Lecture 3:

Media influences on eating behaviour

- Around 98% of us watch TV and access it 3-4 hours per day.
- By the end of the last century over 60% of men and 50% of women read a newspaper each day and nearly half of all girls, from the age of 7 read a girls magazine each week.
- In addition, people interact with a wide variety of other media such as music cd's or videos, and communications via personal computers.
- Add this to the increasing use of social media…
- The media seek to inform us, persuade us, entertain us, and change us. Governments also engage the public via the media to make ideas and values desirable.

- Before the Second World War, it was believed that the media “injects” values and morals into society. However, social research in the 1960s showed that the audience is not a passive receiver of moral values.

- Society is constructed of many different subcultures, classified by factors such as race, social class, political outlook, adhesion to value systems such as ”vegetarianism” or types of lifestyles.

- There have been many debates about the influence of the media and social behaviour, for example sexual morality or violence. We recognise, as a result of these debates, that the interaction between a media message and an audience response is complex and **audience dependent**.

All research into the media must take into account the different levels of attention, and interpretation of individuals with different motivations, personalities, immediate situations and socio-cultural contexts who bring different information processing strategies to the task.

The latest "POSTMODERN" thinking on the role of media is that it provides learning that is **incidental** rather than direct, and it is a significant part of the **acculturation** process.

We accuse the media, of glorifying the culture of thinness, of causing an epidemic of eating distress, especially among young women. The media denies culpability, or at least responsibility for doing anything about it.

Is our obsession with size zero damaging health?

Over decades our ideal body shape and size has changed from the voluptuous screen goddesses such as Jayne Mansfield, Marilyn Monroe, Bridget Bardot and Ursula Andress to the size zero celebrities of today.
If you look back to the 1940s and 50s the average dress size was a 12-14.
Now, in 2010, the ideal shapes of our screen icons have changed in a very worrying way towards size 8 and 00`s of Victoria Beckham, Kate Moss, Paris Hilton, Madonna and Cheryl Cole.
However, living happily in our own body can be a challenge. For many women it is a constant source of dissatisfaction and distress.

- In modern society the relentless promotion of the idealisation of thinness has put women of all ages under intense pressure to strive after the attainment of body perfection.
- In pursuit of the cultural myth of the 'thin ideal' they manipulate their body shape and an increasing array of cosmetic body modification procedures.
- Any childhood experience such as bullying, repeated harsh criticism or sexual abuse can damage growing self-esteem and increases a young person's vulnerability to developing an eating problem and use it as a way to boost their low self-worth and regain a sense of control over their lives.

There is one aspect of media policy historically largely ignored because of over concern with thin images. This is the use of media to promote unhealthy eating attitudes which may be contributing to a national epidemic of obesity, which in itself will provoke damaging eating strategies as our ever expanding nation seeks to control its weight.

An individual watching television for 2 hours per day will see over **20,000 food advertisements** in one year, most promoting foods high in sugar and fat, mainly urging us to eat for reasons that have little to do with survival.

The problem is worse for our children. During child-friendly broadcasting hours, they are exposed to a continual stream of advertisements for sweets, chocolate, and sugar laden cereals. This aspect of media functioning supports the food industry in contributing to a significant effect on future problems with eating and with weight.

By Clinical standards, one half of women in US and UK are classed as overweight. However, many women in the media are getting increasingly thinner, which does not represent the general public. These conflicting trends lead to body dissatisfaction, particularly in the late teens and adolescence.

Additionally, mens/lads messages also reflect changing trends, with the result being that men are becoming as objectified as women have been (Taylor; 2006).

Obesity:

- WHO identified a global obesity epidemic in the early 1990`s (WHO, 2012).
- Whilst this was originally believed to only affect developed countries, it is now recognized that it is a worldwide problem.
- Rates of obesity have doubled between 1980 and 2008, with 26% of adults and 16% of children in the UK being classed as obese.
- In USA 35.7% of adults and 16.9% of children are obese.

