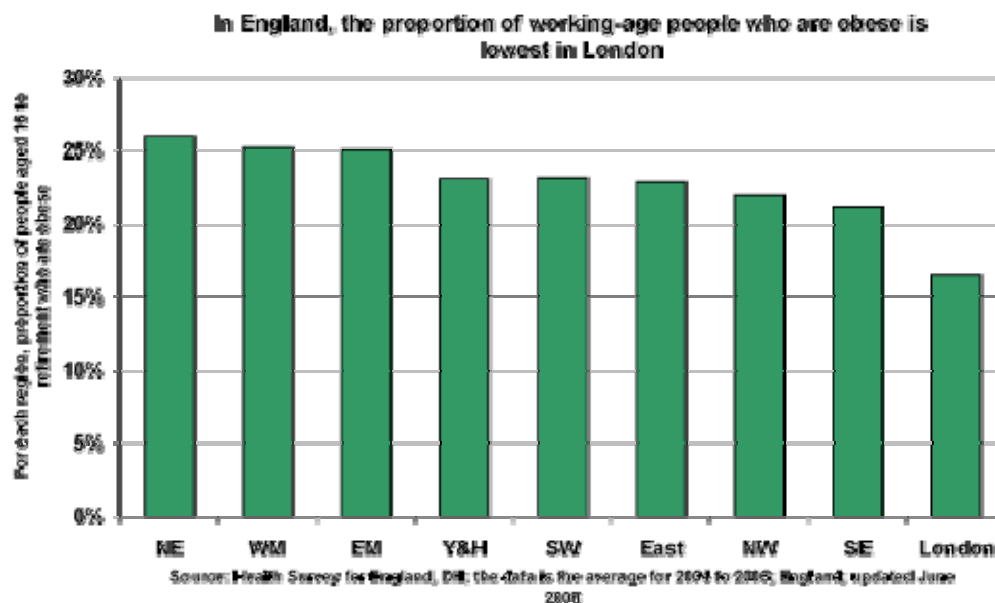
These trends are echoed in most of the westernised world.

The science of obesity – facts and assumptions – and how these raise issues for social marketing solutions

Obesity is a function of the balance of energy intake and energy expenditure, measured through body mass index:

Figure 2: BMI cut-off points for public health action
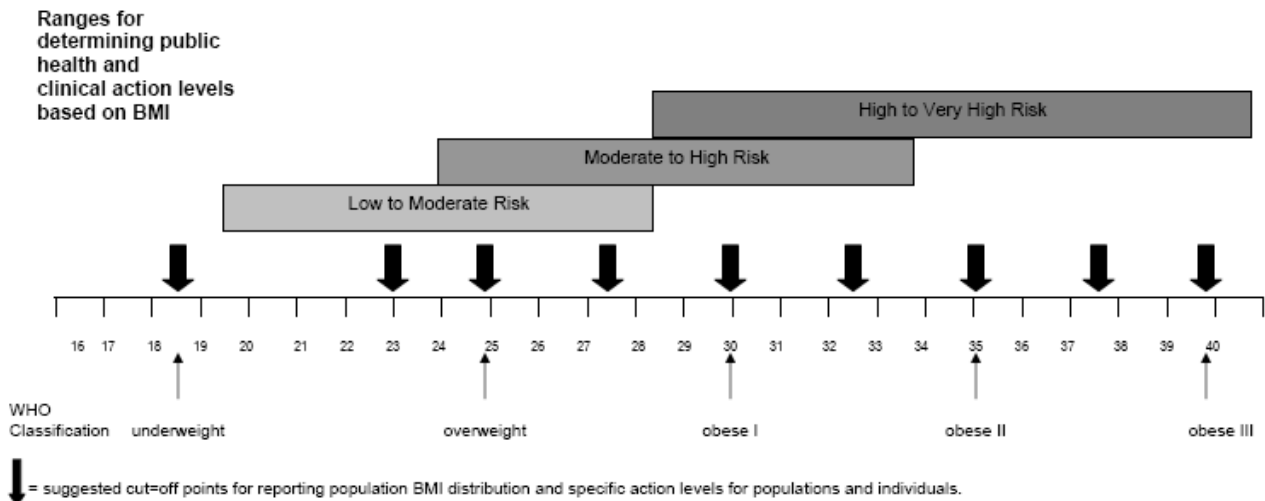
Source: Crawford & Jeffery (2005)[4]

The rising prevalence of obesity is attributable to either an increase in energy intake (food) with expenditure constant, or a decrease in energy expenditure (exercise) with intake constant, or both effects simultaneously. The relative importance of diet versus exercise in their impact on obesity is quite complex and has been the cause of much scientific debate.

Depending on what literature you read, it is quite possible to attribute the obesity epidemic to over-eating or under-exercising, or both. Tackling obesity depends on understanding its causes, so, without getting distracted, let us have a short examination of the 'diet or exercise' debate. In the USA the view has been that obesity is mainly down to excess intake: figures from the US [5] indicate a rise in food intake from 1977. One argument advanced by these authors ran as follows. Obesity is a body weight that exceeds optimal weight for height by about 30 per cent. 30 per cent excess weight represents a cumulative energy imbalance that is quite large for a man of average height. 30 per cent excess weight represents about 150,000kcal of fat, but over a 20 year time span, a daily overdose of only 25kcal is needed to create this. Either excess diet or inactivity could create this imbalance. If we take an increase of 15 per cent as an example, for a person averaging 2000kcal per day, 15 per cent excess represents an increase of 300kcal. This could be one large soft drink, or one chocolate bar – fairly realistic behaviour.

However, the authors argue, changing 300kcal of energy expenditure is more challenging. Only 20-30 per cent of energy is modifiable. So, to change 300kcal – to reduce it – to account for the energy imbalance would require an average reduction of about 60 per cent in volitional physical activity. This is considered by the authors (US based) as not very plausible. Their logic is that in the US, at the start of the obesity epidemic people *were already* relatively sedentary. A reduction of 300 calories of energy output could be achieved by, say, walking 3 miles less each day. Most Americans were not thought to walk 3 miles a day before 1980, so average walking would have to be reduced to near zero. 300 calories could also be saved by changing from standing to sitting for 4-5 hours per day. Labour saving devices could well go some way to achieving this, but the authors judged not enough. The authors concluded that the obesity epidemic comes primarily from eating too much.

The UK, and by inference South West, may be different. One report looking at the UK over time[6] has found that while food intake has hardly changed since the 1950s, exercise/activity levels have dropped considerably – primarily attributed to a result of the drop in manual labour work and of hugely increased car use. So, it may be that the major changes should focus on exercise not diet. Over the past decade, average adult energy expenditure is thought to have decreased by as much as 30 per cent. Calorie intake appears to be at or a little below 1980 levels, but the UK now travels 25 per cent less on foot and by bicycle and watches twice as much television, only half as many young people play extra-curricular sport and only half as many work in physically active employment[7+8+9+10]

Daily life also involves a range of labour saving devices, including cars, washing machines, dishwashers, lifts, car-washes and ride-on lawnmowers. As Crossley explains: "We walk less, work in more sedentary professions, pursue more sedentary leisure pursuits and 'benefit' from any number of labour saving devices around the house"(p.235)[11]. He adds that "*a recent report by the National Audit Office (2001) cites an estimate that the average individual would have to run one marathon (twenty six miles) per week to make up the drop in energy expenditure of the average individual over the last fifty years*" (pp.225-226)[12].

We conclude that the 'science' of obesity is insufficiently settled to provide us with a definitive steer on cause – effect priorities. Obesity is the result of a long term set of behaviours that as a result of probably *both* poor diet and lack of activity[13], lead to a very small imbalance in daily energy intake *vs.* expenditure. Over time, these behaviours lead to the slow onset of obesity/overweight.

What behaviours are at the core of obesity?

This slow, 'drip drip' effect of poor diet and little exercise creates big challenges for social marketers. The behaviours we wish to change are deeply *habitualised, unconscious, and routine*, often 'low involvement'[14] (little or no thought) behaviours made on a day by day basis. As Crossley said, 'obesity creeps up on you'[15].
In addition, there is often little or no link made between any of these micro behaviours and the slow but steady weight gains made. In general, people *do not* tend to stand back from their lives, take a look at these small behaviours, add them up to a big picture and then change to healthier habits.

The DH obesity team's research suggests that obesity is not an ongoing concern for most people – including obese people. One of our PhD students working (ongoing PhD work 2008) on health promoting schools in New Zealand found that parents had a series of health priorities for their children and that nutrition was not top of the list. The DH obesity work[16] also suggests that overweight people do not recognise that they are overweight – as they see it: "what's the problem?" The word obesity does not refer to them – it refers to the "30 stone people on the telly".

The day by day 'invisibility' of the cause – effect linkage of food and lack of exercise creates serious difficulties for generating solutions to the problem. It is difficult to offer solutions when people will listen to the message and think – "yes, but one more biscuit makes no difference", or, "one little walk to the shops makes no difference". There is no instant feedback loop between a behaviour and its immediate consequences: this is true of many health behaviours of course, but is a particular problem with obesity.

The implications of insecure science

Two factors – firstly, measurement problems, and secondly, the difficulty of controlling all the variables of obesity related behaviour – mean that the exact science of obesity is not known. We can be reasonably certain of the general importance of contributing factors, but not of their specific importance, accurately calculable across either populations or individuals. Clear data identifying the specific contributions of food versus exercise, or of specific behavioural choices, are not available. This has a number of implications. First, science can help but does not provide a firm steer on how to proceed with social marketing, and so any strategies are primarily judgement and experience based – though there are behavioural theories that can help, as we will see. Second, the lack of cause-effect evidence makes it is more difficult to lobby for industry changes. Lastly, our citizens pick up on these uncertainties and this makes changing beliefs and attitudes more difficult.

We will take account of these difficulties throughout this report

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The lack of immediate cause-effect feedback has profound implications for designing social marketing solutions. For instance, let's ask ourselves: why do so many adults organise their physical activity around specific events like gyms, and not around, say, active travel – walking to the shops or work? One answer may be the desire to convince oneself that we are doing something specific and definite. Instead of seeing any *everyday form* of exercise as a good thing and part of the solution, there is a temptation to look for a quick fix – a positive result in terms of a gym session followed by weighing oneself. Disappointment often quickly results in lapsing.

Figure 3: Conceptual model of pathways linking selected socio-cultural factors with obesity
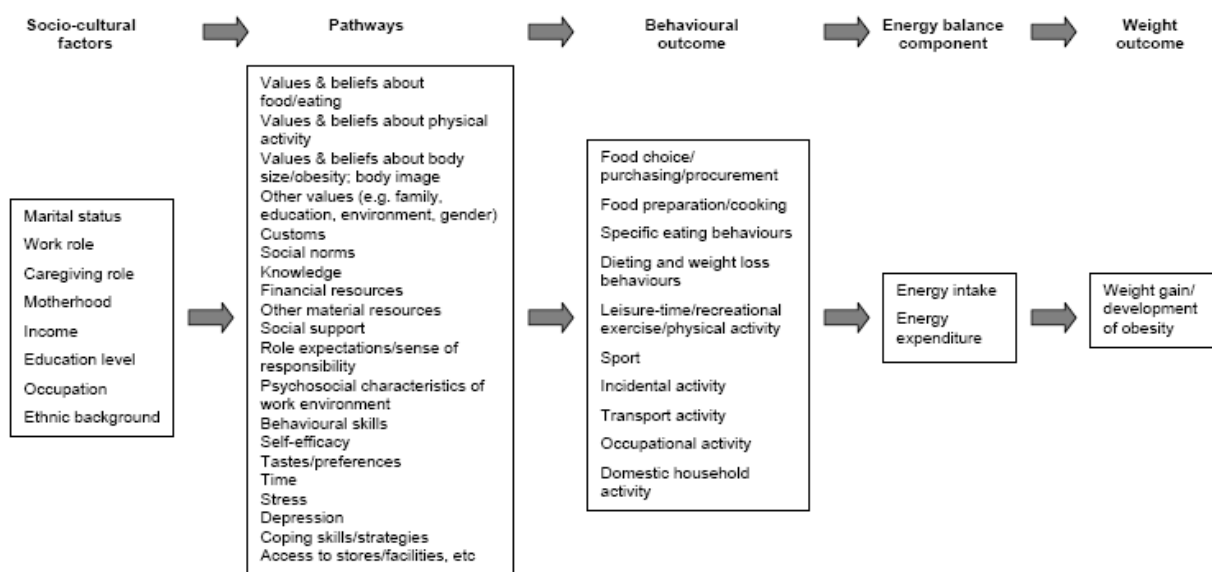
Source: Crawford & Jeffery (2005)[17]

The lack of cause-effect clarity also creates challenges for changing diets. The idea of some foods being 'healthy' or 'unhealthy' will have been absorbed and probably 'half-believed'. Reactions will vary: there will be a mixture of confusion, slight vexation with this-isn't-very-clear-is-it responses, and possibly a 'plague on all your houses' shrug of the shoulders. But on a day by day basis each micro decision – to have a pizza, to not bother cooking fresh vegetables, to scoffing four chocolate biscuits at 10 pm – each of these impulse decisions is seen as not mattering. There will be a great deal of displacement behaviour, especially with poor diet: 'Never mind – I'll do better tomorrow'. 'Not to worry – it's just a couple of biscuits'.

These psychologies and behaviours are important feeders into our strategy recommendations later.

In the next section we look in more detail at the social science and environment of obesity.

Modelling socio-psychological factors and environmental factors leading to obesity

Many of the variables illustrated in Figure 4 are of considerable importance to social marketing solutions to the obesity epidemic.

Figure 4: Influences on food choices and leverage points for population-based nutrition interventions

Demographic/biological	Individual		Environmental		
	Psychological	Behavioural	Physical community	Social community	Macroenvironment al
Gender Age Education Income Race/ethnicity Household configuration Employment number of hours type of work	Self-efficacy Outcome expectations Values (health) Perceived norms Perceived barriers Stress	Behavioural skills Dietary behaviours Physical activity behaviours TV viewing Transportation choices	Food availability supermarkets farmers' markets fast food convenience stores Food prices	Mass media programmes for nutrition and food Community programmes for nutrition and food Cultural food practices Neighbourhood socioeconomic status Worksite policies and environment	Food-related policies and programmes federal state local (e.g. price subsidies, feeding programmes, labelling regulations)

Source: Crawford & Jeffery[18] (2005)

The following list summarises ***the most*** important factors impacting on obesity:

- Our inherited genetic make up: the body is pre-programmed to find fatty and sugary foods attractive, and fatty/sugary foods have an addictive quality to them[19].
- Fatty and sugary foods are cheap, tasty and easily available.
- The rise in TV viewing[20].
- The rise in car use for journeys, including short journeys of less than a half mile. We note the cultural dimension to car use: for instance cycling is much more a cultural norm in Denmark and Holland than the UK[21]. There is certainly association, and very possibly causality, between cycling levels and lower obesity levels in these countries.
- The fact that household types have changed from traditional to non nuclear with rise in single parent families, divorces, and single person households has meant that younger men in particular live alone more – this has led to less home cooking and increased fast food purchased as habitual eating.
- Deprived communities, low income people, and people who lack higher education are more prone to obesity. There is a relative lack of knowledge of healthy foods. Low incomes and lack of everyday pleasures lead parents to buy food they know will 'make their kids happy', and will get eaten. Fresh fruit and vegetables are expensive and the fear of rejection of these foods reduces their purchase.
- Many of the above factors feed the increased availability of energy dense convenience/fast foods.
- Socio-culturally, attitudes to thinness or fatness are important. The notion of an idealised body image, especially for women, is important in feeding

dieting. Paradoxically, amongst deprived groups it may be that 'overweight is the new norm' – if everyone around here is overweight, then that body shape is normal[22].

- With the decline of physical activity as an integral part of life, a new set of values and beliefs about physical activity have built up with, for example, misplaced beliefs such as 'if I get too fat I'll go down the gym and work it off' gaining currency.
- Meanwhile longstanding myths and legends about obesity continue to abound: 'I have a slow metabolism'; 'I have inherited my fat'.

