

Benefits Schedule quantities and repeats are inserted.

There are various reasons why doctors may be using the “regular” option rather than the “once only” option when prescribing antibiotics using MD. Some of these have been discussed on the General Practice Computing Group Listserv,¹ and include factors such as confusion regarding the terms “regular” and “once only” and difficulties recalling patient medication histories if the “once only” option is used. Another explanation is that doctors commonly prescribe chronic medications, and therefore use of the “regular” option may become a habit. Whatever the cause, there is no obvious explanation for the differences observed, except for the use of prescribing software. Our recommendation that prescribing software be altered to avoid these shortcuts was made because it represents the most immediate way of resolving the problem.

1. General Practice Computing Group Listserv. Available at: <http://www.gpcg.org/listservs/index.html> (accessed Mar 2003). □

Differences in overweight and obesity among Australian schoolchildren of low and middle/high socioeconomic status

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TO THE EDITOR: As part of a large, national nutrition study, height and weight were measured among 4441 students from 38 schools randomly selected from lists of all state and territory schools in Australia in 2000. Public, private and Catholic schools, in both rural and urban areas, were represented.

Schools were categorised as being of low or middle/high socioeconomic status (SES),¹ based on direct measurement of parental income. Parental consent was obtained, and the study was approved by the University of Sydney Ethics Committee and all state departments of education.

Overweight and obesity, as defined by an international standard definition,² were identified in 17.3% and 6.4% of

School students classified as overweight or obese* according to socioeconomic status (SES), school level and sex

	Males (n=2232)		Females (n=2209)	
	Low SES (n=574)	Middle/high SES (n=1658)	Low SES (n=508)	Middle/high SES (n=1701)
<i>Primary school students (grades 1–6; ages 6–13 years)</i>				
Overweight students	19.4% (42/216)	16.2% (110/680)	23.2% (51/220)	17.8% (136/766)
Obese students	6.9% (15/216)	5.3% (36/680)	6.4% (14/220)	5.7% (44/766)
<i>High school students (grades 7–12; ages 13–18 years)</i>				
Overweight students	17.6% (63/358)	16.4% (160/978)	17.0% (49/288)	16.8% (157/935)
Obese students	10.1% (36/358)	5.6% (55/978)	7.3% (21/288)	6.5% (61/935)

* Overweight and obesity are classified according to the international standard definition.²

participants, respectively. These characteristics showed a trend towards greater prevalence among students from low-SES backgrounds compared with those from middle/high-SES backgrounds for the total group (19% v 16.8% overweight [$P=0.09$]; 8.9% v 5.8% obese [$P=0.02$]), females (19.7% v 17.2% overweight [$P=0.2$]; 6.9% v 6.2% obese [$P=0.56$]), and males (18.5% v 16.3% overweight [$P=0.23$]; 9% v 5.5% obese [$P=0.003$]), although not all differences were statistically significant.

After controlling for SES differences in age and height, mean body mass index (BMI) was significantly higher among low-SES than middle/high-SES participants for the total group (20.3 kg/m² [95% CI, 20.1–20.5 kg/m²] v 19.7 kg/m² [95% CI, 19.6–19.9 kg/m²]; $P<0.001$), females (20.4 kg/m² [95% CI, 20.1–20.7 kg/m²] v 19.8 kg/m² [95% CI, 19.6–19.9 kg/m²]; $P<0.001$), and males (20.2 kg/m² [95% CI, 20.0–20.5 kg/m²] v 19.6 kg/m² [95% CI, 19.5–19.8 kg/m²]; $P<0.001$). A breakdown of results by SES, sex and school level is shown in the Box.

Low-SES primary school children were also 1–2 cm shorter, on average, than middle/high-SES primary school children (boys: mean 141.5 cm [95% CI, 140.6–142.5 cm] v 143.5 cm [95% CI, 143.0–144.0], $P<0.001$; girls: mean 141.0 cm [95% CI, 140.8–142.6 cm] v 143.3 cm [95% CI, 142.5–143.6 cm], $P=0.01$).

The average proportions of overweight and obese children and adolescents in the study were similar to those found in other Australian studies.^{3–5}

The results suggest that SES is a factor in the development of overweight

and obesity among Australian school children. This may be a relatively recent trend, as these data were obtained in late 2000. Low SES in children may also be associated with nutritional deprivation and height retardation. Further research should clarify these relationships among children from low, middle and high SES backgrounds, as well as examining the combined impact of both SES and ethnicity.

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Salmonella outbreak associated with chicks and ducklings at childcare centres

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TO THE EDITOR: Travelling animal shows, with animals such as young poultry, rabbits and reptiles, commonly visit childcare centres in Australia. Transmission of *Salmonella* infection to children from ducklings and chickens is well doc-

umented in the United States^{1,2} and United Kingdom,³ but not in Australia.

We investigated a cluster of *Salmonella agona* cases in children, identified through routine laboratory surveillance. Initial investigations identified a potential association with visits to childcare centres by a single local hatchery.

At each show, children saw an egg hatching, watched day-old ducklings swim and had the opportunity to hold a day-old chick or duckling, and to touch an adult chicken.

Details of gastrointestinal illness were sought from childcare centres that had hosted visits from the hatchery. This identified laboratory-confirmed cases with onsets between 14 April and 6 May 2002 in seven people. All attended one of four childcare centres; six were children and one was a staff member. Onset of illness occurred 2–12 days after the hatchery visit. A total of 316 children attended shows by the hatchery between 9 April and 8 May.

Environmental sampling at the hatchery recovered *Salmonella agona* from multiple sites over repeated visits. These included the egg incubator, faeces from day-old hatchlings returning from a show with children, faeces from young chicks and ducklings in the brooder cage, duck faeces from their yard, corn meal used in the preparation of feed for all poultry, and rat droppings in the feed preparation and storage areas. No *Salmonella* were detected in samples collected from the corn meal supplier.

New procedures based on guidelines from South Australia⁴ and the Centers for Disease Control and Prevention⁵ were introduced for all shows from 8 May. These included supervised handwashing after handling animals, avoiding carpeted areas for the show, adequate cleaning of macroscopic faecal contamination and disposal of the water used by swimming ducklings into the sewerage system.

No further cases were identified among the 251 children who attended shows over the subsequent two weeks until the hatchery cancelled all further visits.

We conclude that infection was acquired through contact with chicks and ducklings from a single hatchery, and that the outbreak was halted by the introduction of measures emphasising handwashing after animal contact.

Contact between young children and young animals, both of whom have naïve immune systems, represents a special ecological niche. Young poultry are particularly vulnerable to salmonella infection and subsequent high level excretion, and young children are similarly vulnerable.

As animal visits to childcare centres are highly valued by children and carers, appropriate guidelines should be widely promoted to the childcare sector and the petting zoo industry to reduce the risks these visits pose. The petting zoo guidelines developed in South Australia⁴ are an excellent resource and NSW Health is currently developing a fact sheet on the topic.

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