

HOME | USER GUIDE | MY ACCOUNT | LISTS | HELP | SUPPORT | LOGOUT

U L R I C H ' S
P E R I O D I C A L S D I R E C T O R Y™

The global source for periodicals information since 1932

Advanced Search Browse Ulrich's Alert Ulrich's Update Serials Analysis System

Quick Search Title (Keyword) Go

Medical Journal of Australia

[BACK TO RESULTS](#)

SEARCH MY LIBRARY'S CATALOG: [ISSN Search](#) | [Title Search](#)

[Click for Open Access](#)

Basic Description Other Editions/Formats Abstracting/Indexing & Article Access Publisher & Ordering Information Advertising, Rights, Demographics

JCR Web SFX

Click highlighted text for a new search on that item.

Table of Contents: [Click here to view](#)

ISSN: 0025-729X

Title: Medical Journal of Australia [Additional Title Information](#)

Publishing Body: Australasian Medical Publishing Company Pty. Ltd.

Country: Australia

Status: Active

Start Year: 1914

Frequency: Semi-monthly (23/yr.)

Document Type: Journal; Academic/Scholarly

Refereed: Yes

Abstracted/Indexed: Yes

Media: Print

Alternate Edition [1326-5377](#)

ISSN:

Language: Text in English

Price: AUD 368.50 subscription per year domestic to individuals
AUD 474 subscription per year foreign to individuals
AUD 420 subscription per year domestic to institutions
AUD 530 subscription per year foreign to institutions
AUD 60 subscription per year domestic to students
(effective 2008)

Subject: [MEDICAL SCIENCES](#)

Dewey #: 610

LC#: R99

CODEN: MJAUAJ

Circulation: 28500 unspecified, Audited by: Circulations Audit Board

Special Features: Includes Advertising, Abstracts, Bibliographies, Illustrations, Book Reviews

Article Index: S-a. index

Editor(s): Martin Van Der Weyden

E-Mail: medjaust@ampco.com.au

URL: <http://www.mja.com.au>

Description: Covers medical practice and clinical research papers, editorials, original research papers and case reports.

ADDITIONAL TITLE INFORMATION

Alternate Title: Medline Abbreviated title: Med J Aust; Variant title: M J A

Title History: Formed by the merger of (1881-1914): Australasian Medical Gazette (Australia) (0314-5158); (1910-1914): Australian Medical Journal (Australia) (0314-514X); Which was formerly (until 1909): Intercolonial Medical Journal of Australasia (Australia) (1033-3487); Which was formed by the merger of

(1895-1896): Intercolonial Quarterly Journal of Medicine and Surgery (Australia) (0816-1941); (1856-1895): The Australian Medical Journal (Australia) (1033-1387)

▲ [Back to Top](#)

Add this item to:

(select a list) ▼

+ ADD

Request this title:

I'd like to request this title.

GO

Corrections:

Submit corrections to Ulrich's about this title.

GO

Publisher of this title?

If yes, click GO! to contact Ulrich's about updating your title listings in the Ulrich's database.

GO

• [Print](#) • [Download](#) • [E-mail](#)

▲ [Back to Top](#)

[HOME](#) | [MY ACCOUNT](#) | [LISTS](#) | [HELP](#) | [LOG OUT](#)
[SEARCH](#) | [BROWSE](#) | [SERIALS ANALYSIS SYSTEM](#)

[SUPPORT CENTER](#) | [CONTACT US](#)

Copyright © 2008 [ProQuest LLC](#). View our [privacy policy](#), or [terms of use](#).

Choice and voice: obesity debates in television news

Catriona M F Bonfiglioli, Ben J Smith, Lesley A King, Simon F Chapman and Simon J Holding

In Australia, more than 3.2 million people are obese, and thus at increased risk of disease.¹ Obesity is widely understood to be a problem of individual lifestyle. However, sociocultural and physical factors in the environment are powerful drivers of overweight and obesity.² A key element of the sociocultural environment is the mass media.² The media's contribution to obesity by providing sedentary entertainment and promoting foods with high fat and sugar contents is the subject of multiple studies.³⁻⁵ By contrast, the role of, specifically, the news media in obesity has attracted less research attention despite the importance of news as a source of medical information and as a major influence on public understanding and health-related behaviours.^{6,7}

The news media draw attention to health problems, with issues that receive heavy coverage often moving higher on public and policy agendas.⁸ News stories frame issues by highlighting certain aspects of an issue and sidelining others, thus defining the problem, identifying causes, apportioning blame and pointing to particular solutions.⁹ The news media may frame obesity as gluttony and sloth, which places responsibility in the hands of affected individuals, or as an environmental, cultural and political problem that needs to be addressed at these structural levels.

