

DRAFT ONLY

The 'war on obesity' needs you! Or does it?¹

Michael Gard

Charles Sturt University

Although I am not exactly sure who, I expect it was a very wise person who once said that things are never as bad or as good as they seem. I take heart from this because we live at a time when almost everything seems to be in or on the verge of a crisis. Take health. Although one of the best and most well funded in the world, to my knowledge people have been describing Australia's health system as 'in crisis' for at least 20 years. It is true that many people are not able to access the same level of medical treatment as readily as others because of their ethnicity, income, geographical location or some other factor and that this is a situation which needs to be remedied. But we might at least stop to wonder how something can be in a perpetual state of 'crisis' and whether it is accurate to describe it this way.

Another 'crisis' which has generated a great deal of popular and academic concern in recent years is the crisis of obesity, often called the 'obesity epidemic'. It is interesting to note that some Western scientists began announcing an obesity crisis over 50 years ago (Science News Letter 1952; Mayer 1953) and that since that time Western health has generally improved at the same time as obesity levels have steadily increased. Even so, talk of an obesity crisis continues to intensify. We are presently being warned – as I write, almost on a daily basis - of a looming obesity driven

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public health catastrophe and both the mass-media and scholarly journals have been full of cataclysmic predictions. Perhaps, like me, you have been confronted by newspaper articles making astonishing claims such as the one that predicts that today's generation of children will die before their parents on account of their obesity (Fox 2003, McCullagh 2003). Indeed, many people now talk of the pressing need for a 'war on obesity' (Friedman 2003, Young 2003) to go along with the many other wars – such as those on drugs, crime, terror and poverty – which we are regularly said to be fighting. Where does physical education fit in all of this? It appears that significant sections of the mass-media, the medical profession and other public health professionals think the answer to this question is simple. For example, there are those who claim that a de-emphasising of physical education in Western schools over recent decades has contributed to rising obesity levels and that physical education can and should play a significant role in the solution (Critser 2003). In my own work, both as a researcher and a teacher, it has also become clear to me that many teachers and student teachers see fighting the 'war on obesity' as physical education's most important duty. This seems to be equally true in both primary and secondary schools. Anecdotally, my own sense is that many schools have adopted a variety of 'anti-obesity' programs and that these range from the innovative to the radical, and from the drastic to the downright dangerous. Perhaps more than anything else, what has struck me is the passion with which some educators have taken up obesity as a cause. In fact, it is this passion which has probably lead to some of the more dubious school programs. After all, regardless of the actual seriousness of a situation, simply using the word 'crisis' implies that drastic action is required and, I would argue, has the

potential to cause people to act in ways that they might otherwise see as imprudent or even unethical.

In the remainder of this chapter I want to suggest that the significance of the 'obesity epidemic' for physical education, particularly in Australian primary schools, is not at all a straightforward matter. I want to offer a perspective which goes beyond the understandably sensationalist reporting of the mass media and which might at least prompt readers to think carefully about this complex issue. In simple terms, with all of this talk of obesity there lies the risk that children will be made to endure unnecessarily boring, unpleasant, ill-conceived, pointless and even unsafe physical and health education experiences in schools. For example, I am aware of proposals to introduce 'audits' of children's lunch boxes where teachers reward students for bringing 'healthy' food to school, regular weighing of students and 'remedial' physical activity for students who fail to meet body weight targets. How seriously should we take these ideas? As I suggested at the beginning of this chapter, it would probably be unwise to immediately assume the worst, that Australian schools are about to be transformed into 'boot camps' for thousands of unsuspecting children. At the same time, I have seen and heard enough to be concerned that the 'obesity epidemic' will shape the practices of at least some teachers and the school experiences of at least some students in negative ways. This will be unfortunate for many reasons, not least because (as I will argue below) these practices and experiences are unlikely to have any detectable affect on population obesity levels or health.

By the end of this chapter I will not have unveiled what I see as *the* right way to think about children and their body weight. Nor will I have given

definitive advice about which teaching practices are 'ok' and which are not. Instead, my hope is that I will have offered readers a range of different points of view so that they might go on thinking and even be inspired to find out more.

A looming catastrophe?

Readers could be forgiven for not being aware that the idea that we are in the middle of an obesity crisis has been disputed. The vast majority of mass-media reporting and most academic writing about obesity has tended to suggest that only one point of view exists; that far too many children and adults are obese and that dire health and economic consequences await unless something is done. One outcome of this situation which I encounter personally is that some of the students who enrol in my university's undergraduate teacher education programs are extremely reluctant to consider alternative arguments. In fact, it appears that, for many, the 'obesity epidemic' is a cherished idea, an idea which seems to confirm people's core ideas about themselves and the world.