The following diagram summarises the physical activity component of obesity, modelled according to factors that social marketers may have to take into account:

Figure 5: Social ecological model of physical activity
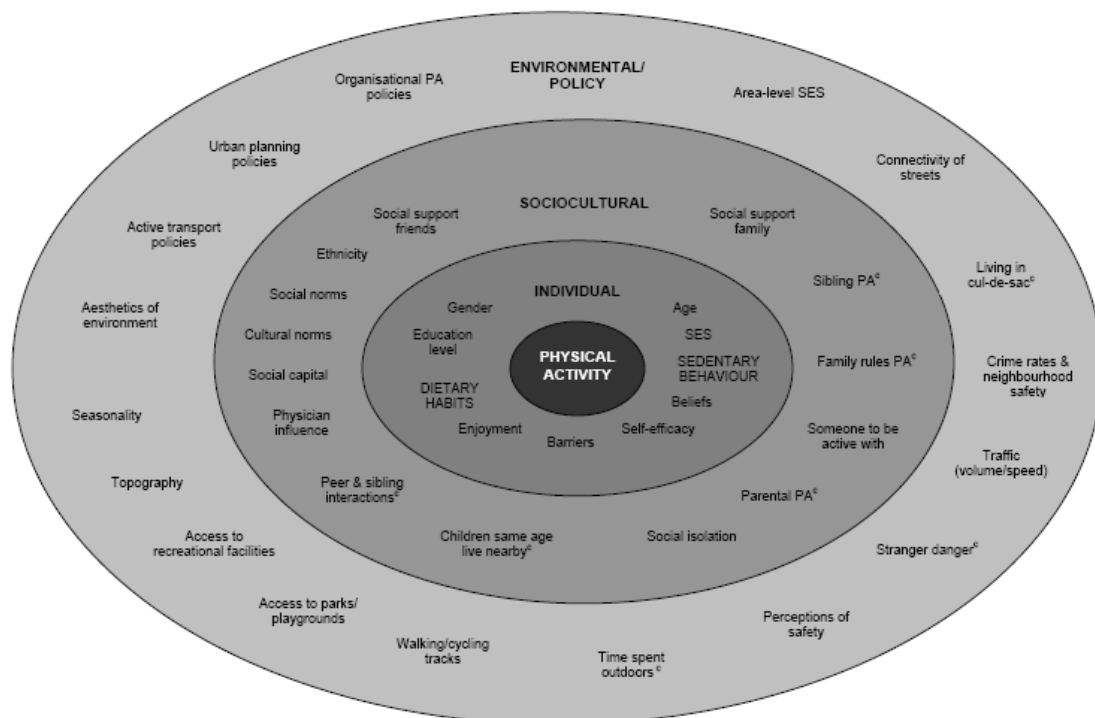
([c]= relevant to children)

Source: Crawford & Jeffery (2005)[23]

We can also examine the issues from the perspective of time use. The American Use of Time Study[24] found that while Americans had more free time in 1985 compared to 1965, sedentary activities accounted for most of this time (for instance, TV watching 38 per cent, socialising 17 per cent) while exercise/sport accounted for less than 10 per cent of all free time. The biggest changes have occurred with TV viewing with 1965 data recording 4.9 hours per week and 1995 data recording 25.2 hours weekly.

Figure 6: Proportion of free time spent on specific activities by adults aged 18-64 years
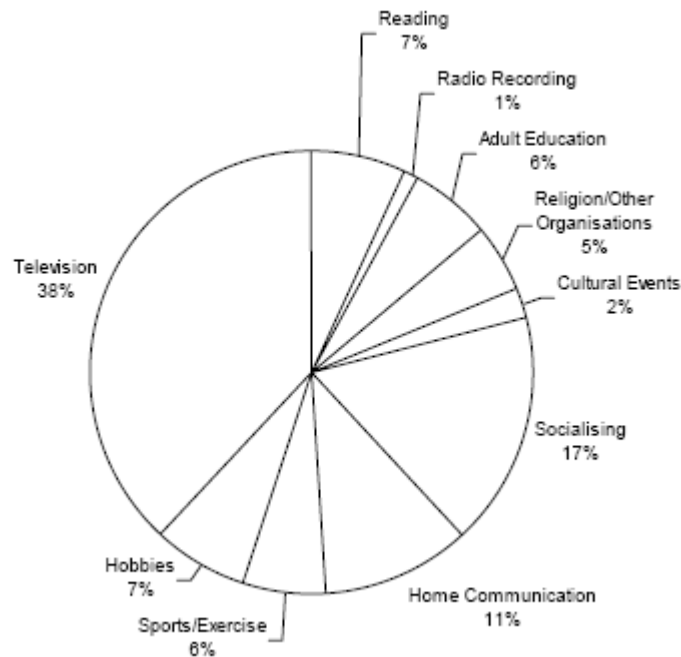
Source: Americans' Use of Time Study 1985

Similar studies of UK time use reveal similar trends, with *active leisure* a small component of life. The other major outlets for physical activity are *active travel* and *activity at work*: but these have declined as well. For example UK figures for active travel reveal some of the lowest active travelling in Europe: only two per cent will cycle, with the majority travelling by car. The dangers presented by a car dominated society appear to be a major blockage. For example, while up to 50 per cent of children aged 6-12 want to cycle to school, only two per cent actually do.

So far we have identified and briefly discussed some key concepts that help us understand obesity. We now move onto a discussion of the theories that may guide us in designing programmes to combat obesity.

Theories that can guide social marketing strategies

There is disagreement about the psycho-social causes of obesity: on the one hand obesity could be seen as individually controlled and an individual choice of free will[25]; on the other hand it may be driven by social structures. This debate is important to social marketers. The stance taken in such debates may depend upon the ideology of the debater, but the problem with the 'free will' argument is that it doesn't convincingly explain the steep rise in obesity in the way that structural/external factors do. The argument that the macro environment, peer pressures and social norms all encourage obesity, and that its insidious nature (creeping up on an individual whose habits may not be outrageously unhealthy) mitigates against a sense of personal control, is compelling[26]. Of course, these arguments should be balanced by the recognition that individuals can, in theory, overcome this negative environment through will power. A commitment to an exercise/healthy diet lifestyle is usually a choice that can be made, but such a lifestyle would currently 'swim against the tide' of the convenience driven car/fast food life of the majority. Behaving counter to such social norms requires confidence, personal beliefs, or a collective change in attitude at a societal level. Marketing can help address these building blocks – but it will take time.

The free will argument finds more favour with US based social marketers[27] who tend to regard *self interest* as the primary motive that guides human behaviour. This is undoubtedly another important component of a social marketing solution. In the case of food and exercise the concept of 'outcome expectations' – our expectations that a behaviour will lead to a certain outcome for us - is important. We need to change the expectations that fatty and sugary food is tasty and pleasurable to eat; and exercise can be hard work and a cause of discomfort.

The stages of change theory also has an important perspective to offer[28]. For example, recent focus groups that the authors undertook on a Sport England project looking at exercise highlighted how people are prone to *serial contemplation*, and repeat trial. People have a tendency to 'stick' at the 'contemplator stage' of the model – putting off actually doing anything about exercise, convincing themselves that by contemplating exercise that doing it is just a step away. Chronic triallists may go one step further and do a three week binge at the gym of, say, three sessions a week, suddenly stop and leave it for six months, then repeat the binge exercising behaviour. (Some of our focus group respondents also revealed – unsurprisingly perhaps - that they didn't like or enjoy gyms very much). We should not therefore fall into the trap of seeing exercise take up as a linear series of decisions.

Social marketing theories are often based on knowledge-attitude-behaviour models. These include the integrated Theory of Planned Behaviour (see Figure 7), or AIDA (awareness, interest, desire and action) [29]+[30].

Figure 7: Integrative Model of Behavioural Prediction and Change
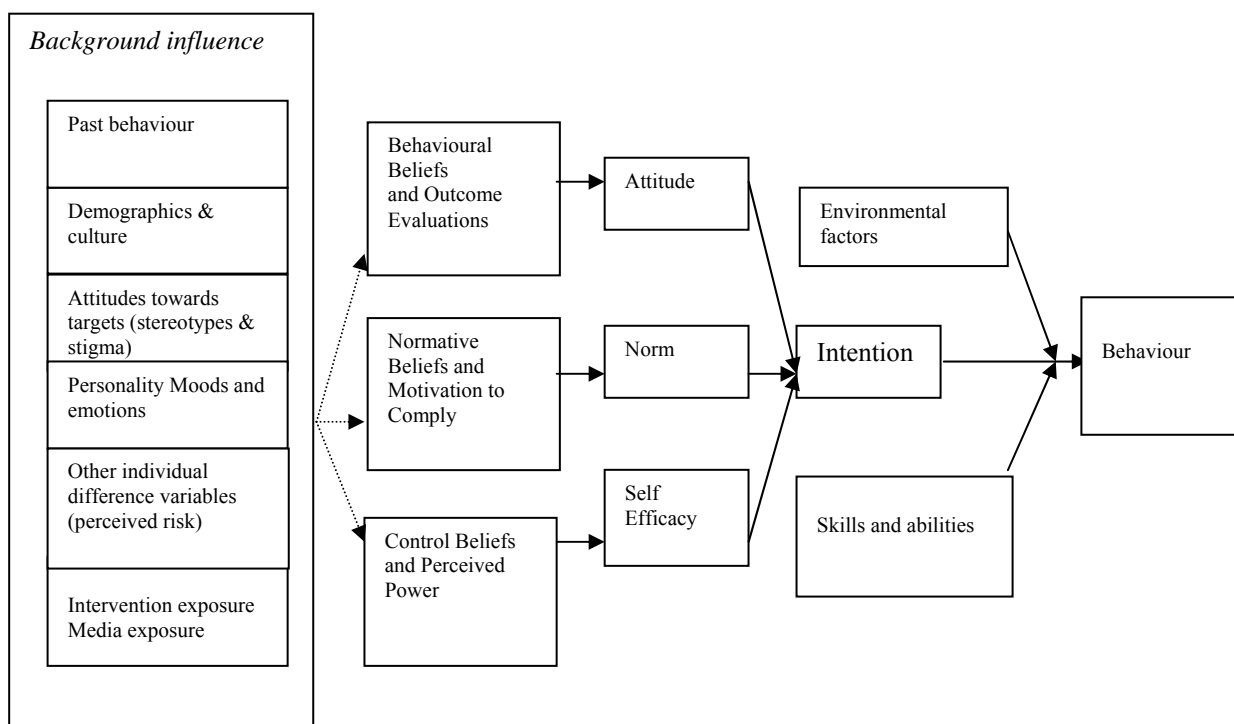
Source: Fishbein, M. (2000)[31]

There are elements of models such as the Theory of Planned Behaviour (TPB) which are clearly useful: the importance of beliefs, of social norms and of behavioural control (self efficacy), all brought into one model looks powerful. But the TPB emphasises cognitive, logical decision making, and this may not be appropriate for obesity behaviours. (In general, we would warn against over-reliance on any model – none will usually explain more than 20-40 per cent of the variance in behaviour. However, as guides to help design, they can be useful).

So, if logical thinking does not model obesity well, what does? Obesity is a result of a particular set of human *behaviours*. We think that behaviour based theories, such as those championed by Ehrenberg[32] in his studies of supermarket fast moving goods, may offer help to us.

Figure 8: Awareness Trial Reinforcement Model
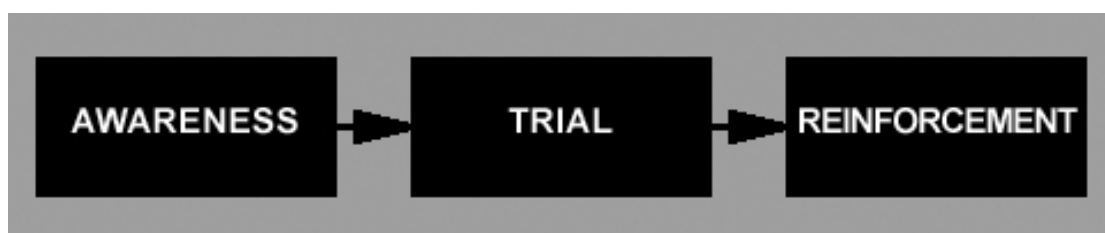
Source[33]

Ehrenberg's emphasis on unthinking routine applies of course to diet, but equally to our use of the car for travel – thinking about short journeys here, people often use their car without consideration for any active travel – the car is seen as easy and convenient.

There may also be emotion driven reasons to behave in ways leading to obesity. Links between depression and overeating are well documented. Individuals with such chronic mental states may be beyond the scope of social marketing. More 'one off' emotions may include those such as 'impression management' in public eating places: mainstream or middle class people may 'show off', expressing food choices as a form of sophistication to impress others[34]. More generally, and across all social classes, there may be a high degree of 'fitting in' going on: one can imagine a group of 20 year olds all ordering the same thing at a burger restaurant.

In conclusion, in our view it is important not to over-emphasise cognitive, rational thinking and correspondingly under play the importance of emotion, or routine behaviour.

The DH work on obesity on families with children has identified emotional 'hooks' that research suggests will inspire a reaction from the audience. More research is needed to uncover emotional triggers for your other key segments. Let's have a closer look at the DH work.

The DH obesity team plan: What can we learn? Implications for regional social marketing strategies on obesity

The DH are about to launch a large scale national campaign[35] due to begin September 2008. This will be a strongly branded piece of work that will seek to unite the audience – mostly mums with young kids – around a social movement.

Figure 9: DH obesity team segments

PEN PORTRAIT OVERVIEW	Struggling Cluster 1	Unaware Cluster 2	Complacent Cluster 3	Engaged Cluster 4	Traditional Cluster 5	Active Cluster 6
CLUSTER DESCRIPTION	Struggling parents who lack confidence, knowledge, time and money	Young parents who lack knowledge and parenting skills to implement a healthy lifestyle	Affluent, overweight families, who over indulge	Living Healthily	Strong family values and parenting skills but need to make changes to their diet and activity levels	Plenty of exercise but potentially too many bad foods
FAMILY DIET	Convenience, comfort eating, struggling to cook healthily from scratch	Children fussy eaters, rely on convenience foods	Enjoy food, snacking habit, parents watching weight	Strong interest in healthy diet	Strong parental control but diet rich in energy dense foods and portion size an issue	Eating motivated by taste, healthy foods included but so are unhealthy
PHYSICAL ACTIVITY	Costly, time consuming and not enjoyable. High levels of sedentary behaviour	No interest in increasing activity levels because perceive children to be active	Believe family is active, no barriers to child's activity except confidence	Family active although believe child not confident doing exercise	Know they need to do more: time, money, self-confidence seen as barriers	Activity levels are high, particularly in mothers
WEIGHT STATUS	Obese and overweight mothers	Obese and overweight families Child's weight status not recognised	Obese and overweight families Low recognition of child's weight	Below average levels of obesity and overweight	Parental obesity levels above average, children below	Low family obesity levels but child overweight levels are a concern
DEMOGRAPHIC	Low income, likely to be single parents	Young, single parents, low income	Affluent parents of all ages, varied household size	Affluent older parents, larger families	Range of parental ages, single parent families	Average incomes, younger mothers, mixed household size
INTENT TO CHANGE	Higher levels in quant, but fear of judgement and lack of confidence make them harder to change	Low currently due to lack of knowledge, but willingness to accept help once alerted to risks	Low intent to change and likely to deny that problems exist	Low intent to change but already healthy lifestyle	Low intent on diet but significant intent to change on physical activity	Highest levels of all clusters on both food and physical activity in quantitative research but not a priority to influence
POTENTIAL TASK	Build confidence, Increase knowledge and provide cheap convenient diet solutions	Provide understanding of risks of current lifestyle and develop parenting skills	Create recognition of problem and awareness of true exercise and snacking levels	Learn from successful techniques used by cluster	Focus on increasing activity levels and educate on portion size	Focus on providing cheap, convenient, healthy high energy foods to fuel active lifestyle

Source[36]

The idea is to identify the constituents of modern life that lead to obesity – too much convenience food and sedentary life - and to demarcate these as the "enemy" that people can move against. The team are aiming their campaign, in particular, at clusters one to three (see Figure 9).

This campaign will not be DH branded, and is not going to lead with traditional health messages. However the campaign will make the link between diet, physical activity, and health problems such as heart disease and diabetes.

The ads will also feature 'real' people with a sense of realism that shows changes happening, giving a sense of hope that change can be achieved. The aim is to get mums at the school gates chatting and organising a different way of life. The central

motivators of the campaign will be family fun and children's happiness rather than health. The principle will be 'showing' rather than 'telling'. The branding will have a playful element to it – something that attracts both the children and the adults, and something that can be stretched to other segments in future – teenagers, empty nesters. An emphasis will be placed on themes such as happy family memories as motivators to act. The well known Iceland originated LazyTown character has been an input into the work, but the UK campaign will be more multifaceted than this.

The DH are seeking to try and create a "social movement". Social movements (such as the green movement or mothers against drunk driving or, further back in time, the Labour movement) are often characterised:
- voluntary bringing together of people who want to change something
- often a protest against the current norms
- can be transformative
- can be political and engage in conflict

Social movements can be part of the armoury of social marketing – because social movements are to do with behaviour change at a societal level.