Worldwide:

	Adults	Children
UK	26%	16%
USA	35.7%	16.9%
Brazil	48.5%	

- One in four in China are obese
- In India there is a dual challenge
- In Mexico due to poor tap water
- In the Middle East due to the overeating habits of the Bedouins

- In the UK the people most likely to be obese are those who fall into the deprived category.
- In the USA, the differences between high and low incomes and obesity levels are weakening, but the lower income levels are still more vulnerable because of the limited access to quality fresh and health foods.
- They rely on processed cheap foods and have easier access to these foodstuffs.

Passive `overconsumption` of energy from cheap foods high in fat and sugar leads to obesity (Swinburn, 2011)

`Obesogenic environment`- The role of environmental factors in influencing food consumption and activity levels (Jones et al., 2007)

Recent findings suggest that the prevalence of obese BMI has Tripled, exceeding the 95th percentile, with figures such as 10% in 2-5 year olds and 15% in 6-19 year olds.

This persists into adulthood, with the risk of obesity 17 times above normal weight peers. (Hauner, 2004).

Obesity can be related to chronic diseases such as CVD, diabetes, fatty liver disease and orthopaedic disorders.

As a direct response, there are current health awareness initiatives which explore several aspects of media interaction with eating behaviours.

Three potential mechanisms have been identified: Decreased metabolic rate, Displacement of physical activity and Increased calorie intake.

Testing these ideas:

Decreased metabolic rate

Whilst there were some early findings, these were never replicated (Klesges et al., 1993)

DECREASED ACTIVITY: the couch potato:
Studied more for T.V than other media, with some successful supportive evidence. However, for video games etc., the evidence is non existent, as there is an expenditure of energy associated with playing games.

The Kaiser foundation surveyed media use in 8-18 year olds between 1999 and 2004. 70% had a TV in room, and 36% were between 6mths and 6 years!

40% of 8-18 year olds play games daily but most of their time is still spent watching TV. The American College of Sports Medicine state that obesity is directly related to the number of hours spent watching TV.

But when TV viewing and obesity are charted against each other they do not fit. Obesity is increasing but viewing is not!

The bottom line is obesity arises from eating more than you need. This leads to the couch potato argument.

Problems with the research-

How can we accurately measure in a 24 hour period? Time sampling would be useful, but few studies utilise it.

Marshall et al. (2004) conducted a meta analysis of 52 studies, and reported an overall correlation of -.12 between media and physical activity. What does this mean?

Media doesn't take the place of other physical activity and neither does it encourage us to be sedentary.

Increased calorific intake

We see at least 3 hours of food adverts per week. What about food branding?

- Two potential reasons:
- 1. eating whilst viewing
- 2. consuming higher calorie foods

For 2 out of 3 meals we eat with the T.V. on. However not much research is conducted in this area, the question is: mindless eating?
Or T.V. provides us with the opportunity to eat outside mealtimes?

T.V. exposure to calorific foods: after cars, food is the biggest advertiser (McCall, 2003) 7 billion pounds is spent on food advertising and out of this 2.3 billion is on sweet and snack foods. Furthermore, 1 billion of budgets are targeted at youths. Food accounts for 50% of all T.V. ads (Taras & Gage 1995)

Early research looked at the decline in physical activity in rural communities following the introduction of TV (Williams et al., 1986).
Lower levels of activity was found in adults and children.

Weak correlations have been consistently found between media and decreased activity, however in a meta analysis Marshall et al. (2004) found an effect size of -.12 (very small!)

These findings suggest that even without TV children would not be out playing. They would be doing other sedentary activities such as reading (Vanderwater 2006).

Eating whilst viewing

Coon et al., (2001) looked at eating patterns of 91 children. Children from families which ate in front of the TV consumed 6% more of their total daily energy from meat, 5% more from pizza, salty snacks and fizzy drinks and 5% less from fruit, veg and juices combined, than those eating at the table.

But difficult to determine that watching TV per se caused this…

And.. If playing games this could be less…..

Food advertisements

After cars, food products are the second largest advertiser (McCall, 2003). In 1997 the food industry spent seven billion, out of which, confectionery snacks, cereal and fizzy drinks accounted for 2.3 billion!

