

routinely used at our hospital. As digests were undertaken in open beakers it is also possible that these data underestimate levels due to volatile element loss during processing. We have not yet analysed materials associated with serum sampling and storage, or tissue samples exposed to contaminated formalin.

These results show that commercial formalin used routinely to fix necropsy materials may be contaminated with antimony. It is possible that such contamination may result in poor correlation between necropsy liver and blood concentrations of antimony. As the long-term effects of tissue storage in metal-contaminated formalin is unknown, it may be prudent for studies analysing necropsy tissues to check for possible contamination of archival material and to ensure that prospectively collected tissues are not exposed to corroded scalpel blades or to contaminated preservative fluid. If significant contamination of necropsy tissues from formalin has occurred, data may not accurately reflect true antemortem trace metal tissue levels, and accurate comparison of levels between SIDS infants and controls in such tissues may not be possible.

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Foodborne transmission of cyclospora

SIR—Transmission of the intestinal pathogen *Cyclospora* has been linked to water;¹⁻³ foodborne transmission has been suspected, but not proven.¹ This report suggests that *Cyclospora* infection was acquired from food. A 45-year-old airline pilot presented on Sept 13, 1995, with a two-and-a-half-week history of diarrhoea. His symptoms began on Aug 25 with sudden onset of severe nausea, weakness, fever, myalgias, and watery diarrhoea up to 10–15 times per day. He was prescribed a 5-day course of ciprofloxacin; after which he could eat without nausea, but continued to have intermittent diarrhoea.

On Sept 11, while eating a rich meal, he developed bloating and distension which progressed to diarrhoea, cramping, and abdominal pain, and was referred to a gastroenterologist. The pilot's route was to fly turnaround from New York to Port-au-Prince, Haiti, three times per week. Normally, he would take a sandwich with him for lunch, and wait until his return to New York before eating dinner. However, his chronic symptoms of acid reflux had worsened over the summer, and were exacerbated by late dinner. Beginning in August, 1995, he would eat food on board the airplane that had been prepared in a kitchen in Port-au-Prince. The airline meal consisted of baked or broiled chicken with chutney sauce, rice, vegetables, and a salad with dressing, or roast beef with a brown sauce. He would take a soft drink with his meal, but he never drank water or used ice. A fresh stool specimen showed few large oocysts of *Cyclospora*. The patient was treated with trimethoprim-sulfamethoxazole twice daily for 7 days. He reported striking improvement in his symptoms, and had remained well. His wife and daughter also remain well; stool samples from them evaluated at the Centers for Disease Control and Prevention, were negative for *Cyclospora*.

Cyclospora is endemic in Haiti.⁴ Cases acquired in New York are extremely rare. The most likely source of infection were the meals prepared for the crew and passengers in Haiti. His symptoms and untreated course of infection were

consistent with other descriptions of the illness. This case underscores the need to be aware of acquiring endemic disease from abroad even when the country is not actually visited. Airplane stopovers, and the source of onboard meals, should be taken into account when investigating enteric illness related to travel.

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Vitamin A status and dark green leafy vegetables

SIR—de Pee and her colleagues (July 8, p 75) report no improvement in serum retinol in lactating women receiving vegetable supplements, by contrast with those given wafers containing equivalent amounts of β -carotene. de Pee et al question the conversion factor of 6:1, currently used to convert dietary carotenoids to retinol equivalents and the efficacy of such carotenoids in combating vitamin A deficiency.

It is generally agreed that a single conversion factor may not be valid for all dietary situations. However, there is no reason to doubt that increased consumption of vegetables containing provitamin A does improve vitamin A status in deficient populations. At least 11 studies including ours^{1,2} from different parts of the world have demonstrated a positive impact from vegetables and fruits rich in β -carotene. Only one of these studies is cited, the others being dismissed as poorly controlled. On the other hand, there is only one other report (from Guatemala) of vegetable supplements having no effect on serum retinol.³

de Pee et al did not measure carotene isomers in the cooked supplements but it is possible that prolonged cooking resulted in increased formation of *cis*-isomers with lower potency. Moreover, all the earlier studies showing a positive impact were done in children with low serum-vitamin-A concentrations, the increase in retinol being greater in those with initial concentrations less than 20 $\mu\text{g}/\text{dL}$ than in those with higher levels; there was no change above 30 $\mu\text{g}/\text{dL}$. These results cannot be ignored just because they are not confirmed in lactating women. Although the test used by de Pee et al suggested low vitamin A stores, only 3% of women had serum retinol concentrations in the deficient range. We are not given the data in relation to initial levels to see if retinol responses differed between those with normal and those with low concentrations.

These results cannot be extrapolated to settings where many children have retinol levels below 20 $\mu\text{g}/\text{dL}$, in whom vegetable supplements have been shown to be beneficial. Even in the Guatemalan study,³ where the mean serum retinol was not in the deficient range and there was no change after vegetable supplementation, two children with serum retinol less than 20 $\mu\text{g}/\text{dL}$ showed a positive response. Deficient populations do benefit from vegetable supplementation but the lack of response in those with