



NSW Centre for Overweight and Obesity

Reporting obesity:

a resource for journalists

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A note on the author

Catriona Bonfiglioli is an experienced journalist with seven years in mainstream journalism and seven years as a full-time medical reporter, first with Australian Associated Press and then with *Australian Doctor*. Catriona is a former president of the Australasian Medical Writers' Association. In 2005, Catriona gained her PhD for her research analysing Australian news media coverage of genetic technologies. Since October 2005, Catriona has worked as researcher at the NSW Centre for Overweight and Obesity. She also works as a journalist at AAP.

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Introduction

The obesity epidemic is a strong news story which has attracted Australian and international media attention increasingly since 2001. The Australian news media has highlighted many of the key issues in overweight and obesity as well as reporting debates including: Is food or exercise the most important factor? How bad are junk foods? Should food advertising to kids be banned? Should school canteens and tuckshops ban junk food? Is obesity alone really a health risk or only a problem when it is combined with diabetes, heart disease or other diseases?

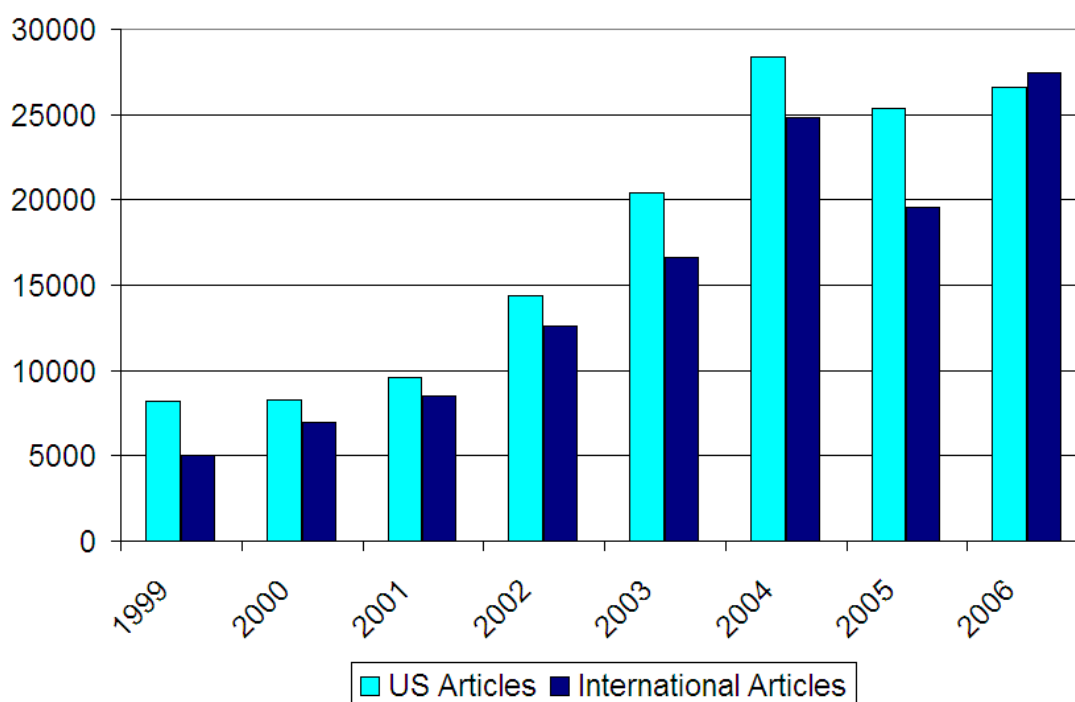
These choices in reporting overweight and obesity profoundly affect Australians' understandings and attitudes to these problems. The increase in coverage is placing obesity on the public agenda. However, paradoxically, the focus on obesity may also make the issue seem irrelevant to some people, stigmatise overweight people and fuel the industries which are dependent on obesogenic lifestyles but offer only short-term solutions.

The aim of this publication is to highlight current debates in relation to obesity as a health problem, point to evidence-based research, suggest alternative news angles and illuminate the choices journalists can make in how they cover this topic.

The media guide is based on current research as well as analysis of media coverage of obesity in Australia. It is recognised that this issue is receiving constant media coverage and the focus of debate may change from time to time.

Further information on the rates and trends in obesity amongst children and adults in Australia, as well as current programs and approaches, is available from the following website: <http://www.coo.health.usyd.edu.au>

Figure 1 News articles referring to obesity published in United States and international media from 1999 to 2006.

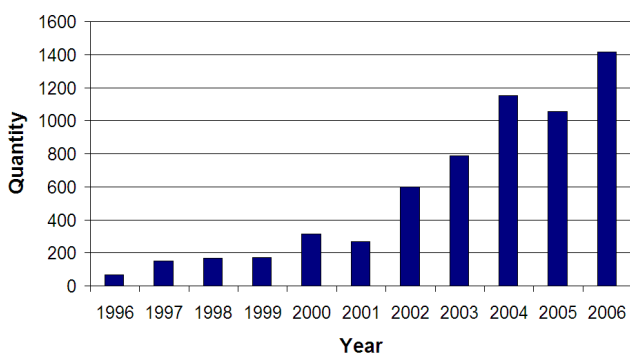


Source: International Food Information Council, 2007.

The role of the media

News reporting can profoundly affect people's awareness and understandings of health issues and often influences their health choices, with mixed effects. Research shows how the news that Kylie Minogue had breast cancer stimulated an increase in breast screening,¹ reports about health benefits of wine boosted red wine sales,² publicity about health risks of hormone replacement (HRT) dramatically reduced women's use of HRT^{3,4} and, most alarmingly, how heavy coverage of suicide in Australia was associated with spikes in suicide rates.⁵

Figure 2 Articles referring to obesity in The Sydney Morning Herald, The Australian, The Daily Telegraph, The Age, & The Herald Sun from 1997 to 2006.



