Prevalence of overweight and obesity in children aged 7–11 years for 1985, 1995 and 2000

Sex	Year	Number	Overweight (%)	Obese (%)	Overweight + obese (%)
Boys	1985[1]	2425	9.7	1.5	11.2
	1995[1]	457	11.6	3.7	15.3
	2000	141	16.3	9.9	26.2
Girls	1985[1]	2443	11.0	1.9	12.9
	1995[1]	430	17.2	6.3	23.5
	2000	127	21.3	7.1	28.4

in November 2000 as part of a community study. This study was approved by the Central Coast Health Ethics Committee.

All children in each class were asked to take part. With parental consent, weight and height were measured in children from all class groups (aged 7–11 years) by child health nurses using standardised procedures. Children were classified as overweight or obese using the standard international cutoffs for body mass index.[3] They were compared with data obtained during the 1985 Australian Health and Fitness Survey (AHFS85) and the National Nutrition Survey of 1995 (NNS95).[1]

A total of 268 children (127 girls, 141 boys) were surveyed (average of 25 girls and 28 boys of each age). This represented a 70% response rate. The Table shows that the incidence of overweight and obesity in Australian children has continued to increase, with relative risks for the increase between 1985 and 1995 of 1.37 (95% CI, 1.07–1.75) for boys and 1.82 (95% CI, 1.49–2.22) for girls, and relative risks for the increase between 1995 and 2000 of 1.71 (95% CI, 1.21–1.43) for boys and 1.21 (95% CI, 0.87–1.67) for girls. Our findings indicate a marked increase in proportions for boys in only five years since NNS95. While the increase for girls was not statistically significant, the pattern is consistent.

Thus, the incidence of overweight and obesity in Australian children is steadily increasing. Importantly, according to the 1996 Census Socio-Economic Indexes for Areas,[4] the school we surveyed is situated in an area ranked in the middle quintile for relative socioeconomic disadvantage (state and national average), and is immediately adjacent to one 4th- and several 1st-quintile and 2nd-quintile areas. We believe our findings are representative of the Australian population of children.

The challenge to healthcare workers is significant. The National Health and Medical Research Council's *Acting on Australia's weight*[5] identifies goals for preventing further weight gain in adults, and eventually reducing the proportion of the adult population that is overweight or obese, and to ensure the healthy growth of children. Recommended strategies range from national dietary and physical activity guidelines to increasing physical activity through the design of towns, transport systems and public recreational facilities. Effective strategies are urgently needed to alter food intake and physical activity at individual, school, community and population levels.

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"Order effect" in the provision of medication information

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To the Editor: One concern that medical practitioners and pharmacists have about patient counselling is the uncertainty about the amount of information which should be given to patients, especially regarding possible adverse reactions to medications.[1] Studies have found that providing information on possible adverse reactions can affect patients' willingness to take the medication.[1]

Research in cognitive psychology provides clear evidence that the order in which information is presented has a significant influence on judgement. Information received first is likely to have a disproportionately large effect on judgement, the "primacy effect".[2-4] Despite clear evidence supporting the "order effect" in diverse areas, research has not been undertaken to investigate whether the order effect is present in medication information.

Two descriptions of a fictitious medicine for treatment of diabetes

A: Diabetic Medication

This medication is effective; it lowers sugar levels. It makes one feel better and boosts energy. It may cause nausea and headache.

B: Diabetic Medication

This medication may cause headache and nausea. It boosts energy and makes one feel better. It is effective; it lowers sugar levels.

To test the hypothesis that differently ordered sequences of the same information about a drug can result in different judgements,[5] 804 subjects were presented with a short description of a fictitious medication. The descriptions were presented in one of two formats (Box): (A) positive–negative (therapeutic benefits followed by potential adverse reactions) or (B) negative–positive order (potential adverse reactions followed by therapeutic benefits). The surveys were randomly distributed to university students, mindful of the limitation of extrapolating the data to the general population. Subjects rated the medication (from very bad to very good) and the likelihood of taking the medication (from very unlikely to very likely) on seven-point Likert scales. For analysis, we used the independent sample *t* test, which is robust and therefore considered suitable for this analysis.