However, alternative points of view *do* exist. For example, there now exists a body of research which questions the medical consequences of overweight and obesity (such as Adres 1999, Chambless *et al.* 2002, Gaesser 1998).

Some researchers point out that the existing studies which are sometimes described as 'proving' the case against heavier body weights actually show that body weight by itself has virtually no effect on people's medical health except in cases of extreme obesity (for a summary see Campos 2004). In other words, you need to be extremely overweight before body weight becomes a direct health hazard. There is also a quite mainstream body of

scientific evidence to suggest that people who are slightly *underweight* may be at greater health risk than people who are overweight or moderately obese (for example Gaesser 1998, Visscher *et al.* 2000), particularly for older people (Grabowski & Ellis 2001).

Some researchers also make the widely acknowledged (though rarely publicised) observation that there is almost no evidence of any kind to show that *losing* weight is good for your life expectancy (for example see Williamson *et al.* 1999). In fact, they argue that there is evidence that dieting in order to lose weight can have significant negative health effects particularly, as is often the case, if people develop a routine of continually losing and regaining weight over a period of years, a phenomenon sometimes called 'yo-yo dieting'. For example, yo-yo dieting appears to significantly increase the risk of heart disease (Hamm *et al.* 1989). This is an important point since the value of losing weight is often thought of as self-evident, and a significant percentage of Western people, particularly females, are trying to lose weight at any given moment (Germov & Williams 1996). It is certainly true that, of the small number of people who manage to lose substantial amounts of weight and keep it off (small, that is, compared to the much larger number who try to lose weight and fail), many of these say they feel healthier and better about themselves generally as a result of their weight loss. This should come as no surprise given that we live in societies which strongly stigmatise overweight and obese people and, perhaps more importantly, where thinness as opposed to fatness is often viewed as a sign of good health. I certainly cannot ever recall an overweight or obese person's image being used to advertise a 'health' product. All this is true despite growing evidence that it is perfectly possible to be overweight and

healthy and that being too thin may be worse than being fat (Brodney *et al.* 2000).

I am careful to use the term 'growing evidence' rather than 'proof' here. After all, as some readers will correctly point out, just because a group of scientists arrive at a certain conclusion, this does not prove that their conclusion is true. Scientists get it wrong sometimes. The point that I want to stress, however, is that there is a great deal of uncertainty in the scientific literature which deals with the connections between body weight and health and that a variety of different opinions exist. One of the reasons for these differences in opinion is that scientific research simply has not produced definitive answers. This is an important point to keep in mind every time we read a newspaper or magazine or see a television program which confidently describes overweight or obesity as unhealthy or even as 'diseases'.

My own opinion is that overweight and obesity have been greatly exaggerated as public health problems. However, I do not expect that all readers will share this view, so let us for the moment explore another aspect of 'obesity epidemic' talk.

A generation of couch potatoes?

In the lead up to the 2004 federal election, the Australia political scene was momentarily enlivened by both major parties attempting to outdo each other's concern about obese children. While the two sides proposed to address the problem in different ways, all seemed to be in agreement that today's children were in the grip of an 'epidemic of inactivity'. Everyone from the country's head-of-state and government ministers to doctors and ex-

sport stars appeared to be convinced that young Australians, *en masse*, had given up physical activity and become house-bound captives to technology. In a speech to Diabetes Australia Association the Governor-General, Major-General Michael Jeffrey, was reported blaming 'DVDs and Playstations' for Australian children's 'fat lifestyle' (Wood & Walsh 2004). The federal minister for Children and Youth Affairs Larry Anthony, went further, suggesting that 'The greatest offender among the contributing factors to childhood obesity is the amount of time children spend in front of the television or computer' (Vermeer 2004, p 5). Meanwhile, the former Olympic marathon runner Robert DeCastella has repeatedly described the physical activity habits and obesity levels of Australian children as a 'disgrace' (De Castella 2004, p 5), and the chief executive of the Australian Sports Commission has been quoted widely describing today's children as a couch potato generation (Conway 2003).

Amidst all this talk of 'couch potatoes' there is the unmistakable refrain of adults lamenting how the children of today are less physically active than in 'their day'. Take the following from an article published in *The Sun-Herald*:

Children are also less active, said Martha Lourey Bird, a Weight Watchers spokeswoman and academic with a background in childhood obesity. "Christmas day is a classic example," she said. "Before we would be outdoors, playing with our new toys all afternoon. Now, kids are more likely to be indoors, playing on the computer."