Source: NSW Centre for Overweight and Obesity

Obviously, the news media are not a public health information service and reporters have to meet news editors' demands for compelling newsworthy stories which will engage readers, viewers and listeners. **But the news media are an important and influential source of health and medical information; so it is important to get the whole story.**^{6,7} The way nutrition and fitness issues are covered is likely to shape public understandings of and responses to the problems of excess weight and sedentary lifestyles. News coverage highlights particular causes of weight problems, emphasises certain solutions and identifies who is responsible for solving the problem.

The news about nutrition, diet, exercise and weight problems is constantly changing, leading to confusion among readers and viewers about what to do. News media traditions mean the media tend to highlight conflict and debate which may feed feelings of uncertainty about what people should do to be healthy and avoid being overweight.

Agenda setting

Because journalists select which issues and events to report from a wide range of possible stories, news audiences see these issues and events as more important than the sidelined stories.⁸ When reporters and editors use their news judgment to decide where to place a story in the paper or a bulletin, those decisions also signal to audiences which stories are the most important. This role of conferring importance onto news and events is known as the 'agenda-setting' role of the media and is thought to be a key explanation of how the news media influence social and public policy agendas.⁹

Framing

Journalists and news organisations also shape understandings of health problems by framing issues and events in particular ways. News stories frame issues by highlighting certain aspects of an issue, sidelining others and using metaphors and catchphrases to link new stories to archetypal tales such as the David and Goliath story with their associated values (i.e. little guy [good] takes on big guy [bad]). In doing so, stories define problems, identify causes, apportion blame and thus promote particular solutions.^{10,11} So, for example, news reports which focus on the criminality of illicit drug use support punishment as a solution, while those which emphasise that drug users are people with an addiction point towards health care solutions.

Obesity is in the news

The obesity epidemic is recognised in the media as a major health crisis. Coverage has increased dramatically in Australia and new angles are evolving. Meanwhile, the news interest has spawned a spin-off reality TV industry with top-rating shows such as Network Ten's *The Biggest Loser* which attracted two million viewers in Australia in 2006.

Print media

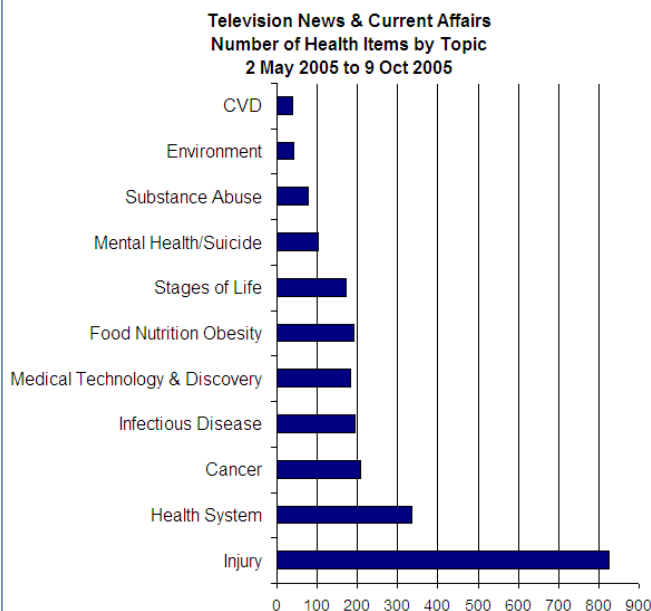
Overweight and obesity are attracting more media attention. The quantity of print media coverage has increased dramatically since the late 1990s overseas (see figure 1) and since 2001 in Australia (see figure 2).¹² In the US, obesity overtook tobacco and smoking as a news issue in 2000.¹³ Although in Australia, 42% more deaths are related to physical inactivity than to high body mass (13,491 vs 9,525 in 2003),¹⁴ obesity is far more popular than physical activity as a news topic.¹⁵

Australian research suggests consumer fears about food risks may be driving the newsworthiness of overweight and obesity: a study of articles about food risk published in three NSW newspapers found that 38% focused on obesity.¹⁶

Television

Analysis of Australian TV news shows that obesity, food and nutrition are amongst the top 10 health issues covered. A new research database of television news coverage of health issues has been developed by a team in the University of Sydney's School of Public Health.¹ This team has found that items about food, nutrition and obesity are the fifth most common TV health item and make up about 6.6% of news and current affairs about health captured by this database (see figure 3).

Figure 3 Australian television news and current affairs. Number of items by topic from 2 May 2005 to 9 Oct 2005.



Source: Chapman and Holding, The Australian Health News Research Collaboration, The University of Sydney.

What makes obesity newsworthy?

Television news about overweight and obesity is dominated by stories about medical or surgical treatments. This may promote medical interventions at the expense of the prevention of weight gain (or excessive weight gain in the case of children), which is relevant to everyone at every weight (except people who are underweight).¹⁷

Figure 4 What makes news in Australian television coverage? Types of news angle in 50 television items.

What Makes News in Australian TV coverage?

Modern Medical Miracles 20%

Lap banding saves lives for seriously obese

Quirky News 14%

Wine may help weight loss

Hunting the Holy Grail 10%

CSIRO diet works

Weight Loss Heroes 10%

Workplace weight loss winners

Danger in Familiar 8%

Coffee may be more fattening than a Big Mac

Health Scare 8%

Obesity is a serious threat to us & our kids

Food Fight 4%

Conflict over obesity

Junk food Ads to Blame 4%

Experts, parents attack junk food ads

David and Goliath Struggle 2%

Taking on big business

Source: Bonfiglioli et al. 2006. ¹⁷

A study of what makes obesity newsworthy, conducted by the NSW Centre for Overweight and Obesity (COO) examined news angles in 50 Australian television news items about overweight and obesity (see figure 4).¹⁷

One in five stories was a modern medical miracle type story which reported technomedical fixes such as lap-band surgery.