Children are targeted via intensive food adverts and by 14 they are directly purchasing 14 billion goods annually

Over 75% of food manufacturers budgets and 95% of fast food ad budgets are allocated to TV. Food makes up 50% of all advertisements. (Story et al., 2002)

Product placement

Product placement occurs in not just television programmes and films, but also in video games and internet games. Whilst traditionally this was a small area, it is rapidly growing.

Exposure to snacks and food products:

Taras et al. (2000) exposure to food products in ads increases our choice and preference for that food product. Children increase their requests to parents for that product.
The requests reflect the ad frequencies.

Brand awareness and brand loyalty

Advertisers are aware that children identify and are loyal to brands. Even 2 & 3 year olds show a preference for brands. They in turn affect parents` buying patterns through the nag factor! (Story & French, 2004).

So whilst product placement is illegal in programmes aimed at children, it dominates prime time TV and movies.

You see them in videogames too; Advergames on the product websites. Think smurfs etc…

In a now seminal study, Gorn & Goldberg (1982) had children aged 5-8 in a summer camp watch 30 min cartoon with 5 mins of food adverts, repeatedly over 2 weeks. When offered a choice of foods, the children opted for the foods advertised.

Hitchins & Moynihan (1998) found children's recall of food adverts was directly linked to their consumption.

Halford et al. (2004) obese children recognised more ads and ate more of the products than normal weight children.

How do children make sense of adverts?

Under 4 they are not able to differentiate between the adverts and the programmes.
Under 7 they don't understand the persuasive intent. They just perceive it as information.
Even 7-11 year olds have difficulty questioning commercial claims (John et al., 1999).
E.G. children under 7 don`t appreciate the sentence `part of a balanced breakfast`. (Kunkel et al., 2004)

The media may have two useful roles: the first in health promotion for the public at large, the second, in the arena of primary prevention.

Health promotion seeks to promote healthful behaviours or attitudes to the public at large. Primary prevention is defined as an activity designed to eliminate or render ineffective, factors involved in the causation of a disorder and an activity designed to strengthen the host against noxious influences.

Eating disorders

- The media are held responsible for the supposed growth of eating disorders in the country. To what extent is this true?

- Relationships with food are very complex and there are mixed messages. The glamorous `thin-ideal` sends a clear message that both slender and muscular bodies are the way forward.
- Does this thin- ideal coax us into body image disturbance?
- Does disordered eating stem from the creation of a `normal` environment of diets and the acceptance of repeatedly evaluating our bodies, constant diets and excessive exercising in an attempt to reduce feelings of inadequacy?

Tallulah Wilson

The number of children and teenagers seeking help for an eating disorder has risen rapidly in the past three years, according to figures given exclusively to The Independent on Sunday.

The most common eating disorder reported was anorexia, which made up more than 3,000 of the counselling sessions. ChildLine research on the issue reported: “Young people suffering from anorexia often emphasised how they felt they would be much happier and more accepted if they were slimmer. In other cases, young people under-ate because it was something they could be in control of when other things in their life were going wrong.”

ChildLine says it received more than 10,500 calls and online inquiries from young people struggling with food and weight-related anxiety in the last financial year. The charity believes this dramatic increase could be attributed to several factors, including the increased pressure caused by social media, the growth of celebrity culture, and the rise of anorexia websites.

The case of Tallulah Wilson has reignited the issue of the impact of the internet on vulnerable young people. The 15-year-old Londoner had visited pro-anorexia sites and wrote in her diary that she was “fat” and “ugly” before killing herself.

Experimental manipulations cannot be said to CAUSE eating disorders but they can infer cognitions which increase our risk.

Furthermore, our body image can definitely be influenced by the environment by exposure to media and comments from peers friends and family. As a result much of the research focuses on body image.

Body image disturbance is more greatly affected when there is evidence of a prior dissatisfaction to exposure (Harrison 2001). Furthermore, early experiences can predict ones vulnerability to BID.
Currently the role of social support is an area for potential therapeutic progress:

Stice et al. (2001) found that girls in receipt of a magazine subscription were unaffected if they reported a high level of social support from family and friends.