Social movements are often started spontaneously; 'igniting' and spreading like a chain reaction through social networks. They go onto create social relationships and a shared group identity which individuals can take on and which often sustain the movement over time.

The campaign is also aimed at health workers, volunteers, NGO workers who make up thousands of people who work on the ground to create activities to try and influence behaviour. So, local people running walking buses will be contacted, told about the 'movement' and invited to join. These colleagues are seen as key to igniting the social movement. This side of the campaign will be driven by a 'customer relationship management' database driven operation.

We asked the question: why turn this into a movement – why not just concentrate on individual motives to act? The DH team see the 'movement' approach as key to communities owning their own solutions.

In response to this information we examined **the theoretical origins of social movements**[37]**.** The following are seen as important:

- Emotions: can be important in issues such as deprivation, severe inequality, or a shared sense of grievance: the fuel protests or the Fathers for Justice campaign may be examples of this. Movements occur in highly charged contexts characterised by mass excitement, rumour, even mass hysteria… Emotions may be important to underpin why people join, but they are certainly important to explain why people stay with a movement: the emotional bonds of commitment and community;
- rational, calculative and opportunistic approaches : emotions are fine but they need organising and resources; here the emphasis is on structures;

- deep cultural processes in which people talk, argue, debate and build relationships and through this generate a sense of collective momentum and presumably action of some kind.

How do social movements start? The buzz phrase here is mobilisation. People need to be personally mobilised – they need to be motivated. Key here may be the effectiveness of persuasive communication, but also the influence of social networks. The latter implies that for any movement on obesity a nascent infrastructure must be in place to take forward any communication campaign: our contact at the DH emphasised that they are looking to support regional work and for the national campaign to support local infrastructure and help it to coalesce.

Why do people join movements? The more a person's meanings, aspirations, identity and personal biography align with the organisation, the more likely they are to join it. This is known as 'frame alignment'. Framing is a process/behaviour by which people make sense of their daily lives and the grievances they may have. Frames are schemata of interpretation – enabling individuals to locate, perceive, identify and label occurrences within their life space and the world at large.

For obesity to become the subject of a social movement, people need to overcome an apathy gap. Change agents will be those who no longer wish to live a 'divided life' in terms of their beliefs. Their beliefs become more important than the costs; they form a web of structures of feeling – and these feelings take precedence over cognition. The first step is to bring one's actions into harmony with one's inner life. An example, relevant to the obesity issue, may be the Slow Food movement. To recruit, social movements must resonate with the cultural zeitgeist, and find favour with at least some prevailing views in society at that time. Movements may grow out of *pre-existing social networks* that provide ready made lines of communication.

Are conditions ripe for a social movement to combat obesity in the UK? The DH clearly wishes to create such conditions. Whether there is sufficient desire for change amongst enough people is a moot point – clearly this is a major challenge for DH.

An important role for the DH campaign is the language to use to describe the vision the movement: this is no trivial matter. This process is known as labelling. Labelling is an indispensable part of perception and interpretation: before people can change a culture, they must first be able to think about it in their own minds and then be able to talk about it with others.

That concludes this section, and we are at the end of the first part of this report in which we have reviewed the theoretical landscape of obesity from a social marketing perspective.

Up to now we have spent time assessing the current state of play on what is known about obesity from a public health perspective, and we have raised some of the key implications for social marketing. The next section of this report sets out the strategic considerations for a regional social marketing programme. This plan is partly evidence based and partly a set of informed judgements that seek to build on current knowledge.

Part 2: Strategies

Social marketing solutions: strategic considerations

The next section reminds us what social marketing can offer the public health professional. If this is familiar territory you can skip this section and move onto a discussion of aims and objectives, measurement and control, and upstream considerations.

The role of social marketing in combating obesity

Social marketing has been shown to be effective across a variety of health problems[38]. It also has led to success in behaviour change with many different types of audience including low income and working class sectors. This is an encouraging background for us to consider its role as a set of techniques that may help in combating obesity.

An 'ideal' response to social marketing to combat obesity

Here's one kind of logical, well informed response that we may seek:

"OK I seem to be overweight. What I need to do is avoid this carrying on because it will lead to heart disease and diabetes in a few years. So, I will take action now to introduce a series of permanent changes to my diet and also increase my exercise. I recognise that weight loss is very gradual and also not a one off event. Therefore I am happy to change permanently. I also understand that I do not need to be puritanical about a new diet – a cream cake once a while is fine as long as my everyday diet and exercise is healthy. If I stand back and think about this new way of life, I think I am exchanging some instant pleasures and a lazy life, but in return getting a feeling of well-being and feeling better and fitter. This is an exchange that I understand and am willing to make".

At the moment the above argument is followed by a small minority. For the rest it may not be constructed in this manner, or not understood, or not believed. Others may have got as far as considering this argument but decided that for them exchange from tasty fast food and a sedentary life is not worthwhile.

We would distinguish social marketing from traditional style health education campaigns. In the obesity field the latter have struggled to make an impact. The New Zealand Push Play campaign is an example:

New Zealand Push Play

This is a community-wide intervention which commenced in 1999 and is underpinned by substantial mass media advertising centred on the promotion of the recommendation of 30 minutes of moderate –intense exercise daily. Significant increases in awareness of the message have been achieved, together with an increase in the proportion of people who "thought about being more active". A slight increase in physical activity levels was recorded between 1999 and 2000 but not in subsequent years. Supporters of this intervention remain positive about its potential and stress (surprisingly) that change in actual physical activity "was not a key goal given that it was an awareness campaign".

The fact that no significant change in physical activity levels have occurred would appear to reinforce the disconnection seen in many interventions between generating awareness and actually changing behaviour. Awareness and interest are necessary, but not of themselves sufficient to achieve behaviour change at the individual or societal level. What appears to be lacking is identification of the factors that will move individuals, population segments and the population as a whole to actually make, and sustain, the behavioural changes sought.

Source: Bauman et al [39]

Social marketing is at its most effective when it starts with the citizen and how they live their lives, then seeks to design attractive 'offers' – new ways of living - that people will exchange for their current behaviours. Of course, social marketing may also include creatively designed communications that highlight the problems and also dramatise the solutions:

Successfully combating obesity using social marketing: VERB
The VERB campaign was run by the US Center for Disease Control to promote exercise across test sites in the US. VERB is not an acronym but rather was to communicate action – the tag line was "It's what you do". In the first year of VERB, marketing efforts were dedicated to creating and introducing the VERB brand to 9-13 year old children. As a previously nonexistent brand, VERB initially had no value to this group. To sell VERB successfully as "their brand for having fun," the campaign associated itself with popular kids' brands, athletes, and celebrities, and activities and products that were cool, fun, and motivating.

The VERB programme was based on extensive research in the US that found the benefits of activity to 'tweens' (9-13 ages) were:
- Time with friends – playing, having fun;
- Time with family, siblings;
- Positive recognition;
- Opportunity to explore and try activities that appealed.

So the social marketing solutions involved:
- Mass media – TV/magazines;
- Viral marketing (spreading the 'buzz');
- Grass roots marketing: letting them stumble onto the brand: discovery, ownership (used community events, concerts, shopping malls;
- Posters;
- Tween-friendly website ("sticky").

Our own analysis of the VERB programme finds that

- there is an emphasis on fun and excitement for the kids;
- there is an attempt to provide lots of educative materials for the parents/schools;
- the programme tries to create added value through a strongly branded approach backed up with substance – lots of resources made available; points systems, etc;
- VERB focuses on a narrow target audience and its marketing is very focused as a result;
- the creative quality of VERB is very high;
- local delivery on the ground is driven with enthusiasm and strong local personalities.
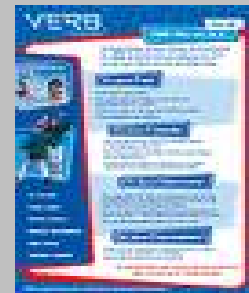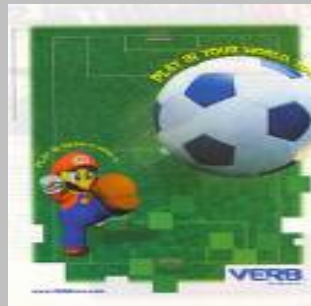
Lessons learned from the first two years of activity:

- Physical activity messages should generate feelings of happiness, fun and excitement;
- Ads should feature a mix of friendly competitive sports and individual activity;
- Messages should include range of benefits and show how barriers can be overcome;
- Ads should avoid gender bias, create feeling of inclusion and be inspiring.

For many more useful details of the VERB campaign see:
http://www.cdc.gov/YouthCampaign/

Source[40]

Aims and objectives of social marketing strategies to combat obesity in the South West

We have noted that obesity is usually caused by small differences between energy intake and expenditure over a long period of time – usually years and often decades. However, health interventions often set objectives over, say, a one year or 18 month period, and positive changes in BMI over a 12-18 month period are rare outcomes. The well known North Karelia Project in Finland spotlighted this problem. Over a twenty year period North Karelia have deployed significant resources into healthier diets and increased exercise programmes. They achieved high levels of awareness and good levels of participation in better nutrition and exercise. They did achieve BMI reductions amongst the most unhealthy sectors, but, critically, at a population level, average BMI's were almost unchanged[41].

One conclusion is that – at least as an interim – shifting BMI levels should *not* be adopted as an objective – at least not for the general population.

How can we address this difficulty? Bill Smith[42] pointed out that often social marketers 'need to reframe the problem' to achieve social changes in difficult scenarios. You may, therefore, wish to consider setting objectives thus:

Over a 1-2 year period:

- Attempt to reduce BMI levels for acutely obese people of BMI, say, over 35.
- Attempt to increase levels of 'good' nutrition and increased exercise at a general population level with the aim of increasing general well being and general health but not emphasising weight loss per se. Put simply – the aim would be to achieve a behaviour change of increased exercise and improved nutrition, but accepting that, say, embedded snacking habits will remain.

Over a 10 year period:

- Set a general aim of BMI reductions by small but achievable targets; say an average of two percentage points across each of the different sectors. If a population segment has an average BMI of 30, then a ten year target may be to reduce this to an average of 28.

Finally, given the difficulties in shifting diet and exercise behaviours, it may also be prudent to place at least some emphasis on interim objectives such as awareness of health problems, knowledge of ways of preventing obesity, and attitude shifts.

Measurement and control

Research issues - Reporting obesity, food intake and exercise levels

Measuring food intake and exercise levels is fraught with difficulty. Much of the field relies on self reports and these suffer from memory problems (what did you eat in the last week?), ego-defence (I am a disciplined and logical person so I will put those snacks out of my mind), and impression management (I don't want the researchers to think I am greedy or lazy).

Under-reporting of dietary intake is a well documented shortcoming[43], and such under-reporting is greater amongst overweight compared with non-overweight individuals[44]. Self report measures of physical activity are similarly problematic with activity levels often overstated versus observational data. Observation studies have to some extent helped uncover these deficiencies in self reporting, but are expensive and not feasible outside of controlled conditions with small numbers.

These measurement issues have implications for any social marketing strategy. We suggest bearing the above reservations in mind, but recommend self report as the only practical way of obtaining measures with large numbers. Longitudinal studies are recommended: a series of measures over time to examine upward or downward trends are superior to cross sectional surveys of ad hoc campaigns. Objective measures such as controlled BMI measures are also recommended. Site based interventions allow activity attendance data to be obtained, while market research may be used to measure larger scale communications effects.

Let us now turn to the first of our sections dealing with practical actions you may wish to consider. Can the food industry help us combat obesity?

Upstream Issues: Lobbying, Policy and the Industry

The case for public intervention in food industry activity

Wellever[45] discussed a series of elements that need to be in place to trigger government intervention in public behaviours. These include the following relevant to combating obesity:
- Social disapproval. There is indeed a cultural norm in the UK that 'disapproves' of obesity. However this is less clearly the case in deprived and working class communities.
- Medical science: the example of smoking suggests that successful public health interventions are based on solid medical science. But as we noted earlier, the science of obesity is much more complex and open to dispute. The base levels of physics (obesity is caused by an excess of energy intake over energy expenditure) and biology (energy expenditure is modified by metabolic rate; appetite levels can vary, etc) are widely agreed upon. However there is no current acceptance of settled 'truths' in the extant literature about the relative impact of food intake and exercise levels at population level. Food intake is

hugely complex, meaning that identifying the root causes is much more difficult.

- Blaming the industry: the food industry certainly fears being singled out as deliberately responsible for inflicting harm. Industries that market to children are particularly vulnerable. This has reached the stage of becoming openly political in the UK, with the food industry and its allies (commercial marketing agencies for example) fighting back. In the US, various attempts to bring lawsuits against the likes of McDonald's have been largely unsuccessful. As Wellever notes, it is not clear whether opposition to Ronald McDonald will provide the same rallying call as Joe Camel or Marlboro Man.
- Generating a 'Social Movement'. This is the aim of the current DH national initiative. At this early stage it is very difficult to predict the possible outcome of this initiative.
- The emergence of 'Interest Groups'. Groups such as Slow Food[46] have been in place for some time and the opportunities remain for public health leaders to galvanise these groups into a cohesive force for change. However, we acknowledge the difficulties in time and resource in doing so.

The role of the press

We spoke to a professional with considerable media experience in broadcast media in the South West. His view was that – scare stories of 30 stone teenagers apart - obesity occupied a strange place within media at present. In spite of its position as an epidemic with enormous health implications – the macro effect was not seen as news in the way that other health scares do. Although the media are keen on social causes, obesity as a societal problem was not seen as one of them. Exceptions might include variations on scares such as 'first generation to die before their parents' and similar, but obesity is something grows extremely slowly for a long time, and the media has not been terribly good at spotting the news potential of something that is so prevalent and seems so 'normal'. Paradoxically there is audience fatigue in scare stories of extreme obesity – stories which in any case are unhelpful because people disengage with the word obesity – not seeing it as relevant to them, even if they are themselves obese. The need is for a new narrative to be built up – one that reframes the issues using new imagery and introducing a fresh new 'story' for the media to take up.

> **Why the press could be vital in getting the message across**
>
> Does it matter how the press cover the obesity issue? According to Ben Goldacre of Bad Science fame in the Guardian, yes – it is vitally important. He provides strong evidence that regardless of what people say in surveys about not trusting journalists, in reality, people read the press a great deal, their contents seep in, people believe them to be true, and they act on them. To back up his bold claim, Goldacre quotes a 2005 study in the Medical Journal of Australia which looked at the impact of Kylie Minogue's breast cancer on mammogram bookings. They rose by 40 per cent during the two week publicity peak, and six weeks later they were still up by a third. The most they had previously fluctuated was 10 per cent. A systematic review by the Cochrane Collaboration found five studies looking at the use of specific health interventions before and after media stories, and each found the same effect: greater behaviour change after the publicity.
>
> Goldacre's oft made point is equally salutary: the press often get 'science' stories badly wrong – often wilfully misconstruing a story to generate maximum shock or scare. We need to continue to battle to obtain objective coverage, helpful to our cause.

Source[47]+[48]+[49]

We recommend linking with national media initiatives to position the SWPHO as a primary point of contact for media information and clarification on any potential coverage, as well as positioning the SWPHO as a repository for national, regional and local reports. As national initiatives are released to the media, the SWPHO can then highlight regional stories of interest.

Where there is data indicating that the South-west region should receive special consideration in the implementation of government-sponsored/national initiatives, the media can then become allies in providing coverage of the issues as part of a wider lobbying of policy makers for requisite resources.

Lobbying for changes from the food industry

The over-consumption of energy dense food is driven by some innate human characteristics that the food industry exploits. The first is described by Wansink and Huckabee[50] as the 'law of least effort'. Marketers have long known that we are highly attracted to anything that is convenient. People will pay £2 for an ice-cream on a beach that costs 60p in a store a mile away. The problem is that the most convenient food is also the unhealthiest.

The second is the genetic 'hardwiring' of our food preferences driven by millennia of evolution and behavioural learning. People are 'pre-programmed' to want low cost but tasty food that they eat in much larger quantities than was envisaged by their forbears. Interestingly, while, historically, good tasting food was equated with good health, this has now been reversed so that good taste equals unhealthy in the minds of consumers. But this perception has, as yet, failed to change habits. Food companies are not responsible for this innate biology that drives our search for salt, fat and sugar.

These are not ingredients sought out because of clever marketing; people would seek them out regardless of marketing. However food companies have driven the growth in consumption with their highly effective marketing of low cost, tasty options, made available in incredibly convenient ways.

The argument then is not whether to 'blame' food companies, but whether they should be more responsive in helping control obesity. They are under pressure to co-operate because there is a public relations battle looming, and they wish to present themselves as responsible and looking after their customers. They do not wish to be cast as 'bad boys' in the manner of Big Tobacco. They are also under pressure because of the threat of taxes, fines, restrictions and legislation.