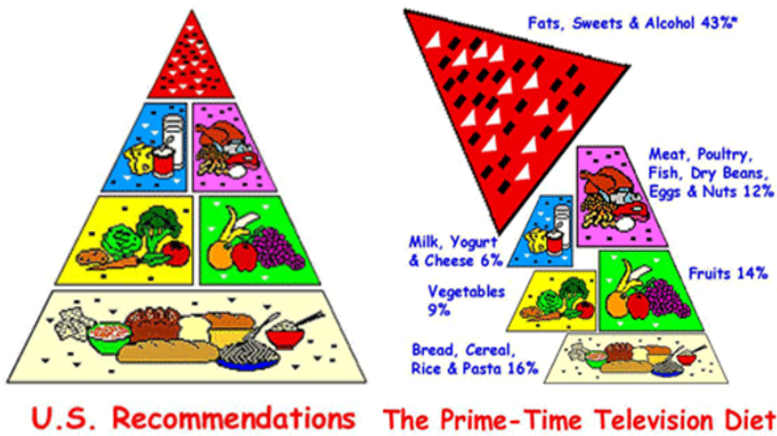
Obesity also captured news attention with quirky new solutions – such as how wine or sleep or chocolate could solve weight problems (14% of items), claims that a new diet really works (10%) and weight loss success stories (10%).

One in 12 stories led on the health scare aspects of obesity, while a similar number revealed hidden calories in foods or drinks. Fewer than one in 20 led on attacks on junk food adverts despite evidence that advertising promotes high-fat, high-sugar foods more heavily than healthier foods (see figure 5).¹⁸

Leading on medicotechnical solutions, new diets and quirky solutions tends to keep the spotlight on individuals and diverts attention from the wider social and environmental forces which shape individual choices and drive obesity.

A focus on the individual also helps to medicalise obesity, highlighting drugs and surgery as solutions rather than healthy nutrition and activity.¹⁹ Media reinforcement of individual responsibility provides grist to the mills of doctors and pharmaceutical manufacturers and lets the food and advertising industries off the hook.²⁰ Focusing on the individual also supports the diet industry which sells diet plans and diet foods to people with weight problems, despite the scant evidence showing these products improve health or even produce sustained weight loss.^{19,20}

Figure 5 How does television advertising in the US relate to US dietary recommendations?



Source: Byrd-Bredbenner, Grasso & Finckenor, 2001¹⁸

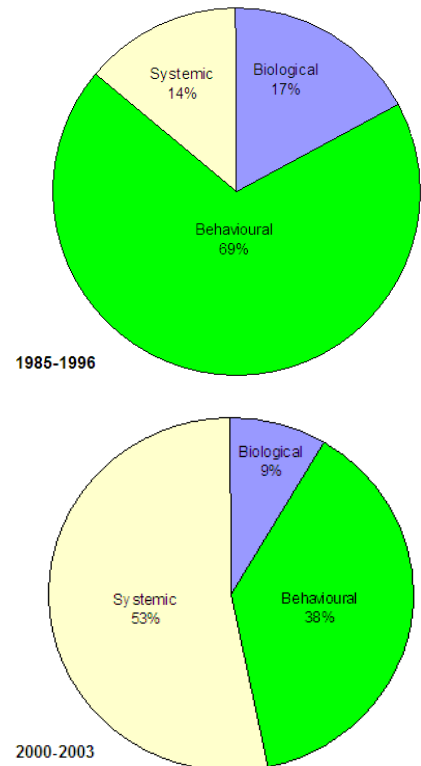
Individuals and societies

Most media coverage portrays the issues of overweight and obesity as problems of individual responsibility. A study of US press coverage found two thirds of articles published between 1985 and 1996 held individuals responsible for their weight problems (see figure 6).²¹

A COO study found two thirds of television news items about obesity focused responsibility on individuals (see figure 7).¹⁷ The US study found almost 40% of stories blamed sedentary lifestyles while a similar proportion blamed poor food choices by individuals.²¹ The Australian study found two thirds of Australian TV news items blamed poor nutrition alone while just 6% pinned the blame only on inactivity, and 8% blamed both.

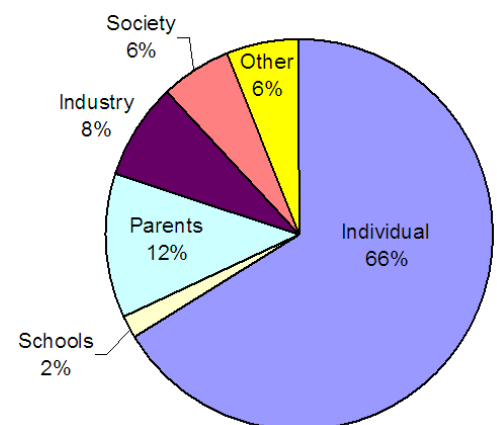
This focus on individual 'gluttony' and 'sloth' has common sense appeal, resonates with audiences and absolves industry and government.¹⁹ Framing obesity as a problem of individuals neglects the physical and social environmental factors which influence our activity opportunities and food and drink choices and thus drive obesity.

Figure 6 How responsibility for obesity is framed in US news stories: frames in 136 news stories about obesity in The New York Times



Source: Lawrence, 2004²¹

Figure 7 The dominant messages about responsibility in Australian TV news items about overweight and obesity, May-Oct 2005.



Source: Bonfiglioli et al. 2006¹⁷

Individual responsibility framing does not resonate with health experts and parents

Health experts are teasing out the causes of the causes of obesity, looking at how urban planning, car-dependency, safety fears, taxi-mums (& dads), building design, food and drink portion size (upsizing bottles, plates, and serves, see figure 8), lack of play space, parks and other environmental factors, all conspire to reduce energy expenditure and increase inappropriate intake of food and drink.

Figure 8 Portion size and fat content illustrate environmental influences on choice.

Portion Size

When is regular not regular?