Are eating disorders on the increase?

- There is no doubt that the ideal body size, as reflected in the style icons promoted in the media, is getting thinner. This ideal body size epitomised by "Cheryl Cole" or "Posh Spice" is unrealistically thin, their BMI is on the borders of what a clinician would regard as anorexic.

Due to the proliferation of food in our culture, people are getting bigger, fatter, and maturing younger and younger as the years pass by. The gap between actual body sizes and the cultural ideal is getting wider, and giving rise to anxiety among almost all women, although it is the most vulnerable who are most affected by this.

Dieting behaviours are however a risk factor for the other eating disorders, compulsive eating and its variant, bulimia nervosa, an illness in which the sufferer (usually a young woman but many men suffer too) diets, experiences rebound binge eating due to food deprivation, and then purges to rid herself of unwanted calories.

Compulsive eating is a direct outcome of rebellion against food restraint, a behaviour that can rapidly turn into a remorseless habit. On the other hand, bulimia is an illness which may start out as a useful strategy to control weight gain but rapidly develops into an addictive illness, which engulfs the sufferer and becomes a way of coping with emotional difficulties.

There is no doubt that the media provides significant CONTENT on body related issues to young women, over 50% of whom, (between the ages of 11 –15 years) read fashion and beauty related magazines.

The exposure to ideal images coincides with a period in their lives where self regard and self efficacy is in decline, where body image is at its most fragile due to physical changes of puberty and where the tendency for social comparison is at its peak.

Girls thus find themselves in a subculture of dieting, reflecting messages not only from the media but also from parents, peers, members of the opposite sex as well as the media.

Analysis of media content both provide a stream of articles on weight control, either through fitness or food control, and physical beauty, together with models whose curvaceousness has declined steady over the period from 1959-1978 (Guillen and Barr).

In all cases, the emphasis on diet or fitness was designed to help someone become more physically attractive and thus acquire status.

There have been a number of studies, which attempted to combine content analysis with studies of attitudes or behaviour to assess the impact of images or messages.

Body image and eating disorders

- Eating disorders are problematic as they can be deadly, with AN having the highest mortality rate of psychiatric disorders at 15.6 % (Zipfel et al., 2000).
- Protracted restrained eating actually raises the risk of later obesity (Neumark-Sztainer et al., 2006).
- According to the APA (2000) the prevalence is:
- AN-3.7%
- BN-4.2%
- EDNOS-4.4%
- AN 10% more likely in girls.

Body image…

- An individuals collective and evaluative perceptions of their body.
- BID- inaccurate perceptions of their body, and is far more prevalent than ED`s.
- Rodin et al. (1985) women's discontent with their body is so common that it has become `normative`.
- It is estimated now that 40-60% of women are dissatisfied (Thompson, 2004).

Risk factors

A modest degree of genetic susceptibility (Bulic, 2004) but this combined with a `perfectionist` family is the most damaging.

In print, the best known analysis is the `playboy` centrefolds which were analysed between 1950-1970`s. their bodies shrank consistently over time (Garner et al., 1980). Wiseman`s (1992) replication showed further decline and more recently BMI`s of the girls did not lower over time, because they were already as low as they could be! Approximately 90% lower than normal.

Spitzer et al., (1999) analysed the BMI`s of playgirl magazine models and found them to be at approximately 32. which equates to about 235lbs in a six foot male.

Electronic media

- T.V. is undoubtedly the most studied, BMI`s of beauty contests declined significantly from 19.35 to 18.06 by the late 20th century, however for meaningful data we need to look at the genres of T.V. that people are routinely exposed to.
- Greenberg et al. (2003) looked at 275 episodes of prime time T.V. and found that 30% of female characters were underweight (5% is the average), 12% of the male characters were underweight (2% is the average) and `fatness` was rare. Yet, in the general population the reality is very different.
- Furthermore, when larger characters were seen, their weight was often the target of criticism or jokes, sending the message that it is okay to be rude to larger people (Fouts & Burggraf 2000).
- As yet, the internet is too vast to analyse appropriately.
- Pro-ana sites (Norris et al., 2006) promoted the themes of success, sacrifice and transformation.