Dramatic increases in the quantity of media coverage of obesity^{10,11} show that the issue is rising up on media and public agendas internationally. In Australia, government summits on obesity, new prevalence data, and debates about excessive promotion and publicisation of obesity have generated extensive media coverage. A Factiva database (<http://global.factiva.com/>) search of articles from five Australian newspapers shows the number of articles mentioning obesity rose from 67 in 1996 to 316 in 2000 and 1416 in 2006. Despite increased media interest, only modest attention has been paid to analysing obesity in print news media,¹⁰⁻¹⁶ and very few researchers have examined television news coverage of obesity.¹⁰

Analyses of news coverage can deliver valuable insights into the way health issues are being framed.¹⁷ These insights can be used to improve communication and inform health professionals' media advocacy.^{13,17,18}

ABSTRACT

Objective: To examine whether television news and current affairs coverage of overweight and obesity frames obesity in ways that support or oppose efforts to combat obesity.

Design and setting: A content and framing analysis of a structured sample of 50 television news and current affairs items about overweight and obesity broadcast by five free-to-air television channels in New South Wales between 2 May and 31 October 2005.

Main outcome measures: Dominant discourses about causes of overweight and obesity; proposed solutions and location of responsibility for the problem; the age-group focus of television items; the relative prominence of stakeholders; and the aspects of obesity which attract news attention.

Results: Most television items (72%) framed obesity as a problem of poor nutrition. Obesity was largely seen as the responsibility of individuals (66% of items). Just over half of news items (52%) focused only on adults while 26% focused only on children. Obesity was framed largely as a problem to be solved by individual nutritional changes, exercise and surgical and medical interventions.

Conclusions: While individual lifestyle is crucial to controlling weight, the research community now recognises the importance of sociocultural and environmental factors as drivers of the obesity epidemic. However, television news portrays obesity largely as an individual problem with individual solutions centred mostly on nutrition. Media emphasis on personal responsibility and diet may detract attention from the sociopolitical and structural changes needed to tackle overweight and obesity at a population level.

MJA 2007; 187: 442-445

We initiated this study to examine how television news and current affairs coverage is constructing the issues of overweight and obesity in Australia. We analysed television news because a single news program can reach up to 1.9 million viewers, it is an influential source of health information, and more Australians (88%) source their news from television than from newspapers (76%).^{8,19,20} The analysis was designed to identify the aspects of overweight and obesity that attract media attention, the population groups that receive the most attention, the causes and solutions discussed, the people identified as responsible for obesity, and the stakeholders whose voices are heard.

METHODS

The study sample was drawn from the University of Sydney School of Public Health's dataset of free-to-air television news and current affairs items about health.²⁰ Between 2 May and 31 October 2005, 115 items about overweight or obesity were identified. Audience-share data and random sampling

were used to generate a structured sample of 50 items. Because Australian television networks reach different proportions of viewers, we used audience-share data to structure the sample to represent the relative reach of each channel thus: Seven Network, 31%; Nine Network, 31%; Network Ten, 19%; ABC, 16%; and SBS, 3%.

A content and frame analysis coding sheet was designed and, after pilot testing and revision, used to code each item for: news angle (usually found in the headline and first sentences); length; type of program; age groups represented; academic sources cited; causal factors mentioned (nutrition, lack of physical activity, both or other); types of people mentioned as being responsible for obesity; and types of solutions offered (including: reduced energy intake, improved nutrition, physical activity, medical interventions, other). People shown or heard proposing a solution were categorised according to whether they were identified as an expert, a government official, a politician, an industry spokesperson, a person with a

weight problem, a parent of an affected person, an activist or lobby group spokesperson, a celebrity, a journalist, or “other”. Items were also coded for the dominant messages about what causes obesity and who is responsible. Drawing on framing theory and traditional journalist news values, the news angles were categorised thematically.

Coding was conducted by an independent researcher trained in the use of the instrument. Inter-rater comparisons for the qualitative questions were conducted on one month of the sample (nine items). Agreement was 89% for dominant cause coding, 100% for dominant responsibility coding. There was 100% agreement about which causes were mentioned and 89% agreement on who was portrayed as responsible.

