Among the consequences of a poor diet may be antisocial behaviour. A study of young adult prisoners (British Journal of Psychiatry 2002;181:22–8) has added to evidence accumulating since the second world War. Two hundred and thirty-one volunteers were randomised to supplementary vitamins and minerals (Forceval) and essential fatty acids (Efamol Marine) or placebo capsules. Prisoners who took the supplements committed 26% fewer disciplinary offences than those who took the placebo and 35% fewer offences during supplementation than before.

A Dutch study (Journal of Pediatrics 2002;140:507–15) has added to the evidence that children with idiopathic short stature (ISS) usually cope well with their shortness. Thirty-six children with ISS were randomised to growth hormone treatment or no treatment. Health-related quality of life (HRQOL) and self-esteem questionnaires were completed by children, parents, and paediatricians three times in 2 years. At baseline HRQOL scores in both groups were normal apart from low social functioning. In the group given growth hormone HRQOL improved according to paediatricians’ estimates but remained unchanged according to parents. Treated children reported similar, or even worse, HRQOL or self-esteem compared with controls.

Even transient congenital hypothyroidism may be due to a genetic defect of thyroid hormone synthesis. In Amsterdam (New England Journal of Medicine 2002;347:175–84) have studied two apparently unrelated Navajo patients with juvenile Paget's disease and shown identical deletions of the osteoprotegerin gene at chromosome 8q24.2 in both of them. They had no detectable osteoprotegerin but very high concentrations of soluble osteoclast differentiation factor in serum. Replacement therapy may be possible.

A trial in Malawi including almost 600 children with bacterial meningitis (Lancet 2002;360:211–8, see also Commentary, ibid: 183) has shown no benefit from dexamethasone treatment begun just before the first dose of antibiotic (penicillin and chloramphenicol). In developing countries most hope lies not in improved treatment of meningitis but in prevention through the provision of conjugate vaccines.

In sub-Saharan Africa the falling trend in child mortality has slowed or reversed in recent years. Much, but not all, of this reversible has been caused by HIV/AIDS (Lancet 2002;360:284–9). It was the cause of 2% of deaths in under 5s in 1900 and almost 8% in 1999. In almost all of southern Africa more than 20% of deaths in this age group in 1999 were attributed to the disease. Botswana, Namibia, Swaziland, Zambia, and Zimbabwe had the highest under-5 mortalities from HIV/AIDS (>30/1000). Reduction of child mortality depends on tackling HIV/AIDS and other major causes of child death such as pneumonia, diarrhoea, malaria, and measles.

Children with autism who exhibit severe behaviour disturbance such as self-injury, aggression, or severe tantrums may respond to treatment with risperidone, an atypical antipsychotic agent. In a multi-centre US trial (New England Journal of Medicine 2002;347:314–21) including 101 children the 8 week response rate was 69% in the risperidone group and 12% in the placebo group. More information is needed about possible long term adverse effects.

The availability of intracytoplasmic sperm injection means that men with low concentrations of sperm in semen may father children: the emphasis is on sperm quality rather than quantity. In Edinburgh (Lancet 2002;360:361–7) 11 of 33 men who had survived childhood cancer and 55 of 66 controls had normal semen analysis. Ten of the 33 cancer survivors produced no sperm and six had reduced numbers of sperm. The good news is that the sperm produced by cancer survivors was of good quality as assessed by analysis for DNA fragmentation.

Most children adopted into a different country do well but a study in Sweden (Lancet 2002;360:443–8, see also Commentary pages 423–4) has shown that inter-country adoptees are at increased risk of psychiatric illness or social maladjustment in adolescence and early adulthood. Compared with the Swedish general population they were three or four times more likely to commit suicide or to be admitted to hospital for a psychiatric disorder and five times more likely to be admitted because of drug abuse. The reasons for these increased risks are ill understood but probably include factors operating both before and after the adoption.

Researchers in Birmingham (Lancet 2002;360:521–7) argued that early treatment of haemangiomases using pulsed dye lasers might get rid of them easily and be better than just waiting. In a randomised trial, however, they found that the 1 year results with laser treatment were no better than with no treatment. For lesions likely to prove troublesome they favour steroid treatment although Lancet commentators in Germany (ibid: 502–3) use the laser or cryotherapy.

Six weeks after starting treatment with rifampicin, isoniazid, ethambutol, and pyrazinamide for pulmonary tuberculosis a 10 year old boy in the Gambia (Lancet 2002;360:138) developed dislocation of one ocular lens and subluxation of the other. A clinical diagnosis of homocystinuria was confirmed biochemically. The eye changes were thought to have been precipitated by isoniazid which inhibits the phosphorylation of the pyridoxine needed for the metabolism of homocysteine. High levels of homocysteine disrupt the suspensory ligaments of the lens.

Juvenile Paget's disease (hyperostosis corticalis deformans juvenilis or hereditary hyperphosphatasia) is a rare (40 cases described worldwide) and potentially fatal disease of bone that presents in infants and young children. Osteoprotegerin is an antagonist of osteoclast differentiation factor. Researchers in St Louis, Missouri (New England Journal of Medicine 2002;347:175–84) have studied two apparently unrelated Navajo patients with juvenile Paget's disease and shown identical deletions of the osteoprotegerin gene at chromosome 8q24.2 in both of them. They had no detectable osteoprotegerin but very high concentrations of soluble osteoclast differentiation factor in serum. Replacement therapy may be possible.

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