Research

- Usually experimental, e.g. a meta analysis by Groesz, Levine & Murnen 2002) showed a modest but significant drop in body satisfaction after exposure especially if under 19years of age.
- Hargreaves & Tiggemann (2004) found males aged 17-27 were more likely to be depressed with their appearance after exposure to the muscular ideal.
- A few longitudinal studies show predictive values of 5-8 and 7-12 year olds in their levels of body dissatisfaction.

Media and emotional states

Stice et al. (2001) compared girls given a magazine to a control group. They were tracked over 25 months. Whilst there were no main effects, there were bulimic symptoms in those girls with low levels of social support.

Harrison (2001) showed individuals with pre existing body discrepancies varying depictions of T.V. thinness being rewarded or fatness being punished. This resulted in them feeling dejected or agitated.
Why?
Bingeing or avoiding food is seen as a coping mechanism which can then become a pathological pattern of eating.

Longitudinal research looked at European Americans and African American 7-12 year olds. Those who viewed more T.V. had higher scores on a `measure of disordered eating` one year later. Also, remember the study in Fiji (2002)!

Underlying cognitive processes

Cultivation theory explains our processes being `normalised`; Harrison (2000) T.V. exposure in boys normalised and predicted beliefs that a `fat` girl they had never met would be stupid, lazy and greedy.

Social comparison theory focuses on how we compare ourselves to others, especially if we perceive them to be similar to us.

Thin-ideal internalisation looks at the degree to which the behaviour will be performed to achieve a given standard. Harrison (2000).

Underlying behavioural processes

- Social learning theory and modelling:
- 2 components- PREVALENCE and INCENTIVES.
- The higher the prevalence, the more the modelling. (think Barbie!)
- The more the motivation, the more likely to execute the restrictive behaviours.

Underlying emotional processes

- These are a massive underlying issue with both eating disorders and body image.
- Strauman et al. (1991) argued that ED`s are a response to coping with noxious emotions such as agitation and dejection. They reported that food avoidance seems to calm agitation and anxiety whilst bingeing relieves dejection and depression.
- Harrision (2002) agrees, ideal body media activate self discrepancies which can thus be avoided by the avoidance and overindulgence provided by ED`s .

Moderating effects:

There are 6 known moderators:
Genre, gender, age, race, body image disturbance and social support.

Genre- this has most effect as evidence shows that exposure to `thin` hurts body image, whilst exposure to `normal` promotes positive body image.

Gender- no difference to exposure in childhood, but in adolescence it is reflected in AN & BN in girls and BMD in boys.

Age- disorders can appear as young as age 5, highest figures in 13-15 year olds and it continues into young adulthood.

Race- more prevalent in whites (Botta 2000). Why?

Body image dissatisfaction and social support we have mentioned.

Can the media respond in the following ways?

- Present a greater variety of body shapes and sizes
- Discourage dieting
- Stop influential people from making weight an issue
- Do not glamorise celebrities who lose weight
- Provide positive fat role models