(Teutsch 2002, pp 10-11)

Writing for *The Age*, Margaret Cook (2002, p 4) sums up what seems to be a widespread belief: 'The reasons for the obesity epidemic are well known.

Children and teenagers are spending more time in front of televisions and computers and less time playing outside’.

I find these claims troubling for at least two reasons. First, they have the effect of generalizing about an entire generation and suggesting that they are in some ways inferior to previous generations. In fact, some members of the medical profession have gone as far as calling today's children ‘Generation O’ (McCullagh 2003), ‘O’ being for obesity, and it is short distance from claiming that children are less active than in the past to implying that children have become lazy. The image of a fat, lazy and physically feeble generation of Australian children is captured in the following passage from *The Weekend Australian*:

Driven to school, picked up from school, kept off the dangerous streets and away from the dangerous parks, they are the cotton-wool generation and, often the only physical exercise they get is when their parents have time to supervise. A child these days doesn't break an arm falling off his billycart, he develops a bad case of Nintendo thumb – a recognised medical problem. The average Australian child aged 5-13 spends between two and three hours a day watching television, lying supine, soaking up advertisements for high-fat junk food. These are the real telly tubbies. If we follow in American footsteps, as we so often do, TV viewing will increase, to slowly soak up almost all the leisure hours of children.

(Powell 2000, p 6)

There is more than a hint of disgust in these words; a sense that today's children are not only fat, lazy and weak, but also stupid as they passively ‘soak up’ whatever television serves up. I have a great deal of trouble

matching this image with the children I know, most of whom are busy, active, lively young people.

The second aspect of this vision which worries me is the way the idea of a generation of physically inactive children is repeated by journalists, medical researchers, health professionals and other academics as if this were a proven fact, beyond dispute. In scientific journals this idea is usually presented in one of two ways. First, and in the majority of cases, the writer or writers simply make the claim as if it were obvious and needed no evidence at all. The second (and much less common) approach is to acknowledge that no evidence exists to support the idea of declining physical activity but to suggest that such a decline is nonetheless 'obvious'. For example, in the journal *Science and Medicine in Sports and Exercise* Hill and Melanson write:

Although it is intuitively obvious that improvements in technology over the past few decades have substantially reduced the energy expenditure required for daily living, this has not been definitively documented. ... The amount of energy expenditure required for daily living also appears to be declining due to an increase in attractive sedentary activities such as television watching, video games, and computer interactions. Again, we do not have good measures of sedentary activity that would allow us to examine changes over time... This is not limited to adults, as it is also likely that significant declines have occurred in the amount of physical activity that children receive in schools. It is not possible to quantify the extent of this decline over the past two to three decades, but the requirement for physical

education has declined in most schools as has the number of school children participating in physical education classes.

(Hill and Melanson 1999, p
S517)

Livingstone *et al.* (2003) writing in the *Proceedings of the Nutrition Society* put the point slightly differently:

Evidence suggests a high prevalence of inactivity in adults, but whether or not inactivity is increasing cannot be assessed currently. Similarly, no definite conclusions are justified about either the levels of physical activity of children, or whether these are sufficient to maintain and promote health. Data to support the belief that activity levels in childhood track into adulthood are weak. Inactivity is associated with an increased risk of weight gain and obesity, but causality remains to be established.

(Livingstone *et al.* 2003, p 681)

I will not devote any more space here to examples from the scientific research literature in which the idea of a general decline in physical activity is simply assumed. However, many examples exist, an interesting situation to say the least given the amount of time I spend reminding my first year undergraduate students to provide evidence for the statements *they* make. However, the failure of those who say that physical activity levels are declining to provide any evidence for this claim is only part of the story. As it happens, there *does* exist some evidence from which conclusions might be drawn and yet this evidence is rarely acknowledged, probably because it does not support the general assumption of declining physical activity levels. This evidence is not conclusive or comprehensive; for a range of reasons,

measuring the amount of physical activity that large populations of people do at any given moment in time has proved an extremely difficult task for researchers, and deciphering whether these levels are changing over time is more difficult still. But it is highly suspicious, in my view, that existing evidence is almost never acknowledged let alone seriously considered.

It is important to remember that declining physical activity is often said to be a world-wide phenomenon - Rippe and Hess (1998) say we are living through an 'epidemic of inactivity'- and that this has contributed significantly to an 'explosion' in obesity levels in the last 25 to 30 years. In 1999 Pratt *et al.* (1999) published a review of existing research surveys of physical activity levels in the United States. They wrote:

It is widely believed that participation in physical activity is declining among adults in the United States. However, national survey data are not able to support this contention. Levels of physical activity and inactivity as measured by the BRFSS and NIS have been remarkably stable during the past decade. Data sources consistent enough to adequately assess trends before 1985 do not exist. A synthesis of noncomparable surveys suggests that leisure-time physical activity probably increased between the 1960s and 1980s.