When it's hot chips

KFC

Regular	313 cal	13g fat
Large	682 cal	28g fat



McDonald's

Small	255 cal	14g fat
Medium	370 cal	20g fat
Large	450 cal	24g fat

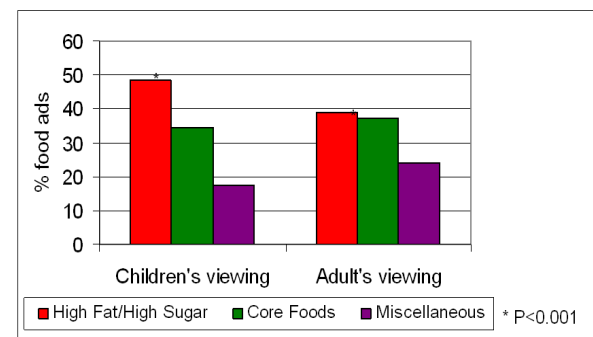


Source: CalorieKing.com.au

That is not to say that media coverage pays no attention to these wider forces: one US study found 31% of articles did discuss structural causes such as car culture (11%) and food/restaurant industries (20%).²¹ Since 2000, the US media have been more likely to frame obesity as the result of sociocultural and physical environments, although behavioural explanations still make up 38% of frames (see figure 6, page 6).²¹ But both US and Australian research find that the solutions highlighted in the media centre on individuals and that structural solutions, such as curbs on food advertising to kids, are less frequent.^{17,21,22}

Many media viewers and readers are parents who are aware of these external pressures. Some parents are forming coalitions to lobby against junk food and soft drink promotions aimed at children. The parents who have joined the Parents' Jury (<http://www.parentsjury.org.au>) are sick of being pestered by endless repeated requests for this or that unhealthy food.²³ Studies show that children's television adverts are dominated by junk food adverts which increase children's consumption of snacks and demands upon their parents (see figure 9).²⁴

Figure 9 Australian research shows almost 50% of food adverts during children's viewing are for high fat / high sugar products.

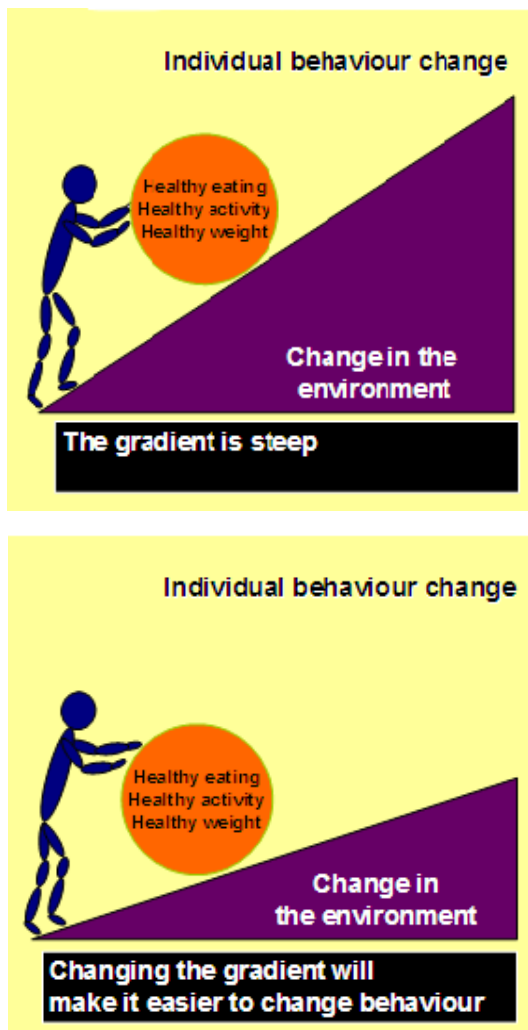


Source: Kelly et al. 2007²⁴

Individuals and environments

One way to illustrate how individual choices are constrained by environments is to think of the environment as creating a gradient: the steeper the gradient (the more barriers there are to healthy choices) the harder it is for individuals to make healthy choices about eating, drinking, exercising and minimising sedentary behaviours (see figure 10). For example, making stairwells more attractive and signposting the health benefits of stair-climbing can increase the number of people using the stairs instead of the lift.²⁵

Figure 10 Changing the environment makes healthy choices easier



Adapted from Puska P, 2001

Problems versus solutions

Focusing on the problems has a risk – it gets attention, it scares people, but it can create cynicism.

Focusing on solutions can create a sense of hope, reinforce actions, and reduce alienation and defensiveness:

- But is it news? Can it sell newspapers and TV programs?
- Yes, people are interested and readers and viewers are missing out on solutions which are known to work.
- While everyone dreams of making and marketing the magic bullet for obesity, the reality is a raft of changes is required to wind back the epidemic. We need changes on multiple fronts.
- There are already roadmaps for solutions, such as government plans – but they are not always fully implemented.³⁰

Although new reports showing the extent of the growing problem of obesity will continue to command prominent media spots for some time to come, it is so widely accepted that obesity is a serious problem that **it may be time to focus reporting on the many programs to combat obesity at the social and individual levels and to focus attention on where governments, industry and institutions are talking but not acting.**³¹