Of the 804 completed questionnaires, 403 were in the positive–negative order and 401 were in the negative–positive order. Participants given the positive–negative description of the medication rated it more positively (mean, 4.43; SD, 1.02) than those given the negative–positive description (mean, 3.70; SD, 1.62) ($P<0.001$). Similarly, participants reported a higher likelihood of taking the medication when information was presented in the positive–negative order (mean, 4.23; SD, 1.62) compared with the negative–positive order (mean, 3.54; SD, 1.66) ($P<0.001$).

We found that the order of presentation of medication information significantly affected judgement of the medication. Subjects rated the medication more favourably when positive information was presented first. These results suggest a potential benefit in presenting medication benefits before discussion of possible adverse effects. Such an approach might apply to medical practitioners and other healthcare professionals when counselling patients. It might also be a consideration in the format of written information, such as Consumer Medicine Information.

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Spinal cord injuries in horse riding

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To the Editor: The conclusion of Holland et al that horse-related injuries in children account for a considerable number of deaths and injury is unarguable.[1] In New Zealand, hospitalisation rates for falls from horses and rugby injuries are comparable.[2] Despite these disconcerting facts, the data on horse-riding injuries need to be put in a balanced perspective. The frequency of injuries in adult equestrian activity, Pony Club riding, occupational riding (including professional jockeys) and riding for leisure are quite different. Collective raw data are misleading.

The freak accident of actor Christopher Reeve in 1995, with the resulting much-publicised quadriplegia, brought public attention worldwide to the question of acute spinal cord injury (ASCI) in horse riding and led to widespread parental concern about "spine safety" in this sport. Spinecare Foundation was subsequently involved in a review of 32 patients with ASCIs from horse riding admitted to the spinal cord injury units at Royal North Shore and Prince Henry hospitals, Sydney, for the years 1976 to 1996.[3] Occupational and leisure riding accounted for 88% of injuries. ASCIs occurred in only two riders under the aegis of the Equestrian Federation of Australia — one while competing and the other while training. There were no injuries in children younger than 14 years of age in any form of riding. Most importantly, in the study period, there had been no ASCIs in Pony Club riders, of which there were 22 000 in New South Wales in 1996. Neither had there been an ASCI in those who participated in Riding for the Disabled.

In the context of these comments, it is relevant to briefly revisit the contentious topic of Down syndrome children taking part in Riding for the Disabled and in sport generally. Since 1970 (from when accurate records are available), no child with Down syndrome in NSW has had an ASCI in any sport, let alone in a well-defined non-sporting accident. There is simply no case for the radiological screening of the cervical spine for atlanto-axial instability in asymptomatic children with Down syndrome before they undertake Riding for the Disabled. The indications for this examination have been set down.[4]

We hold that the public and the medical profession can continue to be reassured by this information. Certainly, a child wearing a lap seat belt or other poorly fitting restraint in the rear passenger compartment of a car is at infinitely greater risk for spinal cord injury than when astride a horse at Pony Club. Further, as Holland et al have documented,[1] if he or she is wearing a protective helmet the chances of head injury would be reduced significantly.

Safety in all potentially dangerous sports should be foremost in the minds of those who administer, supervise and participate in such games. As yet there are no hard data to support the wearing of body protectors to reduce the risk of ASCI, or other vertebral injuries, in horse riding.

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In reply: One of the reasons for publishing our data was to raise the level of awareness of both the frequency and severity of horse-related trauma in Australian children.[1] This trauma appeared to be associated with a low level of compliance with basic safety measures, in particular the use of a Standards-approved riding helmet.[1,2]

We stated clearly in our article that the risk of injury needed to be viewed in the