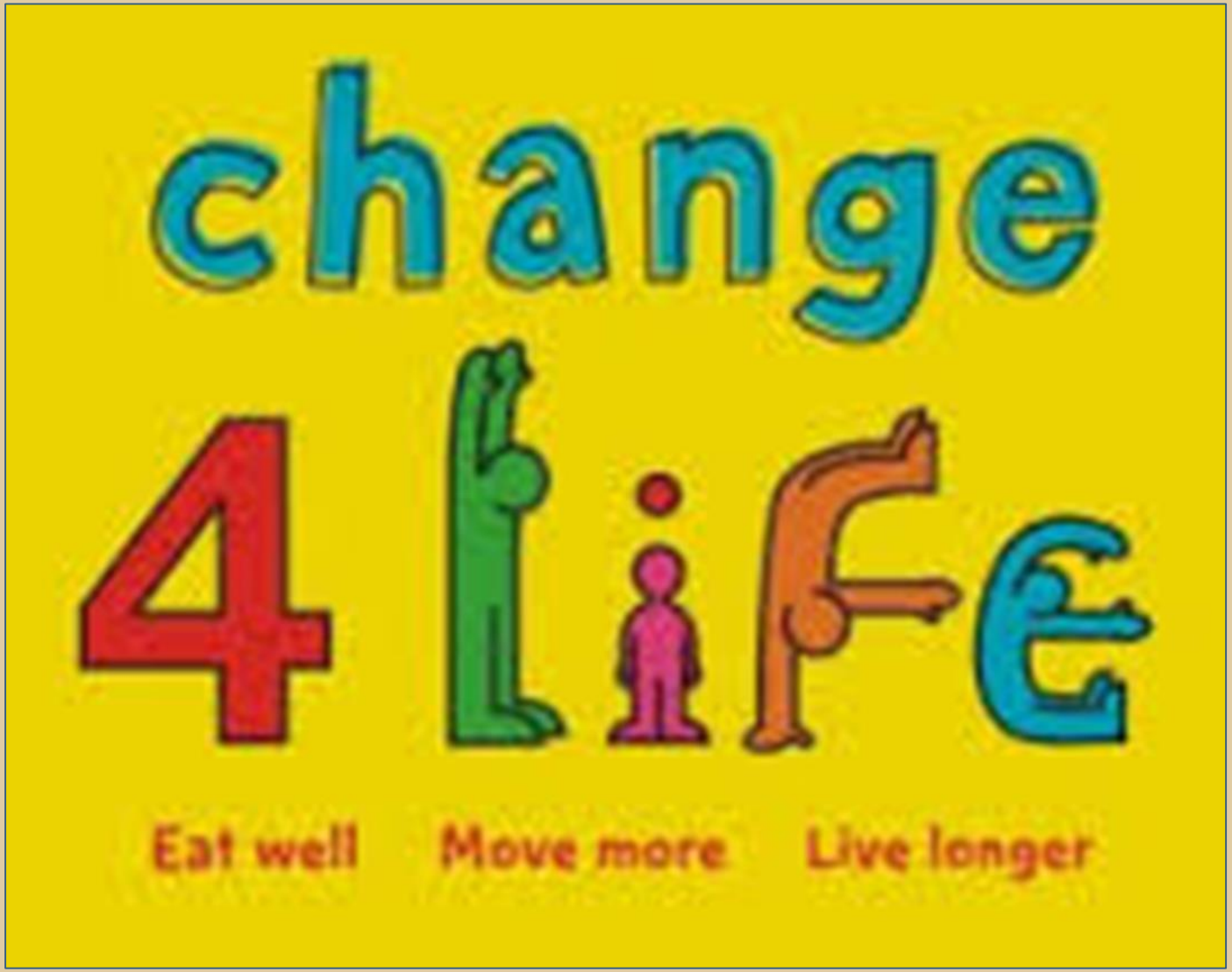
Can The Media Change Attitudes Against Current Trends?

Teenagers urged to create social media campaigns promoting healthy lifestyles.

THE Dairy Council scheme is targeting secondary school pupils across Scotland, in attempt to promote a healthier way of living.
The new initiative aims to encourage secondary pupils to highlight the links between diet, physical activity, health and the environment.

"Today's teenagers live in a world of instant information. The internet, social media and blogs, for example, have opened a world of creative and interactive learning. Against this background, we are encouraging students to plan a social media campaign incorporating key nutritional and environmental messages, using a medium that they understand".

The promotion of healthy food choices



If `thin` makes us dissatisfied, will larger models have the opposite effect? Dittmar & Howard (2004) tested this with the use of `average` models, and found less body anxiety.

So, if this is the case, why has a preference for `thin` evolved?

Why don`t all media users become obese?
Perhaps we do…
Longitudinal findings…

Towards a conclusion…