Illustrating obesity

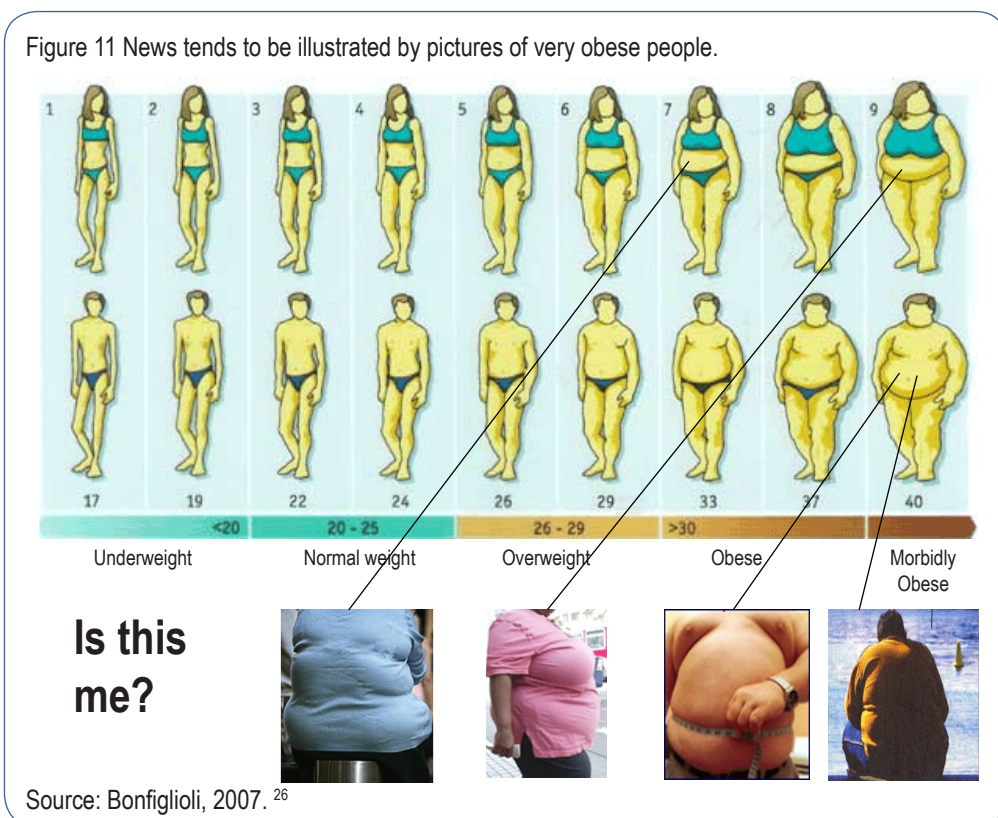
Many news stories about overweight and obesity are illustrated by pictures of people with large bellies cropped to exclude their heads. Typically, these people are not just overweight but morbidly obese.

Clearly, these extremely fat bodies add drama to both television and newspaper stories about obesity. This might make them effective scare tactics, but what if all the overweight readers and viewers take one look at these bodies and say: 'Thank God I'm not like that.' And switch off? If the subtext is "you don't need to worry about your weight until you look like that," as some obesity experts fear, then audiences may be left with the idea that these stories are nothing to do with them, that they are about 'other' people who are at the heart of the problem (see figure 11).

So what? Since obesity is very hard to reverse and has serious health consequences, it is imperative that Australia works on preventing obesity.

That means engaging people who are merely overweight or even just heading towards overweight to prevent weight gain as well as tackling the obesogenic forces in the environment that affect everyone. Weight starts to influence health from BMIs of over 21.¹⁴ There is evidence that even modest weight losses of 5 to 10 per cent of body weight generate improvements in blood pressure and cholesterol, thus reducing the risk of chronic disease.²⁷

Experts also worry about the 'freak show' aspects of using such large bodies and the contribution such pictures make to the depersonalisation and stigmatisation of people with weight problems. Is there a danger the media will turn people with weight problems into problem people? Does such portrayal encourage bullying or discrimination? Overweight children are known to be bullied more, with other children withdrawing friendship, teasing, name-calling and even hitting them.²⁸



The myths

Myth 1. Gluttony and sloth cause obesity

WRONG: Poor nutrition and sedentary lifestyles are important factors, but the environment makes these the easy choices. Furthermore, human genes and physiology make our bodies inclined to store fat when there is plenty, to prepare for famine.

Myth 2. We need to know whether it is nutrition OR exercise

WRONG: Both are important. Focusing on one or the other will not help fight obesity overall. Not everyone is the same, and different people will benefit differently from changes in physical activity and nutrition. Disproportionate attention on physical activity is sometimes used to take the spotlight off the junk food industry's products and promotions which are driving excess energy intake.

Myth 3. Everyone just needs to change their lifestyle – we don't want a nanny state

WRONG: Australia has acted to curb smoking in public, mandate seatbelts, control guns, and fence swimming pools to save lives. High body weight and sedentary behaviours are among the top five killers of Australians.¹⁴ Education is not enough; the physical and social environment needs to be changed to make healthy choices easy choices. This is similar to road safety, where government policy to design safer roads underpins road safety and education measures.

Myth 4. It's just puppy fat and kids will grow out of it

WRONG: Overweight kids are vastly more likely to become overweight adults than other kids. But all kids need to learn healthy nutrition and activity habits because although overweight children are most likely to become overweight adults most obese adults were not overweight as children.²⁹

Myth 5. It's about appearance not health

WRONG: There are health problems associated with being overweight as well as with obesity. Some groups emphasise appearance, but many of the important health benefits of healthy eating and physical activity occur whether or not people look more beautiful. Better nutrition and being more active can improve blood pressure, reduce or even turn-off type II diabetes, and reduce the risk of heart disease.

Myth 6. Adults gaining weight as they get older is 'normal'

WRONG: It is common to gain weight with age, but that doesn't make it healthy or normal. Weight gain with age means too much energy is being consumed and not enough expended, which leads to weight gain and increased risk of diabetes, heart disease and bowel, breast and womb cancer. There are particular stages when there is an increased risk of gaining weight, such as following childbirth or at menopause: except for people who are underweight, preventing weight gain is best for everyone at every age.

Myth 7. If the causes are complex, then we have to reject any immediate simple solutions

WRONG: To prevent overweight and obesity, government, industry and society need to act together to remove or reduce the many factors which drive obesity. Complexity is not a reason for inertia. A combination of practical actions over time could build up to produce society-wide benefits. Small changes could include increasing active time at school, making school canteens healthy, and reducing time spent watching television, playing video games and using computers.