RESULTS

The coded sample included 22 news items, 16 current affairs items, 11 “infotainment” style items, and one other. There were 18 items from the Seven Network, 18 items from the Nine Network, six from Network Ten, five from the ABC and three from SBS. Just over half the items were about adults only (52%), 26% were solely about children or adolescents, and 14% of items were concerned with adults as well as children or adolescents. Four per cent were about all age groups and 4% did not specify age.

The analysis to identify aspects of overweight and obesity that attract media attention found the most common category of news angle (20%) was new surgical or medical solutions such as lapband surgery for teenagers (Box 1). These stories conform to the traditional “modern medical miracles” story type. Reporting of unusual research findings, such as the potential to battle weight with wine or sleep, generated 14% of items, exemplifying the traditional news value of unexpectedness. One in 10 stories featured “human interest” profiles of successful weight losers and a similar proportion focused on the latest diet news. Four stories employed the “danger in the familiar” angle by revealing calories hidden in coffee. The enormity of the obesity epidemic provided strong news angles for four “bad news” items.

In our sample, the dominant discourse was that poor personal nutrition was the cause of overweight and obesity. Box 2 shows that nutrition was coded as the dominant explanation in 72% of items, with 8% giving equal attention to nutrition and phys-

1 Types of news angles in television coverage of obesity

Type of news angle	Example	No. of items
Modern medical miracles	Lapband surgery saves lives	10 (20%)
Surprise or quirky news	Wine may help weight loss	7 (14%)
Individual success stories	Workplace weight-loss winner	5 (10%)
Hunting the Holy Grail of weight loss — a diet that works	Government approves diet book	5 (10%)
Danger in the familiar	Coffee more fattening than a Big Mac	4 (8%)
Health scare	Obesity epidemic a danger to all	4 (8%)
David and Goliath battle	McDonald’s sues activists for libel	1 (2%)
Debunking myths	Ten weight-loss myths debunked	1 (2%)
The elixir of life	Eating less and moving more is the key to living longer	1 (2%)
Big bucks — obesity is big business	\$3 million spent on children’s survey	1 (2%)
Government in bed with business	United States Government acts to stop fast food industry being sued over obesity	1 (2%)
Celebrity	Sportsman calls for activity to stop childhood obesity	2 (4%)
Food fight — conflict	ABC debate on food issues	2 (4%)
Junk food television advertisements to blame	Health experts and parents attack junk food advertising	2 (4%)
Parents to blame	Parents of overweight children accused of neglect	1 (2%)
Pester power	Battle to get kids to eat healthily	1 (2%)
Don’t brand fat children	Labelling children as obese is cruel	1 (2%)
Obesity is genetic	Obesity runs in the family	1 (2%)

ical inactivity. Inactivity was the dominant explanation in 6% of items. Although 56% of all items mentioned both nutrition and inactivity, inactivity was usually mentioned only in passing and nutritional explanations dominated. Just 2% of items mentioned only inactivity as the cause of weight problems.

Nutritional causes commonly raised in our sample included: eating junk foods or take-away food; eating foods with high fat and sugar contents; advertising of foods with high fat and sugar contents; soft drink;

and eating too much. Other nutritional causes mentioned included: portion sizes; alcohol; school food; snacking while watching television; confusing nutritional labelling; and energy drinks. Physical inactivity issues raised included: watching too much television; playing computer games; not walking to school; homework; televisions in bedrooms; lack of parks; small backyards; and the effects of shiftwork and sleep.

2 Most important cause of overweight and obesity as presented in television items about overweight and obesity

Dominant cause presented	No. of items
Nutrition	36 (72%)
Inactivity	3 (6%)
Both	4 (8%)
Neither	7 (14%)
Total	50 (100%)

3 Those presented as most responsible for overweight and obesity in television items about overweight and obesity

Who is seen as most responsible	No. of items
Individuals	33 (66%)
Parents	6 (12%)
Industry	4 (8%)
Society	3 (6%)
Other	3 (6%)
Schools	1 (2%)
Total	50 (100%)

Two-thirds of items were dominated by the message that individuals are personally responsible for their weight. Box 3 shows that parents were the second largest group of people considered responsible. Industry (eg, food and advertising), society and schools were rarely considered the most responsible entities. Government was mentioned as one of the responsible entities in 11 out of 50 items, but never dominated.