(Pratt *et al.* 1999, p S530)

As well as noting that a number of American surveys suggest rising levels of physical activity amongst girls and women, they also point out that:

The public perception of an increasingly sedentary way of life among children is even more widespread than for adults. However, there is even less good information available on national trends in youth physical activity or fitness than for adults. No fitness data exist since the

completion of NCYFS II in 1986. The YRBS physical activity questions have been standardized only since 1993 and provide information only on young people attending school in grades 9-12. There has been no significant change in reported vigorous physical activity between 1993 and 1997: 1993, 65.8%; 1995, 63.7%; and 1997, 63.8%.

(Pratt *et al.* 1999, p
S531)

French *et al.* (2001), also writing in the United States context, argue that:

Overall, government-sponsored, population-based survey data suggest little, if any, change in physical activity levels during the past few decades, although the most recent data are 6 years old. There seems to have been a small decrease in the percentage of the population who report being completely inactive, a small decrease in the percentage reporting regular physical activity, and a small increase in the percentage reporting regular vigorous physical activity. Data from other population-based surveys and trend data on sports and recreational participation between 1961 and 1985 suggest a more dramatic increase in leisure-time physical activity.

(French *et al.* 2001, p 319)

With respect to physical activity levels in Britain, Morris (1995) has come to similar conclusions. In the *British Medical Journal* he claims that 'present evidence suggests that increasing sloth is not an important factor in the current steep increase in obesity' (Morris 1995, p 1569). In this article Morris claims that television viewing had been falling in Britain up to that point, that walking was increasing amongst some sections of the population, and that levels of sports participation were going up in all age and social

groups. A few years earlier Davies (1992) found that existing data suggested high levels of physical activity amongst children but mixed data for adolescents. Davies also wrote:

However, the limited published data on total energy expenditure and resting or basal metabolic rate during later childhood and adolescence would not support the contention that activity levels are low in this age group. Davies *et al.* (1991) have reported high levels of activity in adolescents.

(Davies 1992, p 51)

And later:

There are some data both from the UK and Holland to suggest that there may be a resurgence in physical activity amongst children, adolescents and young adults. Equally, the secular trend towards inactivity may not have affected those age groups as much as has been previously assumed.

(Davies 1992, p 54)

Although in some cases now somewhat dated, the research findings of these writers are important because they suggest that the assumption of steadily declining physical activity levels in Western countries during the 20th century, and particularly over the last few decades, may simply be an assumption rather than a proven fact. It may even be wrong.

Even less data exist concerning the physical activity of Australian populations. However, Bauman and Owen's (1999) review of existing literature suggests very little changes and, if anything, small increases in the amount of physical activity that Australians do. It is also noticeable that researchers who study children's physical activity levels often seem

surprised when their studies find that Australian children are, in fact, quite active (for example see Rehor and Cottam 2000).

To my knowledge, most attempts to quantify the amount of physical activity people do in Western countries have found either no change or small increases in recent decades, and this is equally true for adults as it is for children. We often hear people claim that modern Western living causes children to do much less physical activity than children living more 'traditional' ways of life. Although this is a belief which has rarely been tested by researchers, Lawrence *et al.* (1991) compared urban British infants with African infants from Gambia. They found that the urban British infants played for between two and three times longer than the Gambian children and participated in between two and four times as much 'vigorous' physical activity, depending on how physical activity was measured. The researchers suggested that cultural differences and the availability of toys may explain why the British infants were so much more active.

There is not nearly enough evidence to be sure whether Western children or Western people in general are now less physically active than they were in the past. But there is at least some evidence to suggest the opposite point of view and I can see no reason why this evidence does not deserve to be taken into consideration when people talk about this issue.

It is also interesting to look at the research into children's physical activity and television and computer usage. As we have seen, there are many people who are ready to blame televisions and computers for childhood obesity and many researchers have tried to see whether there is a connection between the amount of physical activity children do and the time they spend using televisions and computers. As it turns out, however, the image of the child

'couch potato' is actually a little more difficult to find in real life. A number of researchers have attempted to summarise the existing studies and found that children's physical activity is not affected very much, if at all, by the amount of television they watch. For example, Grund *et al.*'s review of this literature (2001, p 1246) found that studies have yielded inconsistent and contradictory results and that 'We concluded that the association between TV watching and overweight is unclear in children'. Marshall *et al.* (2002) go further:

The mechanisms by which sedentary behaviours contribute to negative health outcomes, particularly overweight and obesity, are not well understood. One hypothesis is that involvement in sedentary behaviour limits the time available for participation in health-enhancing physical activity. Most data do not support this hypothesis and cross sectional and prospective data between TV viewing and adiposity show inconsistent and weak associations. Sedentary behaviour appears able to coexist with physical activity, with each having a unique set of determinants.