Fresh news angles on obesity

Obesity has news currency, but where are the fresh news angles going to come from?

Causes

Eating and drinking too much and moving too little are the obvious causes of weight gain. But what about the causes of these causes? Researchers have identified many social, economic and environmental changes which drive weight gain. These include: car-dependency, reluctance or inability to allow children to walk, cycle, bus or train to school, and poor access to affordable fresh food and increased density of take-away food outlets and restaurants.

So why not investigate:

- The geography of obesity?
- Who's responsible for street lighting and safety?
- Who's teaching kids to cycle safely? Is local crime as bad as people imagine?
- Where is play equipment being demolished because insurance is too pricey?
- Are food shop owners practising 'food apartheid'?¹⁹ Having a supermarket in your suburb increases fruit and veg intake, so how many suburbs or towns do not have easy access to a supermarket?³²
- If you're thirsty, how far do you have to walk before you find a water bubbler? Do you pass a soft drinks machine first?

Sources

The people journalists phone when they're generating a story help to shape the story. The COO study of television news and current affairs found that most stories featured a person with a weight problem or their parent, an expert in obesity, nutrition, fitness or another discipline and a journalist. Only 10% of the 50 items we studied featured a politician, government official, or industry spokesperson. Just over 10% featured lobby group spokespeople or activists. Leading obesity experts say obesity is not just the responsibility of health ministers but other ministries too. Obesity coverage could be enriched by hearing the voices of architects, civil engineers, economists, ergonomists, epidemiologists, lawyers, transport specialists, urban planners, and local government officials and ministers responsible for these areas.³³

- How about approaching parents' groups like the Parents' Jury, or consumer advocates like the Australian Consumers Association, to find out what their angle on overweight and obesity is?
- To what extent have food companies modified their foods to make them healthier? If everyone is eating junk food, maybe it's time to make all junk food and drink healthier.
- What are local governments doing to encourage walking and cycling?
- How often do transport planners factor in active transport options?

Solutions

Some industry proponents use the complexity of the environmental and social causes of overweight and obesity to argue against making any changes without concrete evidence of impact on obesity rates (as opposed to other desirable outcomes such as healthier diets and more active lifestyles for children, which would give them longer lives and happier outlooks). **Health experts argue that the complexity demands that credible solutions of many different kinds should be implemented as soon as possible to reverse the epidemic.**

All around Australia solutions are being tried and tested but are journalists writing about them? Good news stories are harder to sell, but hard news stories could be built on investigating whether all Australians get equal access to these solutions. For example, access to cancer treatment is much worse in the bush, is the same true of obesity programs? Journalists writing about overweight and obesity can easily tap into the news power of climate change as consumers keen to reduce carbon emissions embrace cycling, walking, public transport, local food, home cooking, gardening and reduced screen time.

Frames

News usually blames food for the obesity epidemic. Food was the dominant explanation in 70% of the COO television sample, and two thirds blamed individuals for obesity (Figure 7 on page 6). These trends in coverage reinforce the idea that individuals are responsible:

- It's easy to say that no-one is putting food in people's mouths but individuals or their parents.
- Likewise, it's easy to say people should simply get more exercise, without questioning what barriers they face in the bid to be more active.

This focus on individual behaviour takes the spotlight off the crucial role industry, government and society have in shaping the way we live, eat and move.

- Obesity is higher among people of low socio-economic status but is it fair to blame less well off people for becoming obese if their suburbs have few fresh food outlets and few, unsafe or unattractive parks?
- Walking to school has become rare. Once it was just the normal way to get to school. Why is this? How could this trend be changed?
- Would improving nutrition and physical activity, which might involve eating less and spending less on petrol, have a negative effect on Australia's economic growth?

A child's perspective

The majority of the COO sample of news items focused solely on adults (52%), or children and adults (14%). Only 26% focused on children or adolescents alone. This was surprising given the prominence of the childhood obesity summit held in NSW in 2002; but perhaps the result of the ethical and logistical barriers to featuring overweight or obese children. **Parents do care if their children are being harmed by the environment.** Obese children are at vastly increased risk of adult obesity and of developing adult diseases like heart disease and diabetes early.

Who is trying to protect them? Who operates as if profit is more important than children's health?

Background notes on obesity

The obesity problem

The problem of obesity is recognised by the World Health Organization as a global epidemic which threatens to overwhelm both developed and developing countries.³⁴ Worldwide, the estimated number of obese adults has risen from 200 million in 1995 to more than 300 million in 2000.

Obesity is a significant risk factor for Type II diabetes, heart disease, high blood pressure and stroke, and some cancers.³⁵ In 2006, Diabetes Australia reported that 3.2 million people in Australia are obese, predicting the numbers would more than double by 2025.³⁶

In Australia in 2003, 9,525 people's deaths were attributable to high body weight (BMI over 21), while 13,491 were blamed on physical inactivity. Only high blood pressure (22,504 deaths in 2003), tobacco (15,511) and high blood cholesterol (15,351) kill more Australians.¹⁴ High body weight contributes to deaths from diabetes, circulatory disease, cancer and other causes. Inactivity contributes to deaths from circulatory disease, diabetes and cancer.¹⁴

Obesity affects men, women and children

In 1995, 48.8 per cent of men were overweight or obese, in 2005 it was 58.3 per cent.³⁷ In 1995, 32.4 per cent of women were overweight or obese; in 2005 it was 39.9 per cent.³⁷ The most recently published figures show that in 2004 one quarter of NSW boys (aged 5 to 17 years) were overweight or obese (17.3 per cent overweight; 7.7 per cent obese). Just over 23 per cent of girls were overweight or obese (17.2 per cent overweight; 6.1 per cent obese).³⁸

Weight gain is accelerating

The proportions of men, women and children who are overweight or obese have been increasing over time, most notably since the 1970s.^{39,40} Australians gain weight as they age. While most people expect to put on weight with age, an Australian analysis shows that this weight gain is accelerating.⁴¹ Furthermore, younger generations are gaining weight faster than their parents' generations and more people are starting their adult life with excess weight.⁴¹