It is useful to ponder for a moment how these pressures may play out. The food industry seems to be following a pattern familiar to firms confronted with public health concerns. Wansink and Huckabee describe this in three phases: denial, appealing to consumer sovereignty, and developing win-win opportunities. Let's take the first two of these to start. Denial includes blaming the obesity effect on the *lack of physical activity people do* rather than their food choices. Secondly, consumer sovereignty asserts that people have free choice, *so let the customer decide*. If they want to eat less of our products they will. Don't interfere in the free market. Fast food restaurants will back this up by offering salads and vegetable options (for example, veggie burgers).

These two arguments look powerful on the surface because they have an element of truth to them. The lack of physical activity is indeed a contributor to obesity. In theory, consumers do indeed have 'free' choice. However the food industry obfuscates on the central point: there are multiple factors leading to obesity, and *one is undoubtedly the way unhealthy food is marketed*. A counter-argument for public health professionals is not to deny that freedom of choice exists, but to challenge the acceptance that unfettered industry freedom to market unhealthy food is a good thing - at a societal level. There are a number of experts that can be called upon: Wellever's own argument is that obesity is partly a societal issue, and as such cannot be purely the fault of individuals. This argument is replicated across much of the literature, and this can be marshalled into a pressure point for the industry.

Wansink and Huckabee's third phase of the future was to predict that *the food industry could be part of the solution* by helping to 'de-market obesity'. They suggest that the industry could help solve obesity and avoid being penalised through legislation. A series of mechanisms to reduce the intake of 'bad' foods are available through the use of classic marketing techniques. These include:
- Deliberately making foods less convenient to eat in large quantities by altering the packaging of foods. For example, chocolate biscuits are sub-divided into smaller packs (say two or three) to help reduce 'unthinking' consumption of five or six at a time. The use of multi-packs could be expanded. Wansink and Huckabee's idea is based on the presumption that many consumers would be willing to pay a premium for packaging that helps them control how much they eat. However this presumption does not appear to have been researched, and looks far from problem free. In addition, the idea ignores the strong backlash from environmental concerns about the steep rise in packaging that

would result. In our view, the danger is that the industry would be replacing one problem (obesity) with another (using up energy resources and creating more waste).

- Reducing selected sizes and offering these at the same price. This is based on the sound principle that income for the food industry remains constant: they would resist attempts to reduce it. However, our view is that it is unrealistic to expect voluntary take up of this idea, because any company that offered large portions at the same price would have a sales advantage, and the others would then quickly follow suit and revert to large size offers. The only scenario in which this idea would work is that of mass markets accepting the idea that buying sugary, fatty food in bulk is 'bad' for them – not something we would envisage happening soon.

- Changing recipes to keep food tasty but increase healthy intake. The idea is to modify the formulation of foods to make them less energy dense but similarly sized, for instance by adding less calorific food such as vegetables or water. While far from perfect (ideally we'd want people to avoid buying processed food altogether) there are major possibilities with this strategy. Research experiments confirm time after time that the perceived taste of food can be manipulated by marketing: the same cola placed in different bottles is given different scores on taste preference, according to the brand on the bottle. So, it is possible that pizzas, burgers and hot dogs can be created more healthily but marketed as tasty snacks. This idea forms the basis of commercial players such as 'The Sneaky Chef' – healthy food offered 'in disguise' so it will be eaten (www.thesneakychef.com). There are particular opportunities here to support new entrants into such markets: we can be sure the big players in the food industry will watch such developments carefully.

- Provide better, more effective labelling on pack. This is an important area for public health lobbying. The marketing principle here is to recognise that the kind of in-depth, technical nature of the information placed on packs through statute is of very limited use in helping change behaviour. A small segment of well informed consumers will indeed use the information in such labels, but they are a small minority: probably well educated, possibly politically aware people with 'green' sympathies. However, many others will remain ignorant of the details of what their food contains. This will particularly apply to processed foods which will typically be high in sugar and salt but these ingredients will be craftily hidden by 'loud' marketing of the 'Low in Fat!' variety. To counter these effects, many stakeholders have recommended the increased use of the 'traffic light' system of labelling[51]+[52]. Colours green, amber and red are used to highlight low, medium and high levels of something unhealthy – fat, sugar, and salt.

The previous labelling convention of Percentage Daily Allowance of food constituents has clearly been of limited value, generating large scale ignorance and confusion. We would recommend strong lobbying for greater use of the traffic light approach, which, whatever its shortcomings, has greater potential for impacting on consumers. Wansink and Huckabee advocate placing clear markers – indicator lines - on the outside or inside of packages to indicate typical healthy portion sizes, in the hope that these will provide natural stopping points. This may also be worth exploring as partial solutions.

Additionally, the 'Traffic Light' system may be further simplified. Consider the example below:

In our view the labelling as it stands is too cluttered, and the key messages are too small and too confusing. We would suggest that research is undertaken to explore whether the % daily allowance figures should be removed altogether, and that the amounts of calories or grams of sugar/fat/salt also be removed or repositioned elsewhere. This would leave the much simpler green, amber, red colouring for each category. This will present an incomplete picture to consumers – but has the advantage of simplicity, and fits with the reality of consumer behaviour in food shopping, which is that consumers typically take no more than one or two seconds to make a product decision within a supermarket. Labels have to impact within this behavioural constraint, and it therefore follows that the principle of 'the simpler the better' holds true.

The potential for counter-advertising

Counter-advertising is the use of advertising methods to counter what are regarded as the damaging effects of commercial advertising. However this is a tricky area for obesity. We have already noted that commercial food cannot be portrayed as the 'enemy' in the way that cigarettes have successfully been positioned over a period of time. Food has to be eaten, and the arguments about what constitutes good or bad food may be firming up but they are complex and still open to dispute. There are also a great deal of foodstuffs on the margin that may be convenient or 'fast food' but may be relatively healthy. Crawford and Jeffrey[53] note that smoking was successfully made socially unacceptable over time and this helped reduce smoking rates, but that obese people have been stigmatized for decades and obesity rates have continued to rise. Similarly, while raising the price of tobacco has helped reduce smoking, it is much more difficult to raise the price of convenience or processed food for fear of discriminating against low income households. Behaviour change for obesity control

will probably require more collaborative approaches between public sector and industry than was the case in tobacco.

However the food industry should arguably not be let off 'scot free'. Untrammelled fast food marketing can be highly damaging, reinforcing fatty and sugary foods as everyday norms. One possibility would be to use the principles deployed in the anti-smoking Florida Truth campaign[54].

This picture is one of the illustrations from the Florida Truth Campaign which asked teenagers to reflect on the bigger picture of the tobacco industry.

This campaign eschewed the usual health and risk oriented themes and instead focused on key youth motivators including independence and rebellion. The campaign goal was to portray the tobacco industry as manipulatively seeking to get teens to smoke and in so doing rob them of their independence. The idea was to use reactance theory – don't tell me what to do – to trigger a desire for personal control away from the tobacco industry. Teens were encouraged to identify with risk takers, dreamers, rebels and being edgy, but who reject smoking. The importance of peer approval and the importance of being 'cool' were heavy influencers on the campaign.

Can something similar be done for food? Not in the same way: the importance of rebellion and cool is not the same. The Truth campaign built on 30 years of public health campaigning to create a 'settled', generally accepted view that cigarettes are bad things. We do not have the same bedrock of awareness and public opinion about McDonalds or Kraft. However, there are some 'Truths' that could form the basis of a campaign. Themes such as balance and moderation and their importance to happiness and well being over time may be promoted. In addition, the insidious nature of the advertising from 'Big Food' could be highlighted, particularly its effect over time in de-sensitising people to bad habits.

That concludes our section on 'upstream' strategies. We are now in a position to consider activities that may lie within the direct control of the public health profession. Our start point is to segment.

Segmentation strategies

Segmentation, targeting and behavioural goals

Segmentation and targeting are essential for effective social marketing. Interventions can be targeted to a specific segment. As Sarlio-Lahteenkorva[55] emphasizes, "Tailoring treatment to divergent needs and matching subjects individually to specific programmes could be more effective than general treatment programmes targeted at all the obese people." Weinrech explains further that "Good marketers know that there is no such thing as selling to the general public. To be most effective, you need to segment your target audiences into groups that are as similar to each other as possible and to create messages specifically for each segment"[56].

Ideally, the target population would be segmented with a method that will produce segments that are as homogenous as possible within each segment and as heterogeneous as possible between them. There are a variety of possible ways to segment people so as to maximise the effectiveness of social marketing programmes to tackle obesity.

The most obvious segmentation methods relate to demographics (in particular lifestage), and socio-economic status. There are others focusing on behaviour: For example, the population could be split by propensity to exercise or eat healthily. In commercial marketing this form of segmentation is often deployed by direct marketers and is very powerful in various sectors. The idea would be to target inactive people who, according to their profile, *are on the cusp* of eating more healthily/becoming active. The key is to have the data available. If the data was available, those on the cusp of behaviour change could be split from those who already behave healthily (and hence don't need help) and also from those people who (from their profile) are *highly unlikely to engage in the activities no matter what we try*. We imagine that this kind of predictive profiling data is not currently available and may be expensive to gather. However, there are techniques available that can help *estimate* who may lie in each segment – see the section on 'geodemographic' data suppliers later in this section.

When formulating your social marketing strategy, we advise linking specific segments with specific and often very different behavioural goals. This combination will most significantly affect the eventual social marketing intervention. For example, if women with children are to be targeted with the goal of increasing energy expenditure, interventions will need to take childcare and home responsibilities into consideration as well as gender issues of body image and identity. In addition, women from different social backgrounds are likely to respond differently to interventions and have different socio-cultural barriers.

Lifestage and social class based segments

Evidence suggests that the oldest and poorest segments of the population are the most susceptible to illnesses linked to obesity[57]. Therefore, in this case, segmentation according to lifestage and social class is suggested as a best practice segmentation

strategy. The table below illustrates a possible segmentation of the South West according to socio-demographic status (vertical) and by lifestage (horizontal). The three segments discussed in detail in this section are hatched.

MIDDLE CLASS 1.1, 1.2 and 2	Children	16-24	Parents with children at home	Empty nesters	Retired
INTERMEDIATE CLASS 3, 4 and 5	Children	16-24	Parents with children at home	Empty nesters	Retired
WORKING CLASS 6, 7 and 8	Children	16-24	Parents with children at home	Empty nesters	Retired

An important general principle to guide your strategy is that the more you segment, the higher your costs and management time become. We need to balance the benefits from segmenting the population with the costs and management time involved. This has been borne in mind in our proposed solution.

Therefore, segments for targeting need to be prioritised. This section will outline key insights into the working class, 16-24 and middle-aged, middle-England segments (shaded areas):

- Working class people are crucial for the social marketing of obesity because they are most at risk[58].
- The 16-24 age group are crucial targets because they are in a transitional life stage with issues of chaotic lives, high alcohol consumption and high fast food consumption. Increasing their healthy habits may positively affect their health in later life.
- The middle-age, middle-England segment may be 'low-hanging fruit'. They may be ripe for behaviour change, with time and money available but with ingrained habits. If these habits can be changed then this segment will experience a healthier later life.

The possible role of Geodemographic data suppliers

As you know, every ten years in the UK, a government run Census is carried out, through which enormous amounts of (geographically based) demographic information is gathered. This data is used by the Government for a number of purposes, but is also available for purchase by interested companies. The data is only available in aggregated form, not at individual level, and so is not useful to marketers in its raw form.

This is where Geodemographic profilers add value. Using techniques like cluster analysis, they firstly place households into groups according to their common demographic characteristics - age, social class, size of house, and so on. They then take each postcode in the country, and allocate a description to that postcode according to its typical household profile. This is useful information to commercial or

public sector/government marketing clients, who will buy this data off the profiling company. One such geodemographic product is called Mosaic.

For combating obesity, the argument for the use of geodemographics is that Type II diabetes is disproportionately high in certain Mosaic Groups:

	Target	%	Base	%	Pen. %	Index	
	Incidence of diabetes 2 across each MOSAIC Group in UK	Incidence of diabetes 2 across each MOSAIC Group in UK	Population of UK in each MOSAIC Group	% Population of UK in each MOSAIC Group	% penetration of diabetes 2 across each MOSAIC Group	Mean average deviation score for diabetes in UK MOSAIC Groups (ave = 100)	
I Twilight Subsistence	63,477	8.01	1,684,756	2.85	3.77	281	
J Grey Perspectives	79,389	10.02	3,958,671	6.70	2.01	149	
G Municipal Dependency	76,503	9.65	4,071,163	6.89	1.88	140	
F Welfare Borderline	50,464	6.37	3,127,968	5.30	1.61	120	
D Ties of Community	143,547	18.11	9,531,308	16.14	1.51	112	
H Blue Collar Enterprise	102,748	12.96	6,975,563	11.81	1.47	110	
C Suburban Comfort	120,586	15.21	9,602,455	16.26	1.26	94	
K Rural Isolation	30,458	3.84	3,227,910	5.47	0.94	70	
E Urban Intelligence	33,292	4.20	3,811,846	6.45	0.87	65	
A Symbols of Success	49,425	6.24	6,150,454	10.41	0.80	60	
B Happy Families	42,672	5.38	6,916,973	11.71	0.62	46	
	792,561	100	59,059,067	100	1.34	100	
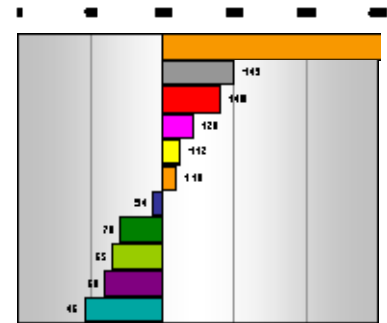
Source[59]

We do know that some Mosaic 'Groups' (the UK is divided into the 11 Mosaic Groups in the table) describe profiles that will be highly represented in the South West. A rapid analysis would suggest the following groups (using their commercial Mosaic Group names (*source*: *Experian*) will be of interest:

Mosaic Group F: 'Welfare Borderline'

This group maintains the following 'types'
F37 Upper Floor Families
F38 Tower Block Living
F39 Dignified Dependency
F40 Sharing a Staircase

Mosaic Group G: 'Municipal Dependency'

Containing:
G41 Families on Benefits
G42 Low Horizons
G43 Ex-industrial Legacy

Mosaic Group I: 'Twilight Subsistence'

Containing:
I48 Old People in Flats
I49 Low Income Elderly
I50 Cared for Pensioners

We would recommend you explore products such as Public Sector Mosaic, supplied by Experian. They will give you each postcode in the South West with a profile that highlights the priority postcodes – those which most closely fit your desired target audience profiles. So, you will get a list of postcodes, maps, (and electoral roll records for direct targeting) that will enable you to quite accurately deploy, say, door drops of leaflets, with minimum wastage.

We can now examine our three recommended key segments.

Segment 1: Working class & deprived communities

Class is the number one correlate of obesity[60]+[61]+[62].

The Goldthorpe-based Office for National Statistics scheme is recommended as the most appropriate way of segmenting by class because it is considered to be the most rigorously conceptualised scheme[63]+[64]. The scheme has also been found to stand up to rigorous empirical testing[65].

	ONS Classes
1.1	Employers (large organisations and senior managers)
1.2	Higher professionals
2	Lower managerial and professional
3	Intermediate (e.g. Clerks, secretaries, computer operators)
4	Small employers and own-account non-professional
5	Supervisors, craft and related
6	Semi-routine (e.g. Cooks, bus drivers, hairdressers, shop assistants)
7	Routine (e.g. Waiters, cleaners, couriers)
8	Never worked, long term unemployed

Key insights into working class culture as well as social and psychological issues related to this group's propensity to become obese are discussed.

1. Class culture

The most important start point is that working class culture is different to middle class culture. Culture is a deep-seated and unconscious worldview which guides our thoughts and actions. Culture is embedded in us by our family, friends and neighbours. The most obvious way it manifests is through our tastes. We actively 'choose' certain behaviours (to drive rather than walk, for example), yet these behaviours are a manifestation of our deeply rooted culture.

For example, it has been suggested that a sweet tooth is linked with a working class background. Wright *et al*. comment; "How easily we associate sweet milky tea with builders and unsweetened Earl Grey or espresso with the professional classes"[66]. Ultimately, just as it is said that our taste in music gives away our social origins, so our taste in food and our ways of presenting it are class-culturally distinctive. The suggestion here is that social marketers should not necessarily attempt to fight these class issues. To use an extreme example to make the point – it would be foolish to try and introduce olives and sundried tomatoes into very traditional working class diet when plainer, simpler foods reflect the deeply rooted culture.