(Marshall *et al.* 2002:

402)

In straightforward terms Marshall *et al.* (2002) found that physical activity and so-called 'sedentary behaviours' such as television watching and computer games do not seem to have much to do with each other: more of one does not mean less of the other and, in fact, in a number of studies the children who watched the most television reported doing the most physical activity. Biddle *et al.*'s (2004) review of the childhood obesity literature found that:

... although more children and youth have greater access to TVs than in previous generations, the amount of TV watched per head has not changed for 40 years. Preliminary findings from Project STILL suggest that inactivity is more complex than we sometimes think. Indeed, measures of 'couch potato-ism', such as TV viewing, may be inappropriate markers of inactivity.

(Biddle *et al.* 2004, p 29)

In other words, the conclusion here is that if we want to know why some children are inactive, knowing how much television they watch is *not* an important piece of information.

What does all of this mean? There is a widespread belief that children *in general* are becoming less and less active and that televisions and computers are to blame. As usual, this is yet another of society's problems which has been given to schools to solve.

But is it a *real* problem? Although not everyone will agree, I have arrived at the conclusion that there is no general problem with the amount of physical activity that children do. There may be some children who, for different reasons, are not very active, but I can see no reason to believe this is a widespread 'crisis', let alone a crisis that is getting worse, which schools should address. By falling for the mistaken idea that *all children* are increasingly inactive we will almost certainly fail to think about which *particular* children are inactive, why and whether this is actually a problem for them. For example, most urban middle class Australian children already have ample opportunities to participate in a huge variety of active pursuits and it is difficult to see how an extra hour or two of physical activity in schools each week will make a difference to their lives, weight or health. If

schools really are to be drafted in to the 'war on obesity' I would want to be sure that we have correctly identified what the actual problem is and whether the proposed solutions are likely to have any effect. However, at present it is not at all clear that Australian children spend too much time watching television and avoiding physical activity .

In all of this talk of childhood obesity, there has been too much wild generalising about a 'cotton-wool' generation of 'lazy' children and not enough careful thinking about the complex and varied lives children lead. There are already more than enough people ready to demonise today's children as 'couch potatoes' without any evidence to substantiate their opinions. As teachers, I am inclined to argue that we have a special duty to be careful in what we think and say about children and that little will be gained by adding our voices to the chorus of insults directed at children. We should be well informed, sceptical of generalisations and open to a variety of perspectives. But at the same time, I believe we should at least be suspicious when interest groups outside the teaching profession assume the right to tell us how we should teach and what our roles as teachers should be.

Physical education for hire

Over the next few years it is probable that a range of anti-childhood obesity programs and initiatives will be tried in Australian schools. It will be important for school teachers to assess the value of these programs for children thoughtfully. For example, it is quite possible that commercial organisations selling physical activity programs to primary schools will proliferate and more and more busy teachers and principals will be given the

opportunity to relinquish the responsibility of providing school-time physical activity. These organisations will no doubt quote statistics about childhood obesity and make liberal use of the term 'couch potato' in their promotional literature. Whether or not you see this as a positive development probably depends on your point of view.

For example, there will be those who will point out that a great deal of time and effort has gone into trying to move physical education beyond callisthenics and the bad old days of 'huff and puff' towards a form of physical education which acknowledges that we have living, thinking, feeling human beings in our classes. People who subscribe to this point of view will also point out that we currently have physical and health education syllabuses around Australia which focus on skill development, personal achievement, enjoyment and a multi-dimensional view of health and well being. They would remind those who enthusiastically sign up to the 'war on obesity' that many young people generally do not like repetitive, overly strenuous and excessively competitive physical activity. If children get a whiff that they are being made to do physical activity because it is 'good for them' or because they are being punished for being part of a 'couch potato' generation, it may not seem quite as much fun as it would otherwise have been.

Above all, the potential problem of a 'war on obesity' in Australian primary schools is that children's physical education will begin to look more and more like the physical activity that weight-obsessed adults do, such as aerobics classes, circuits and laps around the oval. Aerobics classes for primary school children might look like a reasonable idea to someone determined to make children lose weight. To others, with different hopes about the

educational value of physical education, it may look like a very bad idea. I suppose it depends on your point of view.

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