Overweight and obesity have a high economic cost

In 2005, the financial cost of obesity in Australia was estimated to be \$3.76 billion including \$1.7 billion in productivity costs, \$873 million in health system costs and \$804 million in carer costs. The net cost of lost wellbeing was valued at \$17.2 billion, bringing the total cost of obesity in 2005 to \$21 billion.³⁶

BMI vs waist measurement

Body mass index (BMI) is a widespread method of measuring obesity which is calculated by dividing weight by height in metres squared. The WHO definitions for adults are: underweight is a BMI of less than 18.5, healthy weight is between 18.5 and 24 BMI, overweight is between 25 and 29, and obese is 30 and over. The WHO says people who are obese have a 50% to 100% increased chance of premature death compared with people in the healthy BMI range. These BMI categories may not apply to all ethnic groups, with people from Asian backgrounds becoming at risk at lower BMIs and Pacific Islanders becoming at risk at higher BMIs.

These BMI cutoffs do not work for children but children can be assessed using BMI for age percentile charts: a BMI above the 85th percentile is indicative of overweight, while a BMI above the 95th percentile suggests obesity.⁴² (See pages 9 and 10 of NHMRC guidelines).

The NSW Health Department has online BMI calculators:

Children <http://www.health.nsw.gov.au/obesity/youth/bmi.html>

Adults <http://www.health.nsw.gov.au/obesity/adult/bmi.html>

Debates surround the use of BMI to assess obesity because of its inability to distinguish fat from muscle, take account of fat distribution or explain ethnic variation. Some researchers advise measuring excess fat mass, waist circumference or abdominal visceral fat, although others argue these are strongly correlated with BMI.^{34,43}

There is evidence to suggest waist circumference may be a simpler and valid alternative to BMI for health promotion⁴⁴ and a better predictor of cancer risk.^{45,46} Significant increased risk appears to occur when the waist circumference is greater than 102cm for men and 88cm for women.⁴⁷

Obesity and cancer risk

A BMI greater than 30 kg/m² increases the risk of cancer of the colon, endometrium (womb lining), breast (post-menopause), kidney, oesophagus and gall bladder.⁴⁷ The risk is also raised (but to a lesser degree) for people with a BMI of 25 to 30.⁴⁷ Almost 40% of endometrial cancer is attributable to overweight and obesity, along with a quarter of kidney cancer, about a quarter of gall bladder cancer, 11% of colon cancer, 9% of post-menopausal breast cancer, and 37% of oesophageal adenocarcinoma.⁴⁷

The total health costs in 2005 from cancer due to obesity were \$107.3 million, with 79% of these costs related to bowel and breast cancer.³⁶

Where to now?

Thank you for giving your attention to the issue of overweight and obesity reporting in Australia. Australian journalists are already swinging the spotlight onto more and more issues related to the causes of obesity and the solutions. We hope that this resource has provided food for thought and will inspire new stories which help Australia to re-think the way we do things so that it becomes easier to make healthy choices at both an individual and societal level.

References

1. Chapman SF, McLeod K, Wakefield M, Holding S. 2005 Impact of news of celebrity illness on breast cancer screening: Kylie Minogue's breast cancer diagnosis. *Medical Journal of Australia* 183(5):247-250.
2. Dodd T, Morse S. 1994 The impact of media stories concerning health issues on food product sales. *Journal of Consumer Marketing* 11(2):17-24.
3. Haas J, Kaplan C, Gerstenberger E, Kerlikowske K. 2004 Changes in the use of postmenopausal hormone therapy after the publication of clinical trial results. *Annals of Internal Medicine* 140(3):184-88.
4. Lawton B, Rose S, McLeod D, Dowell A. 2003 Changes in use of hormone replacement therapy after the report from the Women's Health Initiative: cross sectional survey of users. *British Medical Journal* 327:845-846.
5. Pirkis JE, Burgess PM, Francis C, Blood RW, Jolley DJ. 2006 The relationship between media reporting of suicide and actual suicide in Australia. *Social Science & Medicine* 62(11):2874-2886.
6. Johnson T. 1998 Shattuck lecture - medicine and the media. *New England Journal of Medicine* 339(2):87-92.
7. Wade S, Schramm W. 1969 The mass media as sources of public affairs, science, and health knowledge. *Public Opinion Quarterly* 33(2):197-209.
8. McCombs M, Shaw D. 1972 The agenda-setting function of mass media. *Public Opinion Quarterly* 36(2):176-187.
9. Gamson WA. 1992 *Talking Politics*. New York: Cambridge University Press.
10. Gamson WA, Modigliani A. 1989 Media discourse and public opinion on nuclear power: a constructionist approach. *American Journal of Sociology* 95:1-37.
11. Entman R. 1993 Framing: toward clarification of a fractured paradigm. *Journal of Communication* 43(4):51-58.
12. International Food Information Council. 2005 *Food for thought VI*. Washington, DC: International Food Information Council.
13. Saguy AC, Almeling R. 2005 *Fat devils and moral panics: news reporting on obesity science*. Sociology Departmental Colloquium Series, University of California, Berkeley.
14. Begg S, Vos T, Barker B, Stevenson C, Stanley L, Lopez AD. 2007 *The burden of disease and injury in Australia 2003*. Canberra, ACT: The Australian Institute of Health and Welfare.
15. Saguy AC, Riley KW. 2005 Weighing Both Sides: Morality, Mortality and Framing Contests over Obesity. *Journal of Health Politics, Policy, and Law* 30(5):869-921.
16. Lupton D. 2004 'A grim health future': food risks in the Sydney press. *Health, Risk & Society* 6(2):187-200.
17. Bonfiglioli CMF, Smith B, Chapman S, King L. 2006 Choice and voice - obesity debates in Australian television news. *Obesity Reviews* 7(s2):74-75.
18. Byrd-Bredbenner C, Grasso D, Finckenor M. 2001 Nutrition messages in prime-time television programming. *Topics in Clinical Nutrition* 16(4):61-72.
19. Dorfman L, Wallack L. 2007 Moving nutrition upstream: the case for reframing obesity. *Journal of Nutrition Education and Behavior* 39 (2 Suppl):S45-50.
20. Berkeley Media Studies Group. 2006 *Framing brief: the problem with obesity*. <http://www.bmsg.org/pdfs/FramingObesity.pdf>
21. Lawrence RG. 2004 Framing obesity: the evolution of news discourse on a public health issue. *The Harvard International Journal of Press-Politics* 9(3):56-75.
22. Dorfman L, Wilbur P, Lingas EO, Woodruff K, Wallack L. 2005 *Accelerating policy on nutrition: Lessons from tobacco, alcohol, firearms and traffic safety*. Berkeley, Ca: Berkeley Media Studies Group.
23. The Parents Jury. Melbourne: The Parents Jury, 2007. <http://www.parentsjury.org.au/>
24. Kelly BP, Smith B, King L, Flood V, Bauman A. 2007 Television food advertising to children: the extent and nature of exposure. *Public Health Nutrition* <http://journals.cambridge.org/action/displayFulltext?type=6&fid=849356&jid=&volumeId=&issueId=-1&aid=849352&fulltextType=RA&fileId=S1368980007687126>
25. Kerr N, Yore M, Ham S, Dietz W. 2004 Increasing stair use in a worksite through environmental changes. *American Journal of Health Promotion* 18(4):312-315.