> **Segment 1, Insight 1**
> The social marketer should work *within* a framework of class cultures. For example, healthy foods should match those tastes but be healthier than what is currently offered.

2. Deprivation: Locating the exchange

Deprivation is stressful, not least because the lack of social and cultural 'capital' in these peoples' lives make it very difficult to overcome obstacles. Working class people often do not have the resources or skills to overcome daily struggles. As a result, there is a tendency for people to resort to eating badly, smoking or consuming excess alcohol. This is in contrast to well educated and higher income people who may cope with a 'bad day' by, for example, going for a walk or to the gym. Poorer people will fall back on their cultural norms, which can be obesogenic behaviours.

> **Segment 1, Insight 2**
> Social marketing must offer an exchange which takes into consideration the additional psychological reasons for poor energy consumption management.
> For example:
> - social marketing needs to be encouraging and supportive
> - community support groups can offer a social network. Loneliness or the feeling of striving alone is stressful and can contribute to relapses.

3. 'Physical capital'

Working class people may have less physical capital than middle class people. Physical capital is 'knowledge' manifested in sport and exercise skills. It is well known that the link between an active childhood and adulthood can most easily be correlated with children's early introduction to multiple types of sports. Then they are far more likely to be physically active in later life.

> **Segment 1, Insight 3**
> Knowledge of the uses of the body should not be overestimated when targeting working class people. To encourage behaviour change, knowledge deficit of that behaviour should also be addressed by social marketers.
> For example:
> - community sports 'lessons' can be fun and provide physical capital which boosts confidence, perceived self-efficacy and also increases physical exertion. Boxing clubs can encourage youngsters in deprived communities to get involved with the sport, increasing their chances of continuing with physical activity in later life. Martial arts and football have also been popular. Community consultation is a good way of finding out what local people would prefer to try.

4. Obesity is of little concern

It is suggested that obesity is not of as much concern to many working class people as the health repercussions suggest it should be. Deprived people, it is suggested, tend to have a 'utilitarian' or 'functional' relationship with their bodies, which is best understood by examining their relationship with physical activity, their diet and their perception of the meaning of 'health'. This is explored below:

Health:
For middle-class people health is considered to be a 'value' to achieve, whereas for working-class people health is more utilitarian, meaning that as long as their bodies

enable them to work or function day to day, they are considered to be healthy[67]+[68]+[69]+[70]+. It has been commented that even those working class people with life-limiting illness consider themselves healthy if they can work.

> **Segment 1, Insight 4**
> Any social marketing referring to obesity as 'unhealthy' should be specific about the meanings of health to the working class.
> For example:
> - Messages need to emphasise being able to 'get on with it' without struggling.
> - The slim 'body beautiful' may be seen as unattainable and unrealistic, so visual material should picture 'people like us'. Where possible, local imagery should be used.

Physical activity:
Commentators have found that middle class people view the body as a project, (modifiable through exercise), but for working class people it is a functional tool for work[71]. Warde explains that there is a class gradient to engagement in the "ascetic routines of training for training's sake"[72].

> **Segment 1, Insight 5**
> Social marketing promoting physical activity will need to take into account the knowledge that 'exercise for exercise's sake' is not a phenomenon deprived working class people identify with
>
> For example:
> - In less deprived neighbourhoods, walking or cycling to work has proven to be successful (see http://www.pedalbacktheyears.info/ for an example in Cornwall). In more deprived neighbourhoods where unemployment is high and lives are more chaotic, this will be harder to achieve.
> - Given the barriers, devices like free pedometers may be a good way of encouraging people to introduce activity into the fabric of their lives.

Diet:
It has been suggested that the economic deprivation of low income households leads to a 'taste for necessity'. For example, as you go up the social hierarchy the percentage of income spent on fattening food decreases and that spent on digestible, lighter foods increases. Necessity manifests as 'preference' but is a forced choice. A preference for fattier, filling foods may be a psychological trick played to cover up the fact that in reality poorer people have a disposition towards 'filling up' their families rather than enjoying the taste of food.

> **Segment 1, Insight 6**
> Dietary interventions need to emphasise the functional elements of food. For deprived people, food is fuel rather than a pleasure or symbolic expressions of taste. Social marketing should emphasise filling up the family for an affordable amount, just as the commercial fast food marketers do.
> - Copycat adverts using fast food style imagery and messages can work, e.g. families eating together, enjoying each other's company. Food choices will need careful research, but the food should be easy to prepare and filling as well as being low in fat salt and calories
> - There is plenty of evidence suggesting that working class families and communities are close and traditional, so marketing an intervention which encourages women to share recipes has potential. We could for example use direct marketing to distribute messages, recipe cards or diet-planning books and incentivise women to recommend a friend or family member to the scheme.

5. Obesity is the norm

Arguably, thinness has become a mark of middle-classness, whereas being overweight is a visible marker of the working class[73]+[74]+[75]

> *"You are the way you are. I'm meant to be this big. There's nothing you can do about it. It's life. We all have our shape."*

The more the norm of obesity becomes accepted in working class life, the less easy it will become for obese people to be prompted by stigma to become self-reflexive and change their habits.

> **Segment 1, Insight 7**
> The DH Obesity Team have research that points out how extremely hard it is to prompt self-reflexivity through marketing, and we recognise the difficulties. Nevertheless, social marketing communications needs to present obesity as 'abnormal' so that obese people are not cushioned by the perception that they are conforming to the cultural norm.
>
> An ideal way of achieving this would be to use the popular media. For example – and we recognise this is not easy - if characters in Eastenders or Coronation Street were to eat apples, and pasta instead of chocolate bars and fish and chips, this would go some way to 'tipping' cultural norms in a healthier direction. Achieving this level of media control, however, is likely to be extremely difficult (although it is noted that lobby groups and charities have had some success in the area).

6. Strongly bonded communities

Working class communities have a unique social set up which is important to consider when planning a social marketing intervention. Members of working class communities tend to have very close bonds with similar people to themselves. The networks are often made up of family members, who settle geographically close to

each other, and also neighbours. Working class neighbourhoods have become far less condensed than in past times, but communities are still strongly bonded and family-centred. Cattell explains:

> "The traditional norm of reciprocity and the expectations and obligations of mutual aid which it engenders, though certainly not as strong, have to some extent survived changed conditions… The 'eyes on the street'… may be fewer, but neighbours still 'lookout' for other people's children"[76]

This strongly bonded community characteristic means that working class social norms tend to be particularly strong and less easily influenced by outside forces. However, communities experience internal solidarity, which can be positive for social marketers.

Segment 1, Insight 8
Working in partnership with community-run organizations can have positive behavioural effects. Stakeholder engagement is a key priority in these circumstances and experience has suggested that if accepted community organisations can be brought onside with the intervention, success can be achieved by tapping in to the strength of the community solidarity.

Also, messages pointing out the family disruption and pain caused by diabetes and other obesity-related diseases could be effective. Family values are important to this group. (However, shock tactics may increase lack of confidence and self-deprecation issues since less well off people can often have low self esteem.)

Family socialisation is particularly important in the formation of dispositions to food, diet and exercise: mums are the primary influence on kids eating habits – through the whole of their lives.

Segment 1, Insight 9
Targeting new mothers and teaching them parenting skills about how to discipline their child's eating and snacking could have a dramatic effect over a child's obesity. However we note that older children often have separate economic lives, so children must be educated to make informed choices about their health (Vlad, 2003).

Source[77]

Research has highlighted a few *key psychological characteristics* which may be specific to the working class group and therefore form important insight for social marketing. The first is perceived self-efficacy: perceived self-efficacy is "the belief that one can change risky health behaviours by personal action"[78]. Low perceived self-efficacy can lead to failure. Those who judge themselves as inefficacious are more inclined to visualise failure scenarios that undermine performance by dwelling on how things will go wrong[79]. Evidence suggests that working class people have lower levels of perceived self efficacy, as a result of lower levels of attainment in education, career and material wealth.

Segment 1, Insight 10
Social marketing messages should aim to boost perceived self efficacy.
For example, using real testimonials of local people who have succeeded can have a strong effect, encouraging people to believe 'I can do it too'.

The following marketing techniques have proven useful in this situation:

- Relationship marketing: Participation in an intervention can be encouraged by building up a rapport with uncertain clients, introducing them to a concept through regular communications over a period of time, and reassuring them with a familiar brand.

- Direct marketing: As above. It has been useful in social marketing interventions to segment a community into 'participants' and 'recluses' to denote those who are already active in a community and those who may suffer from low confidence and low perceived self-efficacy and are recluses. Strategies have been written which aim to a) cross-recruit participants in other community organisations and b) encourage recluses to 'join in', often by using participants as the messenger. For example, data can be gathered from community organisations and participants can be mailed encouraging and incentivising them to join the relevant social marketing intervention.

- Word of mouth: Incentives have been offered to 'participants' for introducing a friend or neighbour to the intervention. Considerable use of health trainers, health volunteers and community champions has been successful.

Secondly, we should consider internal locus of control. Individuals have different types of perceived control over their health:

- Internal control: A person believes they have control over their current and future health through their own choices and behaviour.
- External control: A person believes that powerful others, such as doctors or family, have control over their health.
- Chance control: A person believes the state of their health is down to chance, such as genetics.

There is some suggestion that internal locus of control is linked to middle class beliefs whereas external or chance loci of control are linked to working class beliefs.

Segment 1, Insight 11
For working class groups the emphasis needs to be on changing perceptions so that individual responsibility is seen as being a precursor to change.
For example
- Messages such as 'this is your time' and 'take the first step' can be effective.
- Simple calls to action such as free-texting a number can be effective, 'All you have to do is text this number', implying that all the customer needs to do is take one step and the services will support them the rest of the way.
- Soap-lobbying can be a good way of encouraging soaps (Eastenders, Coronation Street etc) can be a way introducing storylines which can affect the attitudes of the viewers. This could be an avenue for suggesting that obesity is NOT the norm.

Finally, let us consider our ability to change habits. We are all strongly driven by habit, whatever our background, but working class people may be less able to change or break their habits[80]. It is emphasised here that a combination of low cultural capital (knowledge and capability), low perceived self-efficacy and an external or chance locus of control may lead to damaging habitual behaviours being ingrained and hard to change in working class communities.

> **Segment 1, Insight 12**
> Social marketing should aim to provoke self-reflexivity and then provide support for change.
> For example
> - Shock tactics have had mixed reviews. However, messages which enable the customer to 'recognise themselves' are a good way of prompting self-reflexivity.
> - Considerable localised consumer research is essential for this approach, as is stringent segmentation and targeting.

Now let us consider our second priority segment – young adults

Segment 2: "16-24s" – Young adults

Key issues are explored here, with some social marketing action suggestions:

1.   Lack of time to eat healthier/exercise
This group is experiencing a transitional phase, between the structure of school and the structure of parenthood, job responsibility and marriage. Life can be chaotic, revolving around socialising with friends or partners. Young adults have been said to have a short-term orientation to time, not planning ahead but rather living day to day.

Fast food is cheap and readily available whilst vegetables are perceived as boring, tasteless, expensive and difficult to prepare. Buying and preparing vegetables, doing a weekly shop and freezing or defrosting home prepared healthy foods is seen as complex and unappealing. In addition young people often cook for one, which has been said to cause a bulking-up of portion sizes[81].

At the older age range Golberg and Gonasti[82] reported a study of students in which only 27 per cent of students reported that health motivates them in making food choices, and only 17 per cent said food being healthy was really important in their selection of a restaurant. In common with other studies they found that children and youths were likely to believe that taste and the nutritional value of foods are inversely related.

> *"I don't have the time to worry about eating healthily. There's too much to do. I don't plan my day around meals, I eat on the run."*

- 16-24s spend lots of time studying or working, often in sedentary jobs.
- Food planning is low on the priority list so food may be purchased from convenience stores. Pre-packaged sandwiches, cakes and chocolate bars are high in fat, sugar and high up the GI index.

- Some young people have left the family environment, (where meals were cooked and presented by a parent on a daily basis), without the skills to prepare these meals themselves so there is a reliance on ready meals and microwave dinners.
- 16-24s spend lots of time socialising at each other's houses and in pubs, spend lots of time using the internet i.e. Facebook[83] and organise their social life via the mobile phone.

Segment 2, Insight 1
- Offer delivery of vegetable boxes with recipe suggestions. Incentives could be money off a blender, for example so that soup can be made.
- Recipe and price cards can be offered, pointing out ways to make cheap meals, including the location and price of ingredients plus tips about storage.
- Free Tupperware boxes could be offered as a way of encouraging food planning and taking lunch to work or college rather than spending money on pre-packaged lunches. The incentive of financial savings could be used as a motivation for taking packed lunches.
- Microwave healthy recipes could be offered so that speed can be used as a motivation but the meals can still be healthy.
- Deliver messages by email and mobile phone. Calls to action based around the immediate response or freetext or weblink may be effective. Facebook groups designed to motivate young people to exercise may be effective.
- Focusing on one simple behaviour change to effect a slight energy intake decrease or energy expenditure increase could be accepted better than complicated behaviour changes. For example, it has been found that by drinking one less fizzy soft drink a day can have a significant effect over calorie intake
- A recent review examined the availability and the known efficacy of Internet-based weight loss programs. Findings showed that the general public is turning to the Internet for diet and fitness information and has reported that information they found online has impacted their behaviour. Internet-based interventions could be most appropriate for this younger segment.

Source[84]+[85]

2.   Influence of price
- This group is likely to be on a low income with little disposable income, possibly paying off student debts.
- With the disposable income that is available, the priority is appearance (fashion, jewellery, piercing) and entertainment rather than food.

Segment 2, Insight 2
- Recipe and price cards at supermarkets could prompt healthier and price-sensitive shopping.
- Free supermarket delivery could enable poorer young adults to avoid convenience pre-packaged food, which may seem cheaper but is more expensive in the long run and also less healthy than home-prepared food.
- Fruit and veg market stalls at colleges, universities or a fruit and veg van in low income residential areas.
- If possible, the price of healthy foods should be *selectively* dropped to this segment: commercial players may be swayed by the idea that they are setting up 'customers for life'.

3. Alcohol
- Young people socialise in bars and on the street.
- Alcohol is an ingrained part of the transitional phase, Binge drinking tends to drop off after they reach 24/25 years old.
- Decisions regarding health are often overshadowed by a desire to fit in. Therefore alcohol consumption and fast food can often become entrenched in youth culture.
- With alcohol consumption comes fast food snacking and lethargy due to 'hang overs' the following day.

Segment 2, Insight 3
- Physical activity will be the main counteractive to alcohol-related weight increase. The intervention needs to be youth-culture relevant (although be aware that a 16 year old will have far different experiences and perceptions than a 24 year old).
- Physical activity should revolve around fun, possibly with the incentive of 'flirtation' with other young adults. Examples include dancing (salsa, break dancing, urban, dance), *parcours* and martial arts. Team sports may be a good incentive for men, but possibly less so for women. For example, football leagues between major employers or halls of residence could be organised, supported by a commercial partner.
- Lobbying soaps or popular television programs to introduce the idea of countering drinking alcohol with physical activity could be effective. One idea is introducing the concept of a young person in Hollyoaks or Eastenders enjoying social drinking but being aware that they have ingested too many calories and have a need to exercise to balance their behaviour.

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4. Appearance

A recent study suggests that young people are indifferent to healthy eating and see weight gain as inevitable[86]. However, there is a greater acknowledgement of potential problems from the female cohort. Appearance is a great motivator for being careful about diet and exercise.

Segment 2, Insight 4
- Appearance (fear of getting the 'beer gut') could be used as a motivation. For women, particularly, the pressure to stay slim is great. The message could be that by exercising regularly during their twenties, they will make it easier to keep the weight off in their thirties and forties. However, young people tend to have a strictly short-term time orientation. Look good today by eating well – is more powerful than look good in your 30s
- Appearance could be used as a motivation by using youth-specific images such as tattoos or body piercings. Tattoos look far better on a slim, toned body than an obese one. Similarly, navel piercing on an obese stomach is less appealing than on a slim body. These images are likely to resonate with young people.
- Celebrity culture is popular with young people. Using a local celebrity to promote a healthy balance between alcohol consumption and physical activity could be effective.

5.   Socialising and fitting in

Members of this group may not yet be in a serious relationship, but enjoying casual or less intense partnerships. It is important for this group that they seek peer approval for behavioural choices. Friends are often more important than partners or parents in making decisions about fashion, leisure consumption or life choices. This group may spend much of their time surfing the internet (particularly social networking sites such as Facebook and Bebo), talking to friends in person or on mobile phones and reading celebrity gossip or lifestyle magazines such as *Heat* or *FHM*.