Within the 50 television items, a total of 256 solutions to overweight and obesity were presented. The most common single solution (18.8% of total solutions) was a healthier diet. Two-thirds of dietary solutions made no mention of physical activity. Ten per cent of solutions advised following special diets. Just over 6% of solutions advised reducing the intake of soft or sweet drinks, alcohol and fatty coffee drinks. Eating less overall made up only 5.5% of solutions, almost 3% called on parents to be better diet role models, and 1.5% suggested reducing portion sizes.

The second largest overall category of solution was more exercise (15% of solutions), with half of those in that category coupled to advice about diet. Less than 2% of solutions focused on reducing sedentary behaviour (eg, watching television) and 1.5% called on parents to be active role models to their children.

Medical and surgical solutions made up 9.8% of the solutions proffered. These included a stomach “pacemaker” to tell the brain the stomach is full, lapband surgery, liposuction, and an anti-hunger spray.

Just under 6% of total solutions were calls for curbs on marketing of foods with high fat and sugar contents to children. Some referred to government resistance to regulating junk food advertisements. The other structural solutions included: education (4%); government action such as protecting obese children from parental neglect (2%); improving the quality of food available at school canteens and packed into lunchboxes (2%); criticism of urban design featuring small gardens and few parks (0.8%); calls for “society” or “the community” to take responsibility for the problems of overweight (0.8%); food labelling (0.8%); fitness testing (0.8%); and using public policy to create environments that promote healthy eating and physical activity (0.4%).

Almost one in three of the 165 people shown or heard voicing their opinions on solutions were people personally affected by weight problems (29%). The next largest group was that of experts like nutritionists,

surgeons, paediatricians, general practitioners, research scientists and obesity experts (27%). Journalists made up 23% of people who presented solutions. Other voices included: politicians (4%); government officials (3%); industry spokespeople (4%); activists or lobby-group spokespeople (4%); celebrities (2%); and parents (2%).

DISCUSSION

In this sample of television news and current affairs items, obesity was usually portrayed as a problem arising from personal behaviour to be solved largely by individual efforts to eat less and move more, with assistance for some from surgical or medical interventions. Obesity was constructed as a problem more of gluttony than sloth, with nutritional explanations dominant in 72% of items and sedentary behaviour dominant in just 6%. Food may be a naturally more newsworthy topic than physical inactivity because food risk stories draw on powerful public discourses of danger and contamination.¹² Although some items mentioned environmental and structural drivers of obesity, such as food advertising to children, the emphasis is firmly focused on individual lifestyle changes. The normal journalistic practice of selectively quoting sources may have contributed to the relative neglect of environmental factors if, as is possible, experts or others made comments about environmental drivers of obesity which were not broadcast.

The frame of individual responsibility dominated two-thirds of the television items we examined, consistent with studies of discourse on obesity in newspapers.¹⁰⁻¹² United States news media analyses found personal responsibility framing dominated most articles.^{10,11} An Australian analysis of newspaper articles concerned with food risks found that those that focused on obesity usually ascribed responsibility to individuals or, in the case of children, to parents.¹² Although government responsibility was mentioned in a fifth of the items in our sample, it dominated none of them.

The personal responsibility frame is reinforced by the solutions presented, with more than half found to involve individual restraint or exertion. This is consistent with US newspaper analyses which found that although many news articles evoked structural or environmental causes, most fell back on individual behavioural change when it came to solutions.^{11,16,21}

Surprisingly, controversial proposals to curb advertising of foods with high fat and

sugar contents to children — an approach championed by Australian health organisations, but so far rejected by the Australian Government and industry — were rarely mentioned.^{15,22} Reducing intake of calories in drinks and cutting back on sedentary pursuits were also neglected, making up less than 8% and 2% of solutions, respectively.

The news values which drive story selection in obesity may contribute to victim blaming. Individual weight-loss success stories may be good news, but they focus on individual actions, make weight loss look simple, and rarely mention the relapses which are all too common in real life. The subtext is: If they can do it, why can't you? Medical breakthrough stories emphasise the value of medicotechnological solutions rather than the preventive strategies that are also urgently needed to combat obesity. The finding that a focus on adults dominated our sample was unexpected as the major obesity summits held in Australia in 2002 and 2005 focused on children. The relative neglect of children, combined with the media's taste for medicotechnological solutions, may skew debate away from prevention towards curative solutions.