26. Bonfiglioli C. 2007 Do television news images of obesity hinder prevention? *What's new in prevention: news on nutrition, physical activity and weight research* 2(1):6.
27. National Health and Medical Research Council. 2003 *Clinical practice guidelines for the management of overweight and obesity in adults*. Canberra, ACT: Commonwealth of Australia.
28. Janssen I, Craig WM, Boyce WF, Pickett W. 2004 Associations between overweight and obesity with bullying behaviors in school-aged children. *Pediatrics* 113(5):1187-1194.
29. Venn AJ, Thomson RJ, Schmidt MD, et al. 2007 Overweight and obesity from childhood to adulthood: a follow-up of participants in the 1985 Australian Schools Health and Fitness Survey. *Medical Journal of Australia* 186(9):458-460.
30. Commonwealth of Australia. 2003 *Healthy Weight 2008, Australia's Future: The national action agenda for children and young people and their families*. Canberra, ACT: Commonwealth of Australia.
31. Robinson TN, Sirard JR. 2005 Preventing childhood obesity: A solution-oriented research paradigm. *American Journal of Preventive Medicine* 28(2 (Suppl 2)):194-201.
32. Lang T, Caraher M. 2000 Access to healthy foods: Part II. Food poverty and shopping deserts: what are the implications for health promotion policy and practice? *Health Education Journal* 57:202-211.
33. Colagiuri R. 2007 The lion, the wardrobe and the witch hunt: an alternative take on obesity. *Medical Journal of Australia* 186(9):476-477.
34. World Health Organization. 2000 *Obesity: preventing and managing the global epidemic: report on a WHO consultation*. Technical Report Series. No. 894 Geneva: the WHO.
35. World Health Organization. 2007 *Controlling the global obesity epidemic*. Geneva: The World Health Organization.
36. Access Economics. 2006 *The economic costs of obesity*. Sydney, NSW: Diabetes Australia.
37. Australian Bureau of Statistics. 2007 *Australian Social Trends 2006 ABS Catalogue No. 4102.0*. Canberra, ACT: Australian Bureau of Statistics.
38. Booth M, Okely T, Denney-Wilson E, Hardy L, Yang B, Dobbins T. 2006 *NSW Schools Physical Activity and Nutrition Survey (SPANS) 2004: Full Report*. Sydney, NSW: NSW Department of Health.
39. Norton K, Dollman J, Martin M, Harten N. 2006 Descriptive epidemiology of childhood overweight and obesity in Australia: 1901-2003. *International Journal of Pediatric Obesity* 1(4):232-238.
40. Utz RL. 2005 *Obesity in America, 1960-2000: is it an age, period, or cohort phenomenon?* Population Association of America 2005 Conference Presentation <http://paa2005.princeton.edu/download.aspx?submissionId=51591>.
41. Allman-Farinelli MA, King L, Bonfiglioli C, Bauman A. 2006 *The Weight of Time: Time influences on overweight and obesity in women*. Sydney: NSW Centre for Overweight and Obesity.
42. National Health and Medical Research Council. 2003 *Clinical practice guidelines for management of overweight and obesity in children and adolescents*. Canberra, ACT: Commonwealth of Australia.
43. Bouchard C. 2007 BMI, fat mass, abdominal adiposity and visceral fat: where is the 'beef'? *International Journal of Obesity* <http://www.nature.com/ijo/journal/vaop/ncurrent/full/0803653a.html>
44. Han T, van Leer E, Seidell J, Lean M. 1996 Waist circumference as a screening tool for cardiovascular risk factors: evaluation of receiver operating characteristics (ROC). *Obesity Research* 4(6):533-47.
45. MacInnis RJ, English DR, Gertig DM, Hopper JL, Giles GG. 2004 Body size and composition and risk of postmenopausal breast cancer. *Cancer Epidemiology Biomarkers & Prevention* 13:2117-2125.
46. MacInnis RJ, English DR, Hopper JL, Haydon AM, Gertig DM, Giles GG. 2004 Body size and composition and colon cancer risk in men. *Cancer Epidemiology Biomarkers & Prevention* 13:553-559.
47. The Cancer Council Australia. 2007 *National cancer prevention policy 2007-09*. Sydney, NSW: The Cancer Council Australia.

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