Segment 2, Insight 5
- Peer education/getting "cool students" on board with an intervention. Use locally known faces in campaigns
- Buddy system/mentor for new interventions such as at office blocks, major employers or colleges
- Road show activities using the 'Radio One' style roadshow idea. Music, dancing, student radio or local commercial radio – promoting the intervention. This will enable young people to associate balancing their energy consumption with fun and social acceptability.
- Interventions that enable groups of young people to participate are likely to be more popular than those targeted at individuals.

6.   Higher education

Higher education is linked with weight gain. A recent study found that female students increased their weight by 1.3kg per academic year (Hull et al., 2007). This may be due to the alcohol and fast food culture which accompanies high levels of socialising as a student. Students now also have increasing access to cars (typically receiving a car as a present for doing well in their A levels), whereas in the past students would walk or cycle, so their levels of natural physical activity have decreased over time. Anecdotally, we are astonished at the car dependence culture at our own campus here in North Bristol.

Segment 2, Insight 6
- Working with hall of residence committees to introduce intramural sports competitions at universities may be an appealing way of increasing levels of physical activity
- Incentivising students to walk or cycle to university may increase levels of natural physical activity. Ensuring secure bicycle parking is available and helping plan safe routes may also help. Lobbying with groups such as Sustrans to increase the provision of cycle paths in university cities should be a medium/long term goal.
- Prevention would be an effective way of achieving healthier eating behaviours and fitness in the 16-25 year age range. Freshers Week and the first term would be an opportune time to target new students with social marketing information about healthy eating and fitness.

Source[87]

A social marketing professional described a social marketing project for the National Social Marketing Centre in Kirklees. They conducted a series of focus groups with university students to test some intervention ideas. The aspects most attractive to females were:

- **Dancing** - regarded as fun, relaxing and non-boring exercise. Keen to learn new skills.
- **Well being MOT** – highlighting "which bits to focus on" and monitoring improvement.
- **Fast cook recipes** – practical help with cooking skills, but not for the microwave, which is regarded as damaging to food. Ideal if combined with a vegetable box. Being on a budget, they require a display of the value of the meal, e.g. this will cost £1 per portion. Offer alternatives to expensive ingredients for budget weeks, e.g. instead of prawns you could try ham.

The aspects those most attractive to males were:

- **Personal trainer/Well being MOT** – very attracted to personal attention, but not a Life Coach as this links to the potential for interference in all aspects of one's life. A trainer is positively perceived as a health and fitness professional.
- **Delivery of vegetable boxes** – most attractive if linked to fast cook recipes that are laminated and attached to kitchen walls in halls of residence. Would also like fruit in the veggie box.
- **Martial arts** – are attracted to 'unusual' methods of training and exercise. Would also like boxercise and a punch bag.

(*With thanks to Spencer Robinson of the National Social Marketing Centre for this information*).

It is emphasised that intervention development should be developed in consultation with the target group[88].

Segment 3: Middle-age, "Middle-England"

This group would likely be Mosaic Group C:

> *"Mature residents of comfortable homes whose children may have left home and their lives are getting easier. Often have very traditional, conservative views, unlikely to be risk takers."* [89]

They are likely to be married, be close to paying off their mortgage, have children who have left home or are independent, have a settled career and be within ten or fifteen years of retirement. This group is likely to be overweight, particularly the more socio-economically deprived of them. They are unlikely to have done much physical activity during their children's earlier years and often will slip into a sedentary existence during the years of juggling pressures of work and family. Now they have more independence, more time and more disposable income than before and are ripe to change their lifestyle and ultimately their weight.

This older group is potentially a 'low hanging fruit' for behaviour change interventions because they are most able to change their behaviours and are likely to be dissatisfied with their current weight. They might be 'contemplators' with a high readiness for change.

> *"Now that the children have left home, I'm fed up but I don't quite know why, I feel a bit low in energy, a bit dispirited and I'm not happy with my weight".*

The crucial insights and action points for this group are as follows:

1.   Health

This group is likely to be more concerned about their health than the younger population as they are approaching retirement and older age. In a recent review of qualitative literature, older people identified the importance of sport and physical activity in staving off the effects of aging and providing a social support network[90].

Segment 3, Insight 1
This group may be susceptible to messages about healthy eating and exercise in relation to being a safe weight rather than for reasons of appearance.

2.   More time to socialize

This group's new independence has brought more socializing opportunities and they may have become dissatisfied with their weight and appearance.

Segment 3, Insight 2
Promoting healthier eating or exercise as a way of looking and feeling younger may appeal to this group.

Appearance and health are one motivator, but a greater one may be the chance to socialize and build up relationships that atrophied while the kids were younger. So, this group may be interested in taking up new hobbies with their group of friends or as a way of meeting new like-minded people. Community-based interventions which attempt to mobilise a neighbourhood into action by taking up a new exercise such as tai-chi, tennis or walking may be successful.

Insight 3
There may be some mileage in presenting weight loss in the arena of new singles who have grown up or independent teenage children and are looking to find a partner. Weight loss can then be presented as a way of boosting confidence and of looking and feeling younger and more attractive.

3.   Disposable income

This group have more disposable income now their children are largely independent. They may enjoy eating meals out or entertaining at home. Cookery has stopped being completely functional (simply to feed the family) and now is something that can also be enjoyed.

They may, therefore, be willing to try different foods. Ageing is associated with elevated acceptance of bitter tastes, elevated preferences for vegetables and salad greens, and increased consumption of whole grains, vegetables and fruit[91] . On the other hand, they may be conservative in their tastes and unwilling to try anything too out of the ordinary. New ideas should be presented emphasizing taste rather than cost, building on traditional meals with tips for improving its calorific legacy.

This group may be interested in the origin of their food and are prepared to pay a bit extra to obtain good quality, organic or fair-trade produce.

In terms of physical activity, this group have more income to spend on enjoying their leisure time, and more time to participate.

Segment 3, Insight 4
Diet planning based around socializing with friends may be effective. Healthy 'dinner party menus' which emphasise luxury and ostentatious consumption may appeal.

Segment 3, Insight 5
Although the emphasis should be on sustained behaviour changes, this group may be interested in annual or weekend 'health' holidays such as walking, cycling or adventure sports.

Segment 3, Insight 6
It may have become more possible to spend time as a couple now that the children are independent. Marketing deals for two bicycles, two sets of walking boots, two rucksacks, two sets of trainers etc. may be an idea for accompanying promotions for activities that couples can join in together.

Segment 3, Insight 7
This age group are likely to be less competitive than the younger group, so team sports may have less of an appeal. Also, there has been much commentary on the increasing individualization of our lifestyles. They may enjoy solitary or small-group active leisure pursuits rather than team sports.

Segment 3, Insight 8
If no exercise has been done for a while, often years, there may be significant psychological barriers to starting exercise. Encouraging daily physical activity rather than the uptake of a specific sport may help. Community based walking groups, for example, may encourage a social and supportive side of physical activity. The use of pedometers is a good way of encouraging 'embedded' physical activity in daily life.

Source[92]

That concludes our section on segmentation. We can now turn to the final section of this report: specific activities.

Part 3: Activities

The social marketing mix

Principles to guide activities

Mass media alone is unlikely to have a significant effect over behaviour change. For obesity particularly, support is an important element of any intervention. Successful programmes, then, do not just show and model the desired behaviour and its positive outcomes but provide specific guidance for self-management, coping mechanisms for lapses and offers of support structures and groups[93].

Leading American academic Bill Smith[94] has advocated that social marketing propositions should be "fun, easy and popular". He says this to counter the reality that public services often exhort people to do things that are 'boring, difficult and lonely'. (For academics who may be put off by the very simple language he notes that fun = positive outcome expectancy; easy = good for low self efficacy, and popular = peer approval). We also noted earlier that Rothschild asserts that people act primarily of self interest, and that to change behaviour you must appeal to self interest. We have borne these principles in mind in the following discussion.

US social marketers tend to organise their social marketing around a 'social version' of the famous marketing '4Ps' – product, price, place and promotion. So, 'product' here is often the behavioural goal, 'price' is the effort the citizen has to make in changing behaviour, and so on. However although many textbooks follow this route, the use of the 4Ps seems confusing in a social marketing context. In our view, to design social marketing programmes, you are on more solid ground in considering the following elements:

- Interventions – most importantly, permanent programmes supported by ad-hoc activities, and events
- Relationships – we know that these are vital to long term success
- Services offered – such as help in confidence building
- Offers and incentives to stimulate immediate action
- Physical locations – should be embedded in target localities

And

- Persuasive communications.

Communications is dealt with later on in this report. The next section outlines how these social marketing principles should be applied to interventions.

> **Assessing previous health education campaigns to improve diet**
> In the past, a lot of professional advice seemed to revolve around a set of 'DON'Ts', usually around DON'T eat those nice things that you like – eat these healthy things instead – even though they don't taste as nice.
>
> How do ordinary people react on an everyday level to this advice?
>
> - It seems like nagging
> - It makes them feel a bit guilty, but it doesn't stop them because….
> - The 'solution' is perceived as "rabbit food" and not a pleasure, very boring,
> - They are being told to stop doing one of the few everyday pleasures in their lives - chips, cakes, biscuits – yummy! And you want me to stop? Life is dreary enough thanks!

Intervention ideas: Diet and physical activity combined

Crawford and Jeffrey[95] reviewed population approaches to obesity prevention. They noted six sizeable studies at community level that can help in designing future projects. These include the Minnesota Heart Health programme, the Pawtucket Heart Health programme, the Finnish North Karelia programme, a national programme on Mauritius, and the Stanford Three Cities and Five Cities studies. All six of these studies attempted to reduce the fat content of a typical diet, increase physical activity, and reduce smoking. Projects included mass media healthy eating and exercise messages and programmes of events and activities in schools, churches, workplaces and social organisations. Some included point of sale promotions to encourage healthy eating.

All these studies showed quite a lot of operational success: positive results in awareness, participation in the events, self reported changes in diet and physical activity and some health risk factors – blood pressure in particular. However, crucially, objective measures of a drop in obesity levels were minimal. Indeed the most recent US studies reported rapid *increases* in BMI for both the test and control sites.

What can explain the failure to shift BMI levels in these studies? The authors, Jeffrey and Linde, did not hazard an explanation. With our social marketing perspective, we propose the following possibilities:
- These projects may have over-emphasised education and under-emphasised motivation: awareness and knowledge does not equate to action.
- There may have been an underestimate of the need to reinforce behaviours to prevent lapsing.
- Self reporting of diet and physical activity lifestyles is fraught with error. One manifestation may be unreported poor diet habits: people will describe their healthy lunch in detail but forget or conceal their late night binging on chocolate biscuits.
- It may be that a positive impact on BMI is simply unreachable in the timescales of these projects. Diet changes or physical activity are very hard to sustain over time, especially on your own. It may take two years plus of diet change or regular exercise before it becomes habitualised to the extent that it is

semi-automatic and part of the pattern of normal everyday life. It may also take two years plus before the weight loss/health benefits of new diets and exercise are internalised and believed to be true.

- The feeling of isolation and the lack of external motivation in such schemes may well be contributors to failure, and solving these problems is a crucial role for marketing. Marketing's role may be to remove the isolation of exercise, or of diets that buck the social norm: it is to take these things from the individual to the collective level and from the exception to the norm. Marketing can then be a catalyst to encourage peer support and peer enjoyment.

- More could be done to design attractive offerings that genuinely compete with fatty/sugary diets and sedentary lives. More emphasis could be placed on 'joined up marketing': linking together the culture change possibilities of mass media approaches in tandem with personal level projects, which in turn are joined up with group or community 'peer support/pressure' style activities – the latter providing the relationship support and social glue of a successful intervention.

Brighton & Hove City PCT in association with Brilliant Futures and the Priority Partnership (PR and media company)

This intervention aimed to involve over 3,000 children in a range of healthy living activities, including both physical activity and healthy eating. Community events included fun runs and Food n Fun days, supported by local food outlets and sports clubs. Eight thousand passport-style booklets containing incentives, vouchers and a diary section for relevant activities were distributed. While there is evidence of short term positive effects, longer term impact is less certain. A target of 2,000 passports filled in and returned was set, but only 111 (out of the original 8,000 distributed) were returned. The initiative organisers note several factors that may have hampered the programme, including lack of time and coordination, together with a lack of pretesting of the concept and the actual material ultimately used. Specific problems reported appear to have included lack of effective distribution, lack of clarification as to what incentives and prizes were available and the specific completion mechanism.

A full case study is also available on the National Social Marketing Centre's website at: http://www.nsms.org.uk/public/CSView.aspx?casestudy=47

Source[96]

Intervention ideas: Diet

We have taken the time to undertake quite a detailed analysis of interventions across workplace, schools, and communities. This has been useful in making recommendations on social marketing design parameters. The evidence we reviewed comes with the health warnings we discuss elsewhere about how social marketing evidence should be used as a guide rather than a prescription. Our conclusions are:

- Worksite interventions largely focused on individually oriented educational and behaviour change, but applied on a larger scale in the worksite setting. Many of the elements of these trials could be regarded as good social marketing practice: the use of advisory boards, the emphasis on behaviour change, use of communications and incentives, and so on. That said, we have insufficient detail on these interventions to make a detailed evaluation. There may be scope to use social marketing principles to further improve the design of such trials. In particular, we note the relative lack of extensive pre-trial research amongst the employees to achieve designs that were employee led.
- Health messages in isolation do not motivate changes to diet or exercise. As noted above, the 5-A-Day style programmes have much to commend them in terms of simplicity and memorability but on their own will make only very modest in-roads into the changes needed[97].
- Multi pronged activities showed some promise in registering behaviour changes. Integrated approaches that include education, hands on skills building, marketing approaches such as taste tests and price led promotions and communications back up such as point of sale signage, are more successful.
- There has been little emphasis on product innovation – adjusting healthy food offers to increase taste and fun. We mentioned 'Sneaky Chef' style ideas in the earlier section on lobbying the industry.
- Some programmes clearly responded to the human contact and relationship building of intervention workers to enthuse the projects. This is well enshrined in social marketing principle. Keeping resource levels beyond the intervention end date so that key workers can remain in post may well be key.

Summary of diet based interventions

This section identifies a small number of typical workplace, school and community interventions. The literature on these is considerable, but many of the ideas and results overlap.

Some specific workplace interventions and their results

Individual behaviour skill building activities, cooking demonstrations, incentives, café signage and promotion, employee advisory boards.
Results: led to +0.3 fruit and vegetables servings/day

Individual behaviour 5-A-Day educational materials, incentive items, peer educator programmes.
Results: led to +0.77 fruit/vegetables servings per day

Nutrition education, taste tests, environmental based work materials such as point of choice labelling, fruit and vegetable availability; family written 'learn at home' program mailings, family festivals.
Results: led to +0.2 fruit/vegetables servings per day worksite family, +0.5 servings fruit/vegetables per day worksite.

Source: Crawford and Jeffrey 2005

The Working Well Trial was designed to educate and stimulate changes in diet from fatty to fruit/vegetable/fibre foods[98]. Activities included kick off events, posters and brochures, interactive activities, self help material, contests, and direct education classes. Environmental changes included changes in foods available in canteens and vending machines, changes in worksite catering policies and increases in worksite nutrition opportunities. Employee advisory groups were formed to assist with tailoring the intervention to the unique cultures of each worksite. Results showed a modest but significant decrease in per cent fat energy, and modest increases in fruit/vegetable intake.

Other workplace ideas include changing the social environment. For example, the use of social networks at workplaces shows promise. Workers identified by their peers as central to a social network were trained to implement fruit and vegetable promotion and communications activities among the members of their social network. This was compared to another trial in which workers just received a 5-A-Day promotional campaign, and the social network delivered superior results. This approach may also be superior for situations in which workers do not have a central workplace – employment in lorry driving or travelling sales springs to mind.

Good practice also included having intervention staff closely involved with working in the food service arenas and taking responsibility for nutritional signage. Food pricing strategies have shown promise for promoting healthier food choices in worksites.

Schools based interventions were thoroughly reviewed by Crawford and Jeffrey. Overall, results of schools based interventions showed some success in changing dietary intake but little success in changing body weight or fatness.

Food Dudes

This pilot initiative was developed by the Bangor Food Research Unit and involved school-parent collaboration. The initiative centred on improving:
- taste exposure to a range of fruit and vegetables;
- modelling via a video featuring animated characters, the Food Dudes, who gained super powers from eating fruit and vegetables;
- rewards in the form of stickers, pens etc for eating specific amounts of fruit and vegetables.

The initiative was successful in achieving significant increases in fruit and vegetable consumption, and in gaining parental interest and support, at least for the duration of the initiative; evidence of long-term effects once rewards were withdrawn cannot be located. The scheme has also been used in several other locations, but the authors of the review of the Bangor-led intervention note that future delivery or expansion of the scheme is dependent on government agency funding.

