

From the journals

Childhood obesity: time to implement preventive strategies

Findings of several cross-sectional studies suggest that obese children spent less time in moderate and vigorous physical activity. Children who engaged in the least vigorous activity or most television viewing tended to be the most overweight. Obesity risk in children decreased by 10% for each daily hour of moderate to vigorous physical activity and increased by 12% for each hour of television viewing.

Children tend to eat a lot of energy rich foods while watching television. Furthermore, television advertising adversely affect their eating patterns. Eating partially hydrogenated fat commonly found in commercial bakery products and fast foods increases the risk of cardiovascular disease and type 2 diabetes in adults. Consumption of meals comprising high glycaemic index foods such as breads, ready to eat cereals, soft drinks and cake induces a sequence of hormonal events that stimulate hunger and cause overeating in adolescents.

There is a rapid increase in the consumption of sugar sweetened soft drinks by children. A cross-sectional study has shown that energy intake was about 10% greater among school age children who consumed soft drinks, which has a high glycaemic index, than those who did not. By contrast, milk, a low glycaemic index beverage, seems to protect overweight young adults from becoming obese. Obese children develop serious medical and psychosocial complications, and are at greatly increased risk of adult morbidity and mortality. The increasing prevalence and severity of obesity in children, together with its most serious complication, type 2 diabetes, raise the spectre of myocardial infarction becoming a paediatric disease. *Lancet* 2002; **360**: 473-82.

The antidiabetic drug acarbose causes fulminant hepatitis

Acarbose has been found to cause serious liver disease such as fulminant hepatitis. Liver function tests monthly are indicated during the first 6 months of starting acarbose and at less regular intervals thereafter. Patients should be informed of this serious side effect. *WHO Pharmaceuticals Newsletter* 2002; 1.

Hormonal replacement therapy for prevention of post-menopausal osteoporosis – is it worth the risks ?

Results of the Women's Health Initiative (WHI) trial published recently have provided important information about the safety of hormone replacement therapy (HRT) for preventing post-menopausal osteoporosis. This trial conducted in the USA had 16 608 women between the ages of 50 and 79 years, and compared the effect of a combination of conjugated oestrogen plus medroxyprogesterone (0.625 mg + 2.5 mg) with placebo. The trial that was planned for 8.5 years was stopped at 5.2 years on the recommendation of the Safety Monitoring Board.

Women receiving HRT were found to have an increased risk of coronary heart disease, breast cancer, stroke and pulmonary embolism. The risk of colorectal cancer and hip fractures was decreased. Risk for strokes and venous thromboembolism continued throughout the 5 years of the study, whereas the elevated risk of coronary heart disease was largely limited to the first year of therapy. The increased risk of breast cancer did not begin until 3 years of starting therapy. The investigators emphasise the need for rigorous evaluation of preventive therapies. With HRT, which is used by millions of apparently healthy women, even rare adverse effects can harm substantial numbers of women. *Journal of American Medical Association* 2002; **288**: 321-33.

Paediatric cochlear implantation

Implantation of the cochlea benefits children and adults who become deaf after they have acquired speech and language skills. However, the best age for cochlear implantation in children who become deaf before they acquire language skills is uncertain. There is no surgical barrier to implantation in infants and small children. In view of the encouraging results in a large number of older implanted children and excellent long term results in a limited number of children implanted before the age of 2 years, studies on implantation in younger infants appear to be warranted. *Lancet* 2002; **360**: 483-5.

Is there a therapeutic advantage of cox-2 selective inhibitors over non-selective non-steroidal anti-inflammatory drugs (NSAIDs)?

The selective cyclo-oxygenase 2 inhibitors (celecoxib and rofecoxib) are promoted on evidence based on short term clinical trials where these two drugs produced less gastrointestinal erosions and ulcers compared to non-selective NSAIDs (9 to 15% vs. 41 to 40%).

But recent studies involving large numbers of patients followed up for longer periods (eg. The CLASS study and VIGOR study) have shown that use of celecoxib and rofecoxib is associated with a higher incidence of serious adverse events such as myocardial infarction and other thrombotic cardiovascular events compared to non-selective NSAIDs. The absolute risk of serious adverse events has increased to 1.0 to 1.9% for celecoxib and rofecoxib in the larger trials. Hence the claims of safety benefit is outweighed by the higher incidence of serious adverse events. *WHO Drug Information* 2002; **16**: 12-3.

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Whooping cough – a continuing problem

Pertussis has re-emerged in countries with high vaccination coverage and low mortality

News media announced a global resurgence of whooping cough in April this year following a session on pertussis at the 12th European Congress of Clinical Microbiology and Infectious Diseases in Milan, Italy. Subsequently the European Union sent an alert to member states. Pertussis is one of the top causes of vaccine preventable deaths, with nearly 300 000 deaths in children worldwide in 2000. However, reports of a global resurgence originated in countries with low mortality and high vaccination coverage. For such countries the issue is how to fine tune effective immunisation programmes. In the rest of the world, priorities are to decrease infant mortality by improving coverage and timeliness of vaccination and implementing pertussis surveillance.

Crowfoot NS, Britto J. *BMJ* 2002; **324**: 1537-8 (Leading article).