A limitation of our study was that news items covering obesity were collected only from television coverage. It is possible that radio, newspapers and magazines may have approached overweight and obesity with different emphases. However, we found similarities between television news framing of obesity and findings from past analyses of newspaper reportage.

Our findings exemplify how Australian television news and current affairs coverage of obesity reflects and reinforces the dominant community discourse of personal responsibility.^{10,12} Such framing of responsibility is underpinned by the rhetoric of choice — a powerful discourse that has been promoted by the tobacco lobby and is currently being used to blame obese people, or their parents, for their situation. Such victim blaming takes the spotlight off government and industry responsibility for reshaping the obesogenic environment to make healthy choices easier for individuals.²

Although the staging of several high-profile obesity summits in Australia would suggest obesity has become a highly politicised issue, the preferred news angles and the paucity of industry or government voices in our sample suggest that, in contrast with the US media, the media in Australia see the issue largely as one of health and human interest rather than politics.

The media's focus on nutrition may also deflect attention from lack of physical activity and structural issues such as economic pressures to work long hours in sedentary jobs, urban planning that fails to facilitate physical activity, poor public transport and inadequate provision of cycleways, lack of support for active work and leisure activities, and inadequate provision of parks and other recreational facilities.²³ The relative neglect of environmental and structural solutions suggests advocacy efforts may be needed to draw attention to how these factors, singly and cumulatively, constrain individual choices and contribute to the obesity epidemic.

Without substantial media pressure on industry or government, and despite international recognition of the importance of sociocultural and environmental influences on diet and activity, the burden of solving obesity continues to rest on the individual.²⁴

Media advocacy could usefully be deployed to reframe news discourse to highlight how overweight poses a health risk to all of "us" not just "them", how powerful environmental and sociocultural forces drive unhealthy choices and could be altered, how children are the innocent victims of the obesogenic environment, and how poor nutritional labelling deprives consumers of informed choice and helps powerful industries profit from excessive eating and drinking.^{10,25,26} Similar reframings have contributed to enhanced tobacco control and could contribute to preventing obesity.^{10,26}

While food, drink and sedentary habits are different from tobacco, by contributing to obesity, they also threaten society's physical and economic health and therefore justify a strong public health response.

ACKNOWLEDGEMENTS

We thank Ms Isla Tooth for coding the television items. This study was funded by the New South Wales Department of Health.

COMPETING INTERESTS

None identified.

AUTHOR DETAILS

Catriona MF Bonfiglioli, BA(Hons), PhD, Research Coordinator¹

Ben J Smith, BSW(Hons), MPH, PhD, Senior Lecturer²

Lesley A King, BScPsych(Hons), MPsych, Executive Officer¹

Simon F Chapman, BA(Hons), PhD, Professor and Director of Research³

Simon J Holding, BA, Senior Research Assistant³

¹ NSW Centre for Overweight and Obesity, University of Sydney, Sydney, NSW.

² Department of Health Science, Monash University, Melbourne, VIC.

³ School of Public Health, University of Sydney, Sydney, NSW.

Correspondence:

bonfigic@health.usyd.edu.au

REFERENCES

- 1 Australian Government Department of Health and Ageing. Healthy weight for adults and older Australians. A national action agenda to address overweight and obesity in adults and older Australians 2006–2010. Canberra: Department of Health and Ageing, 2006. [http://www.healthactive.gov.au/internet/healthyactive/publishing.nsf/Content/healthy_weight06_10.pdf/\\$File/healthy_weight06_10.pdf](http://www.healthactive.gov.au/internet/healthyactive/publishing.nsf/Content/healthy_weight06_10.pdf/$File/healthy_weight06_10.pdf) (accessed Sep 2007).
- 2 Swinburn B, Egger G, Raza F. Dissecting obesogenic environments: the development and application of a framework for identifying and prioritizing environmental interventions for obesity. *Prev Med* 1999; 29: 563–570.
- 3 The Henry J Kaiser Family Foundation. The role of media in childhood obesity. Menlo Park, Calif: The Henry J Kaiser Family Foundation, 2004. <http://www.kff.org/entmedia/upload/The-Role-Of-Media-in-Childhood-Obesity.pdf> (accessed Sep 2007).
- 4 Kelly B, Smith B, King L, et al. Television food advertising to children: the extent and nature of exposure. *Public Health Nutr* 2007 Mar 5; 1–7.
- 5 Marshall SJ, Biddle SJH, Gorely T, et al. Relationships between media use, body fatness and physical activity in children and youth: a meta-analysis. *Int J Obes Relat Metab Disord* 2004; 28: 1238–1246.
- 6 Johnson T. Shattuck lecture — medicine and the media. *N Engl J Med* 1998; 339: 87–92.
- 7 Menashe CL, Siegel M. The power of a frame: an analysis of newspaper coverage of tobacco issues — United States, 1985–1996. *J Health Commun* 1998; 3: 307–325.
- 8 Gamson WA. Talking politics. New York: Cambridge University Press, 1992.
- 9 Entman RM. Framing: toward clarification of a fractured paradigm. *J Commun* 1993; 43(4): 51–58.
- 10 Lawrence RG. Framing obesity: the evolution of news discourse on a public health issue. The Joan Shorenstein Center on the Press, Politics and Public Policy. Working paper series no. 2004–5. Cambridge, Mass: Harvard University, 2004. http://www.ksg.harvard.edu/shorenstein/research_publications/papers/working_papers/2004_5.pdf (accessed Sep 2007).
- 11 Saguy AC, Almeling R. Fat devils and moral panics: news reporting on obesity science. Sociology Departmental Colloquium Series; 2005. University of California, Berkeley, Calif:

2005. <http://www.soc.ucla.edu/faculty/saguy/saguyandalmeling.pdf> (accessed Sep 2007).

- 12 Lupton D. "A grim health future": food risks in the Sydney press. *Health Risk Soc* 2004; 6: 187–200.
- 13 Caburnay CA, Kreuter MW, Luke DA, et al. The news on health behavior: coverage of diet, activity, and tobacco in local newspapers. *Health Educ Behav* 2003; 30: 709–722.
- 14 McCann M, Haltom W. Framing the food fights: how mass media construct and constrict public interest litigation. Berkeley, Calif: The Centre for the Study of Law and Society, University of California, Berkeley, 2004.
- 15 Nathan SA, Develin E, Grove N, Zwi A. An Australian childhood obesity summit: the role of data and evidence in "public" policy making. *Aust New Zealand Health Policy* 2005; 2: 17.
- 16 Lawrence RG. American values and the news about children's health. *Issue (Berkeley Media Studies Group)* 2002; 12: 1–24. <http://www.bmsg.org/pdfs/Issue12.pdf> (accessed Sep 2007).
- 17 Dorfman L. Studying the news on public health: how content analysis supports media advocacy. *Am J Health Behav* 2003; 27: S217–S226.
- 18 Chapman S, Lupton D. The fight for public health: principles and practice of media advocacy. London: BMJ Publishing Group, 1994.
- 19 Flint D. How news is made in Australia. Canberra: Australian Broadcasting Authority, 2001. http://www.acma.gov.au/webwr/aba/news-pubs/speeches/documents/df_sonaca.pdf (accessed Sep 2007).
- 20 Chapman S, McLeod K, Wakefield M, Holding S. Impact of news of celebrity illness on breast cancer screening: Kylie Minogue's breast cancer diagnosis. *Med J Aust* 2005; 183: 247–250.
- 21 Woodruff K, Dorfman L. Newspaper coverage of childhood nutrition policies. *Issue (Berkeley Media Studies Group)* 2001; 10: 1–12. <http://www.bmsg.org/pdfs/Issue10.pdf> (accessed Sep 2007).
- 22 Abbott T. A plan to win the battle of the bulge. *Sydney Morning Herald* 2006; 10 May: 15.
- 23 Gebel K, King L, Bauman A, et al. Creating healthy environments: a review of links between the physical environment, physical activity and obesity. Sydney: NSW Department of Health and NSW Centre for Overweight and Obesity, 2005. http://www.coo.health.usyd.edu.au/pdf/2005_creating_healthy_environments.pdf (accessed Sep 2007).
- 24 World Health Organization. Global strategy on diet, physical activity and health. Geneva: WHO, 2004.
- 25 Dorfman L, Wilbur P, Lingas EO, et al. Accelerating policy on nutrition: lessons from tobacco, alcohol, firearms and traffic safety. Berkeley, Calif: Berkeley Media Studies Group, 2005. http://www.bmsg.org/pdfs/BMSG_AccelerationReport.pdf (accessed Sep 2007).
- 26 Nathanson CA. Social movements as catalysts for policy change: the case of smoking and guns. *J Health Polit Policy Law* 1999; 24: 421–488.

(Received 26 Apr 2007, accepted 25 Jul 2007)