Source[99]+[100]

Changing food pricing, food availability and food promotions have all shown promise in changing dietary intake but, once again, not BMI. Our supposition is that interventions are often successful in changing public, socially based dietary behaviours, but may not be successful in changing BMI because of private consumption of snack foods.

School based intervention ideas include multi component trials that included classroom education, changes to the café environment and school meal nutrition. Once again changes sometimes produce positive effects on dietary intake but not usually fatness levels. Longer, three year interventions included classroom components, food service changes, and parent home components. These are often successful for increasing fruit and vegetable intake.

Food pricing was also used as a tool. Lowering the price of lower fat snacks in vending machines was tried. Price reductions of 25-50 per cent did have an effect: increasing the volume of healthier foods bought, and increasing the total volume of food bought. 10 per cent reductions did not have any effect.

Changing food availability seems to work well in changing behaviour. Sales of lower fat á *la carte* foods increased when availability was increased.

Food promotions were used as part of environmental interventions and multi-component programmes: mainly promotional signage, informational signage, point of purchase, posters, table tents, taste tests, contests, coupons, and flyers. The effects of these were usually impossible to evaluate separately from the substantive elements of programmes described above but where efforts were made small effects were found.

Finally **community interventions** on 'diet only' were also examined by Crawford and Jeffrey. These ranged from mass media, health screenings, changing food related policies at national or regional level, to interventions in restaurants, grocery stores, churches, and community groups. Many of the strategies used are very similar to those already mentioned above in workplaces and schools, for instance changing food availability, pricing, promotion, and mass media campaigns. It has to be noted that many of these studies did NOT achieve significant results for dietary intake or eating behaviours. We would speculate that the lack of commitment to behaviour change principles and maybe social marketing based approaches, and the lack of a controlled environment may have undermined these programmes. Perhaps we can conclude that *localised* media/education campaigns *do not appear* to be of themselves sufficient to achieve any behaviour changes.

Mass media campaigns aimed at communities have shown some positive effects on food choices. In the US, the Five a Day campaign when measured between 1991 and 1997 had a modest effect on fruit and vegetable servings per day (presumably self reported) going from 3.75 to 3.98 servings per day[101]. The number of US citizens eating five or more fruit/vegetables per day went from 23 per cent to 26 per cent from 1991 to 1997 – which in our view is not terribly significant. Interestingly, however, a campaign focused on low fat milk called '1% or Less' which ran for seven weeks in regions of the US did work well – including checks at six months post intervention, with low fat milk share at 18 per cent increased to 40 per cent post intervention. The implication is that targeting a specific food group increases the chances of change.

In the main effects were relatively modest. It may be that too many of these initiatives were rather isolated. We also noted what we thought was an over-emphasis on health education and a relative under-emphasis on marketing principles that address immediate self interest such as the need for tasty and convenient health food – that matches the taste of the foods our audience currently prefer.

Weight Loss Programmes: the need for ongoing outside help

Sarlio-Lahteenkorva studied dieting programmes. This is a summary of her findings:

'Dieting is so easy when you have good instructions, but somehow I always gain it back when I leave the programme'.
- There is a need for outside help. The success in weight loss and weight maintenance was connected to social control.
- Unambiguous instructions are required and a commitment by the dieter to follow the rules set by the weight-loss professionals.
- Weight problems were seen as a consequence of inappropriate behaviour such as poor eating habits or lack of exercise. However, the subjects usually knew a lot about behavioural weight management strategies and many demonstrated excellent nutritional knowledge but, nevertheless, wanted to have outside control and clear instructions. They were eager to follow all kinds of restrictive diets and instructions given by weight-loss professionals and institutions.
- Weight loss was usually satisfactory or good when the subjects were in the programme but problems started once the programme was over. Since most diets had a rather rigid set of rules, they were difficult to follow in the long-term and the problem was made worse by the lack of outside control and help.
- Incentives were required.
- Support from significant others is considered essential.
- Many people are supporting families and dieting and although dieting is considered acceptable, outside support is still preferred and considered essential for success.
- People failed and left support groups if their weight was not coming down as easily as peers.
- Obese social groups often fail to reduce their weight and end up supporting each other to remain large.

Source: Sarlio-Lahteenkorva (1998)[102]

Interventions to increase physical activity

Please note that we have extensively discussed this topic in our report for the Active Bristol project for Bristol PCT[103]. You may wish to liaise with colleagues there to share learning.

Gordon *et al*.[104] reviewed 22 physical activity interventions of which 14 were community based and one was communications based. Of those that sought behavioural outcomes, a modest eight out of 21 were 'successful', suggesting that social marketing interventions can succeed, but that success is far from easy. Successes included workplace projects, and walking groups amongst seniors. Evidence for improvement on BMI or CVD was much weaker. One exception is the

Pawtucket Heart Health Programme which reported some positive effects on CVD and minor BMI results.

Planet Health (significant success with girls)

This was two year duration school-based intervention in Massachusetts, based on Social Cognitive Theory and centred around decreasing access to sedentary activities such as television viewing ('Power Down') and improving access to physical activity and consumption of increased amounts of fruit and vegetables. Intervention material was integrated into multiple subject areas and children were given choice over the type of activity undertaken, with schools focusing on developing appropriate skills and competencies and the provision of access to a range of activities.

While television viewing dropped for both sexes, fruit and vegetable consumption increased significantly only for girls. Similarly, obesity prevalence reduction was statistically significant for girls but not for boys. This unexpected difference is hypothesised to be due to either girls being more 'attuned' to diet and physical activity topics, or to differential obesity-related factors between the genders.
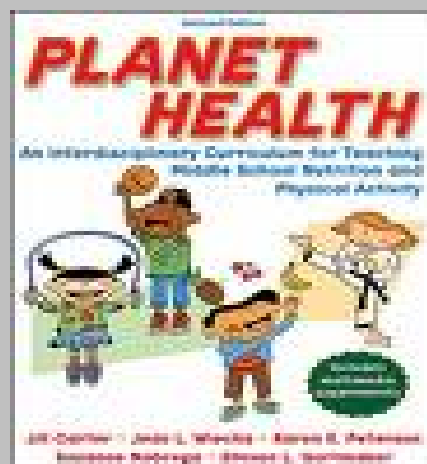
Source: Gortmaker *et al.* (1999)[105]

Crawford and Jeffrey extensively reviewed primarily US based evidence of the effectiveness of physical activity interventions. A variety of different approaches were reviewed which the authors divided into:

- Personal level approaches. These interventions focused on improving self efficacy with respect to physical activity, skills building, and ongoing regular social support for active lifestyles. Social support based interventions such as buddy systems and walking groups were delivered in community settings. These approaches have shown good levels of success with increased physical activity levels spanning two years. Less is known about how to scale up such approaches to population level: clearly the issue with approaches such as this is their high levels of resource intensity per individual – but, at least, there is reasonably strong evidence of success in personal level approaches.

- Social, cultural and organisational level approaches. A substantial amount of research emphasised the importance of social support from family members, friends, co-workers and peers, and also cultural beliefs related to physical activity and health. But few controlled studies have been carried out that focus on changing social or community settings. Our own work on 'Active Bristol' suggests there is great promise in work based active travel to work schemes. In addition, simple stimulus-response style interventions (notes to use stairs rather than the lift and so on) also fared well. The authors also included primary care settings in their debate at this level of approach – and reported mixed results. For older adults retirement communities offer potentially useful settings for community level approaches and increasingly it is the case that on site fitness centres, wider streets, gently sloping kerbs and so on are being built into the environment – but it is too early to assess the success of these.
- Wider environment approaches. Ultimately changes in the physical environment may provide the greatest promise for positive impact on obesity, but as yet have received relatively little attention. We will not dwell on this area here as we imagine such changes are largely outside the immediate control of SW PHO. The promise is great, but evidence is not yet strong in any direction because of the lack of completed studies. Ideas that show distinct promise include altering the density of urban development, mixing land use so that shops are close by and walkable, the aesthetic quality of a neighbourhood (litter, graffiti, landscaping, lighting), improving safety aspects of walking cycling, the proximity of parks, and so on.

From a social marketing perspective the above findings are not surprising. The personal level projects they describe will, if done well, adhere to good social marketing practice by starting with the citizen and how they live their lives, and tailoring a solution that avoids 'nagging' and focuses on attractive suggestions that that person will respond to. We also note a common theme for many of the success stories – the vital importance of *supportive relationships* between key workers and citizens, and how peer relationships can be used positively. Human contact over time, the feeling of being part of a group with a common objective, the positive pressures of not wanting to let others down by lapsing one-self: these are powerful components of successful social marketing methods. Collective activities such as group walks are obvious solutions, but more dispersed activities such as walk to work schemes can be encouraged by providing a way of creating a virtual community – through simple devices such as, for example, pedometer challenges organised on worksites. Combining these strong elements of personalised approaches with group activities looks very promising.

Marketing led interventions for diet and exercise

The interventions described thus far can be re-created by borrowing from commercial marketing mechanisms – for instance through the use of incentives, point systems, and so on. Examples would include price subsidies for healthy food, while convenience - often critical in commercial offerings - may be replicated by for example placing chopped up fruit left close by snack bars or coffee rooms. Redesigning 'healthy food' to improve its taste, and promoting healthy food with brands that are seen as fun and popular, and have social cache or may even be seen as 'cool' also show strong potential.

An important and useful principle in marketing is that of 'acquisition' of new triallists and retention of existing participants being seen as different and requiring different marketing solutions[106]. Let's illustrate this with reference to physical activity. In general, but for leisure activities in particular, designing activities to maximise fun, enjoyment, or as social events has much more chance of success than messages that concentrate on health. So, we advocate 'health through stealth': it may be that you completely disguise the reasons for the activities. However, it may be that health messages become more important to keep people exercising over time. Retention based messages are, therefore, different to acquisition messages:

Figure 10: How the messages vary from acquiring new people to keeping them over time for physical activity

Messages based on:

| fun, enjoyment | fun, belonging | health, well being, |
| friendship | commitment | balance, investment |

Acquire new people   Keep people with you......   self-ownership
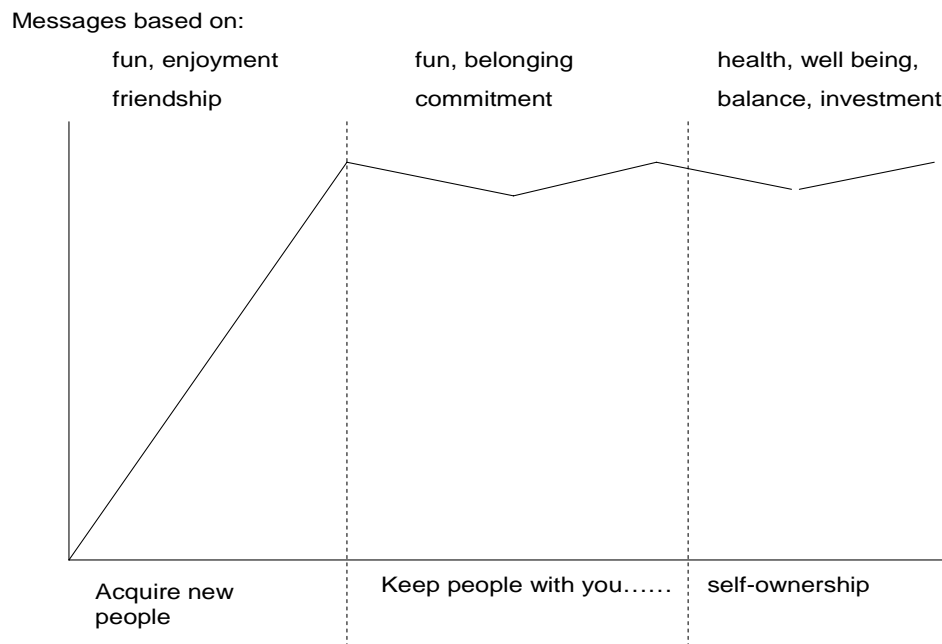
Source[107]

Case Study: Ginsters

The Ginsters Active Workplace project in North Cornwall, sponsored by Sport England, has been an exemplar of good practice in work based interventions.

At Ginsters, senior management, including the Managing Director adopted an open mind to new suggestions right from the start: provided any new ideas were within the boundaries of reasonable management they were willing to try things out. Failure was accepted as part of the process. The MD was often seen personally participating in activities including socially slightly 'risky' ones such as water sports – which were adopted with humility and a sense of humour by him. Respect between management and a very traditional manufacturing style workforce has improved immeasurably.

The other critical success factor was down to the personality of the organiser. At the operational level the organiser was enthusiastic, bubbly and energetic, and had the extrovert personality to approach the different workforce groups (stores, the bakery, the office staff, etc) and engage with them, listening to staff and adapting the events and ideas as a result. He created initial momentum, overcame scepticism – of which there would have been plenty – and then maintained momentum over time, ensuring that those who missed sessions were enthused to come back, keeping the events fresh and interesting, and so on.

Speaking to us, one of the organisers compared Ginsters to Well@Work schemes. Ginsters seems to have worked much more effectively. The major difference is the resource and effort put in. One employer using Well@Work organised it around access to facilities, and a 'workplace champion' given about two hours a week in time allowance. Participation levels were very poor by the end of the project. There was little management commitment and no personal engagement by managerial staff in the project.

Interestingly, the model for the Ginsters scheme once the funding stream dries up is that the company will continue to provide some organisational resource, but events will be self funded. However the critical mass of active, engaged people who are organised as a group means that lower prices for, for example, a day sea fishing can be negotiated. There is great optimism that the new behaviours are embedded.

All Slimming On Referral Members*	Total	Average	Minimum	Maximum
Members	27.00	N/A	N/A	N/A
Weight Change (KG)	-69.85	-2.59	1.81	-9.75
Percentage Weight Change	N/A	-2.87	2.45	-9.94
Weeks attended	202.00	7.48	1.00	12.00
Start BMI	N/A	32.17	24.59	43.77
End BMI	N/A	31.27	23.02	42.51
BMI Change	N/A	-0.90	0.71	-3.00
5% Weight Loss	25.93			

At the extreme some employees have even reduced their BMI. A few of the workforce who were heavily overweight/obese have been inspired to join Slimming World and some individuals have demonstrated significant BMI reductions.

This appears to be a classic win-win for workplace and employees.

Source: The authors: part of the team of assessors of the Ginsters Active Workplace project

That concludes this section. Once an offer or proposition has been designed, it can be communicated. However, communications has other, more strategic roles. Let's have a look at these now.

Social marketing communication solutions

Communications to combat obesity are best deployed though a variety of marketing methods – we are by no means confined to large scale advertising here. Having noted the behavioural trait of lapsing once programmes come to an end, it strikes us that direct marketing programmes using database driven methods and direct media will be a strong tool in keeping in touch, providing support and motivation to adopt changes in life on a permanent basis.

Advertising techniques can be used tactically to support a particular programme or activity. Communications will highlight the programme and bring it to people's attention. Advertising can also be used strategically across the region to do something more ambitious – change social norms, build an idea that could be branded as an alternative lifestyle, shock or 'jolt' people into re-thinking their lives, and so on. Such campaigns can be expensive, but appropriate use of press and PR provides a workable opportunity to get such messages across at lower cost.

Talking of branding, arguably the 'brand' of health needs some work – at the moment health messages are failing to have the impact that health professionals might have hoped for. At present health stands unfavourable comparison with, say, the 'green' movement, with 'healthy' often translated by citizens as 'boring', 'not very tasty', 'uncool', and so on. The solution lies in identifying "healthy" as a positive, fun, enriching lifestyle for the 21st century – something *aspirational*.

Returning to more pragmatic considerations, are mass communication approaches appropriate for combating obesity? We have adapted and added to the Hastings *et al*. review of health promotions[108] and the HDA 2004 review of health promotions[109] and would suggest public health mass communications are a good idea when:

- Wide exposure is desired – the health problems associated with being overweight do not yet appear to be as well understood as those for example with smoking. However raising awareness without addressing motivations does not usually work. After the Department of Health's ACTIVE for LIFE social marketing campaign, awareness of the message was high, but "exposure to the campaign seemed to make little difference to the proportion of active subjects"[110].
- The same is presumably true of food. Even quite young children tend to know that fatty, salty and sugary foods are unhealthy – yet all social groups still prefer to eat those foods. Knowledge, it seems, will not get the job done. Hence, marketing communications has two jobs: first, to raise awareness, and second, to motivate to act.
- When the timeframe is urgent: there is an obesity epidemic and type II diabetes is on the rise. Marketing communications can create 'pizzazz'. It can generate a buzz, a sense of occasion and excitement, a sense of belonging. It can build a brand, something the DH work is attempting.
- When public discussion may help the message process: there remains to be a public level of social discourse about obesity, putting pressure on change.
- When media authorities are 'on side'. UK media are yet to be bought 'on-side' and they are not necessarily as engaged with the obesity issue as may be expected. Their response is difficult to predict – they are likely to provide additional though by no means supportive coverage.

- When accompanying back up can be provided on the ground. The evidence we have seen so far points strongly to obesity being best tackled with a joined up combination of population level activity, whether social change, shock, or brand building messages *allied to* local, face-face activity.
- When long term follow up is possible: provision will have to be made for retention of people in weight control programmes: slippage is a near certainty and needs to be acknowledged as a never ending reality of the obesity problem
- When a large budget exists. SW PHO is we imagine a key player in nationally driven work, but also in a powerful position to use local media for advertising and PR campaigning.
- Relatively simple messages such as drink driving or immunisation can often be solely tackled through mass media without the need for face-face activities. Obesity is much more complex and cannot be tackled by mass communications without localised interventions to back up.
- When other methods have failed. *Very creative* marketing communications can help persuade 'hard to shift' people.

We would conclude from the above that you have a reasonably strong *prima-facie* case for including some form of mass communications as part of your 'marketing mix'.

Marketing communications can do the following specific jobs to combat obesity[111]:
- Change social attitudes. 'Social movements' begin with individual attitude changes. Social norms can be shifted over time, although the time frames are unattractive to managers under pressure to make short term targets.
- Introduce motives to change other than health. Smokers may be encouraged to think about their skin; binge drinkers to how they look to others on a night out. Instead of exercising in order to be thinner, people may be encouraged to take part in exercise that is fun and enjoyable.
- Change beliefs and perceptions. We discussed earlier how habitualised most eating and sedentary behaviours become, and the possibility of so called 'shock' advertising to 'jolt' people out of deeply embedded routines. 'Scare' approaches have a mixed record – particularly as the DH research suggests many people don't equate being overweight with being unhealthy – but shock approaches may have a part to play. An alternative may be to deploy 'truth' based communications – earlier we covered the idea of copying the Florida Truth campaign - a 'wake up' call that tries to make us reflect on how we typically behave, and to ask for reflection on this, with a view to change.

However at the moment we have a problem which is that we are competing with too many other 'health' messages.

Source: National Social Marketing Centre, UK

This diagram emphasises the point that people sometimes feel nagged. Reactance theory also predicts how people have a negative reaction to too many messages of danger – to switch off from all of it. Good creative approaches can avoid the 'switch-off' factor.

Before we get to the specifics of message platforms and creative recommendations, we will now briefly examine how theory can underpin your decisions. There is a vast field of academic literature on the subject of marketing communications. We have identified what we believe to be the key models to help create a strategic solution. If you wish to jump directly to the recommendations we make on message design, you can skip this section.

We took some time earlier in the report to establish a theoretical platform for your communications designs. We identified a number of variables including *habit, involvement* and *emotion* as of primary importance to us. The Foote, Cone and Belding (FCB) grid can help define communication solutions[112].

Figure 11: The FCB Grid, with commercial examples

	Thinking	**Feeling**
High involvement	Learn-feel-do Home computing: Dell *Creative*: product demonstration, long copy, features, benefits	Feel-Learn-do Fashion, make up: Dior *Creative*: large space visuals, impact, symbolism, identity
Low involvement	Do-learn-feel Routine household items: Proctor & Gamble *Creative*: Reminders, quick, easy calls to action	Do-feel-Learn Instant pleasure goods: Cadbury, Budweiser Creative: illustrate instant enjoyment, visuals, show emotion

The bottom two boxes are particularly important for *routine* food purchases: the creative approaches suggested can equally be used by social marketers as by commercial marketers. But when contemplating major diet changes, or a new exercise regime, changing routine sedentary behaviours is a different order of involvement altogether – these decisions may well require more thought, and more planning, possibly made over a period of time with quite a lot of contemplation. These 'change based' decisions are *high involvement/high risk*. Low involvement/low risk messages can be playful, humorous and entertaining; on the other hand higher risk messages *must* be *credible* to engender change: typically six or seven reasons must be offered to tip the individual over to the new behaviour.

Marketing communications have been examined by Rossiter and Percy[113] who focused on the logic: emotion divide. Thinking/cognition is important when contemplating how, for example, exercise fits into preferred lifestyles. On the other hand emotions such as self efficacy may also be important. The individual may ask: am I capable of doing this exercise? Will I make a fool of myself? Can I perform competently? Or they may be concerned with belonging: 'is this activity me'? Are these people my kind of people? Do I belong? Will I fit in? Will they reject me? Or if competing: how well will I do? Can I do well?

We therefore need messages that appeal to a rational approach: self interest (food that is enjoyable as well as healthy; saving money on fuel by walking to work), extolling the benefits (well being, fitness, perhaps even showing off, the satisfaction of being a good parent, feeling good, competing and winning, pleasure, getting out and about, etc) and similarly providing ways of overcoming economic or confidence barriers. We also need to account for emotional sequences. The Rossiter Percy motivation model can help us[114] with this latter task. Rossiter and Percy identified that motives often depend on emotions.

The Rossiter Percy model uses negative motives and positive motives. The idea is that we exist in an 'equilibrium' and can shift to negative states (problems) or positive states (sensory gratification). In these states we look for ways to shift back to

equilibrium or to fulfil sensory gratification. Here is a useful list of motives that we speculate are linked to decisions about food and exercise, followed by the emotional sequence that is associated with each motive:

Figure 12: Positive/negative transfer from motivations

Motive	Emotional transfer			Positive or negative?
	from		**to**	
Sensory gratification (relieve boredom; do something new; mood change)	neutral	►	excited	Positive
Social approval	apprehensive	►	relieved or flattered	Negative
Relationship building	hopeful	►	belonging	Positive
Mastery/competition	neutral	►	sense of achievement	Positive
Health/wellbeing	listless or unwell	►	energetic	Either
Or if the activity takes off				
Social conformity	left out	►	belonging	Either
Self efficacy	fear of ridicule or self ridicule	►	relaxed, enjoyment	Negative
Self approval	conscience struck	►	self consistent	Positive
Problem avoidance	fear of problem	►	relaxed	Negative

Negative motives are about removal of problems. The last example in the list, problem avoidance, is linked to taking us from being fearful to being relaxed. The key messages here are "Do X and you will move from being fearful to being relaxed". This may translate as 'I am fearful of getting fat. So I will lose weight by cycling to work'. On the other hand positive motives are linked to looking for a positive outcome, for example enjoyment with others, a sense of well being or an exercise 'high' (sensory gratification).

However, note the following from Percy:

> "When dealing with *negative* originating motives, the emotional portrayal of the motivation itself is *not as important* as…providing cognitive information that satisfies the need, that 'solves' the problem being addressed. With *positive* originating motives, the correct emotional portrayal of the motivation *is critical* to the delivery of the message. Emotional responses stimulated by *creative elements* within the advertising will facilitate learning."

The remarks above provide a guide for message creation to encourage diet or exercise change, depending on whether we have a positive or negative originating motive. Is our audience looking to solve a problem and get back to 'neutral' or to create something better than 'neutral'? This is ideal territory for further research because if we get this right then we have a sound platform for our message and creative solutions. If diet or exercise is presented as a solution to a health problem (negative framing) – then the model suggests we need to portray the benefit as a believable solution to the problem. On the other hand if diet or exercise change is portrayed as a positively framed message, for example a sensory gratification or a feeling of well being, then it is important to portray the benefit in emotional terms – fun, excitement, mood arousal.

Case Study: The BHF Under your skin campaign

The BHF campaign researched attitudes to anti-smoking campaigns and found that people were:
- Expecting to be lectured and made to feel like socially unacceptable outcasts.
- Expecting huge scary statistics, most of which they know already and can repeat back to you word for word.
- Expecting to be made to feel like pariahs, when in fact the cigarette is the real enemy.
- Deferring the effects of smoking into the future on the basis that they'll stop 'tomorrow' or convince themselves that the worst-case scenario won't happen to them.

How similar are people's likely reactions to obesity campaigns? The chances are that overweight people are:

- Expecting to be lectured to at least some extent
- Expecting huge scary statistics,
- Possibly expecting to be made to feel like pariahs,
- Deferring the effects of being overweight into the future on the basis that they'll stop 'tomorrow' or convince themselves that the worst-case scenario won't happen to them.

Smokers 'hear but don't listen' to these messages – something that led to the under the skin campaign which was more shocking because it was so graphic, and portrayed the cigarette as the enemy not the person. The under my skin solution had the following:
- The creative focuses on communicating the ever present danger of break away blood clots that can cause a heart attack any time anywhere. The statistic 'A blood clot kills another smoker every 35 minutes' was a perfect fit to purpose.
- The statistic wasn't the biggest heart-stopping fact when researched, but was the one that best elicited a reaction of sufficiently alarming, without being as dramatic as to permanently remove all hope (and therefore reason to stop).
- Through making the cigarette the enemy, not the smoker, and by adopting a tone of helpful ally rather than disdainful judge, the BHF aimed to give people hope.

Is there an obesity equivalent to the BHF campaign? One issue is that people don't yet associate obesity with heart disease in the same way as they associate smoking with lung cancer. The latter link took 20 years of campaigning. Obesity → heart disease could be addressed through a decade of national campaigning. But this is not the intended route of the DH work. They intend to make 'modern life' the 'bad guy' of obesity in their forthcoming campaign.

Messages – practice and recommendations

Message Platforms

There are a series of key constructs impacting on obesity. These are either negative state problems to solve – requiring cognitive style approaches:

- **Problem:** habit, unconsciousness, unthinking everyday routine based behaviours

Problem Avoidance: "We are sleepwalking our way into trouble – some simple changes can change things round"
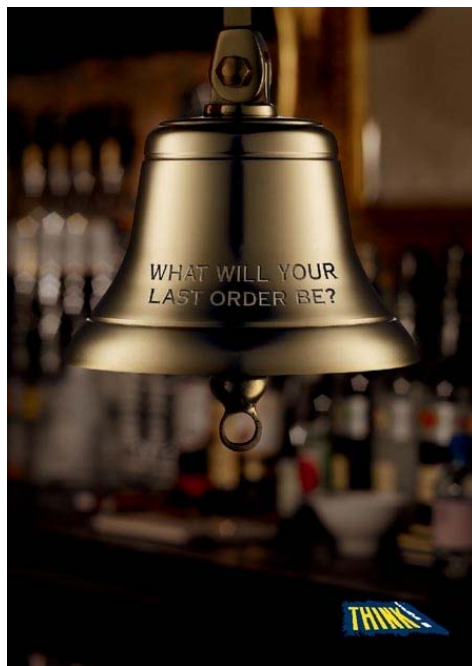
This 2008 drink-drive campaign illustrates how powerful, creative ideas can 'jolt' people out of ingrained habits.

Problem: lack of education and knowledge about proper nutrition and exercise benefits

Problem Avoidance: "Come to our classes and learn about delicious food – free tasters every night"

- **Problem:** lack of confidence to change

Problem Avoidance: "Come and meet lots of friends – ordinary people like you who are just starting up on our new activity. And we'll be offering 1-1 help"

- **Problem** fitting in – "I do what's done around here"

Problem Avoidance "Everyone's doing it these days – thinking about how to live more healthily. Why don't you join in?"

- **Problem:** saving money

Problem Avoidance "Want to save money on fuel? Join our Bike It scheme"

Or 'positive state' 'hopes for a better life' that emotion based messages can build on:

- **Wanting better:** chronic contemplation but never acting

Life can be better: "Make that final leap – Walking to work makes you feel good – and it saves money"

- **Wanting better:** a relaxed, spiritual life

Life can be better "Modern Life – it's stressful. The car is part of that stress. Take the time to walk – remember those walks you loved as a child?"

- **Wanting better:** looking good

Life can be better "Looking your best – there's no better feeling! Do it the natural way – good food and exercise"

- **Wanting better:** feeling good

Life can be better "Ever wondered what its like to arrive at work with a smile on your face? Try cycling in – no better feeling"

- **Wanting better:** having fun

Life can be better "have fun with food – see the Sneaky Chef way of cooking"

Emotion based message platforms may be also be described through audience take outs:

- "I really loved that dance class. It was just like being a kid again"
- "The best thing about our local football club is the team spirit. It feels great to be a part of it"
- "Wheeeee! I'd forgotten the sheer joy of whizzing down a hill on a bike. Fantastic."
- "There's a great feeling of belonging in our community food events. I love it"

Message design – creative guidelines

Our communications will have to *work very hard* to trigger changes in well embedded obesogenic behaviours. We are not in the business of merely maintaining brands or raising awareness of a new product. This need to 'work hard' implies strong creative that stands out from a cluttered, noisy world.

Style of delivery can be as important as content – smokers were found to accept bad news much more readily if it was presented in the right context. This suggests that anti-obesity advertising could present healthy diets and exercise in new ways – perhaps avoiding looking like traditional public sector adverts.

Operation Trident: an example of great creative

The creative treatment of the message can make an enormous difference. The Metropolitan Police's Operation Trident to cut gun crime illustrated great 'cut through' creative to get messages across to very hard to reach groups. A particularly creative media idea was to leave thousands of music magazines in black barbershops. Each magazine had been pierced by a hole, running right through the publication. On the final page, an insert explained to the bemused reader that gun crime tore through whole communities and encouraged witnesses to come forward.

Source: Nairn *et al.* 2007[115]

Obesity is a visual problem, and an emotional problem. This suggests the use of visuals is key for '***showing rather than telling***'.

The following techniques may also be of use:

- Case Histories

This is 'case histories' in the sense of real life stories about people who did things – these often work well to counter 'over-glossy' advertising. These stories clearly play well in the local media – for example the Bristol local press has run stories on locals who have turned their lives from sedentary to marathon running and so on. These stories were generated by the local council Leisure Services dept. SW PHO clearly have the resource to deploy this kind of tactic.

- Testimonials

For localised work aimed at a particular neighbourhood, it may be very important in hard to reach communities to have testimonials from influential *insiders.* Local people, who may be well known, are vital: 'if Tracey says it's alright then I'll give it a try'. If regional approaches are adopted, celebrity testimonials can work well if the celebrity has credibility with the specific audience.

- 'Product as hero'

The technique here is to promote problem-then-solution, for example, car based stress = problem, 'activity' = solution. We suggest avoiding presenting poor health as the problem; instead, reframe the problem according to some in depth research on each segment: problems to be solved then become things like – 'I want to look good again' or 'all my friends think I'm a bit weird for eating unhealthily', or 'I want more energy in the afternoons'.

- Demonstration

This could work well – but needs to be realistic and rooted in local community – smiley faces in gyms or thin 'beautiful people' eating fruit are not recommended. Maybe make real local people who look like local people the heroes. Pick out the subtle satisfactions of walking the kids to school – the extra energy, the company, the bits of fun along the way, the socialising. Of course, demonstration is an excellent device for bringing out the excitement of leisure based 'adrenalin' activities such as mountain biking – which has good potential for families with school children and, increasingly, the 'young at heart' 50-70 year olds. Demonstrating higher energy levels and well being through happy looking people is an option – the key is the way the message is imparted.

- Comparison

This could be by, for example, matching the exercise/activity against, for example, sitting in a car in traffic. Comparisons could work well but we need be careful not to exaggerate: our audience will think cars are great when it is cold and raining! Comparing poor diets versus healthy diets is also tempting – but must be based on a genuine benefit. Most people prefer the taste of sugary foods and fatty foods: we'd recommend bringing in high level chefs/nutrition experts to address the issue of presenting healthy options attractively – with marketing principles of convenience and taste to the fore.

- Association

This is used a great deal by commercial 'big brands' who associate their product or service with something attractive – Guinness with rugby, WKD drinks brand with quirky humour, etc. Association of exercise and good diet with happiness and a better life seems tempting and has yet to be tried in a substantive and sustained way.

- Fear Appeals

Fear appeals have not had a good academic reputation because of their reputation for reducing the sense of control people have. However, we have already noted there may be a place for 'shock' messages to jolt some segments out of their routine behaviours. Such shock messages would have to be based on a credible threat - some segments of the population and deprived communities in particular perhaps have yet to believe obesity is unhealthy. There may yet be a place for *occasional* use of graphic campaigns of diabetes/heart problems that visually shock: the obesity equivalent of the 'fatty cigarette' campaign:

This advert illustrates how fear appeals can work in appropriate circumstances. This advert contributed to recent quit levels of over one million smokers.

This now concludes our report. If you have any queries, please contact Alan Tapp (alan.tapp@uwe.ac.uk).

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