

HEALTH

UNMENTIONABLES

WORMS

IN THIS SQUEAMISH age the thought of infection with worms is stomach-churning. In fact, worms are incredibly common in children (less so in adults, who tend to be more careful about what goes in their mouths).

In most cases worms are harmless. The most common ones are threadworms (also known as pinworms), and it is thought that 20 per cent of children globally are infected with them at any time. A mature female worm is 1cm long, white and threadlike and can be seen in the stools of an infected person. The females move to the anus to deposit their eggs, usually at night, which causes a tickling sensation. They are transmitted after an infected person scratches the area, getting eggs on their hands, which are then reingested or deposited on toys, utensils etc, where the eggs can survive for three weeks. When swallowed, the eggs hatch in the intestine.

Threadworms do little harm, but can disturb sleep and cause mild abdominal pain. They can be killed off with drugs, although the whole family should be treated. Wearing underwear in bed will mean that any scratching is less likely to spread eggs; ensuring that fingernails are kept short means that they are less likely to adhere; and bathing in the morning can detach them. Washing hands after going to the lavatory and keeping away from animal faeces also helps.

The other common worm is the roundworm, thought to affect 98 per cent of us at some time in our lives. These can be transmitted through handling faeces or by bodily contact. The eggs can survive for up to three years, so they can also be caught from dust, paper money, carpets and curtains — the environment should be cleaned after someone has had roundworm. De-worm pets, especially kittens and puppies.

Once ingested, the eggs hatch in the lower intestine and the worms penetrate the bowel lining, enter the blood and in the lungs, crawl up the larynx, are swallowed and re-enter the intestines. Symptoms are usually minor and drugs solve the problem.

JEREMY HAZLEHURST

I AGREED to have a bone-density scan only to kill time during the coffee break at a medical conference. Minutes later I was taken aside by a doctor and told that I had the bones of an 80-year-old, and must take urgent action to prevent the crippling symptoms of osteoporosis.

At 33 I am young to have porous bones, but the result should not have come as a complete shock. Like thousands of others, I was anorexic as a teenager, unwittingly starving my skeleton of crucial nutrients when I should have been building bone for the future.

When excessive dieters stop having periods, their oestrogen levels plummet and bone starts to thin rapidly. (Anorexia in men can also affect their hormone levels, reducing the body's ability to absorb calcium.)

As a result of my teenage undereating, I had osteopenia — premature thinning of the bones, which makes them more porous. Mine were roughly halfway between normal healthy bones and fragile osteoporotic bones. Left undiagnosed and untreated, osteopenia is likely to develop into full-blown osteoporosis by the time you reach your fifties.

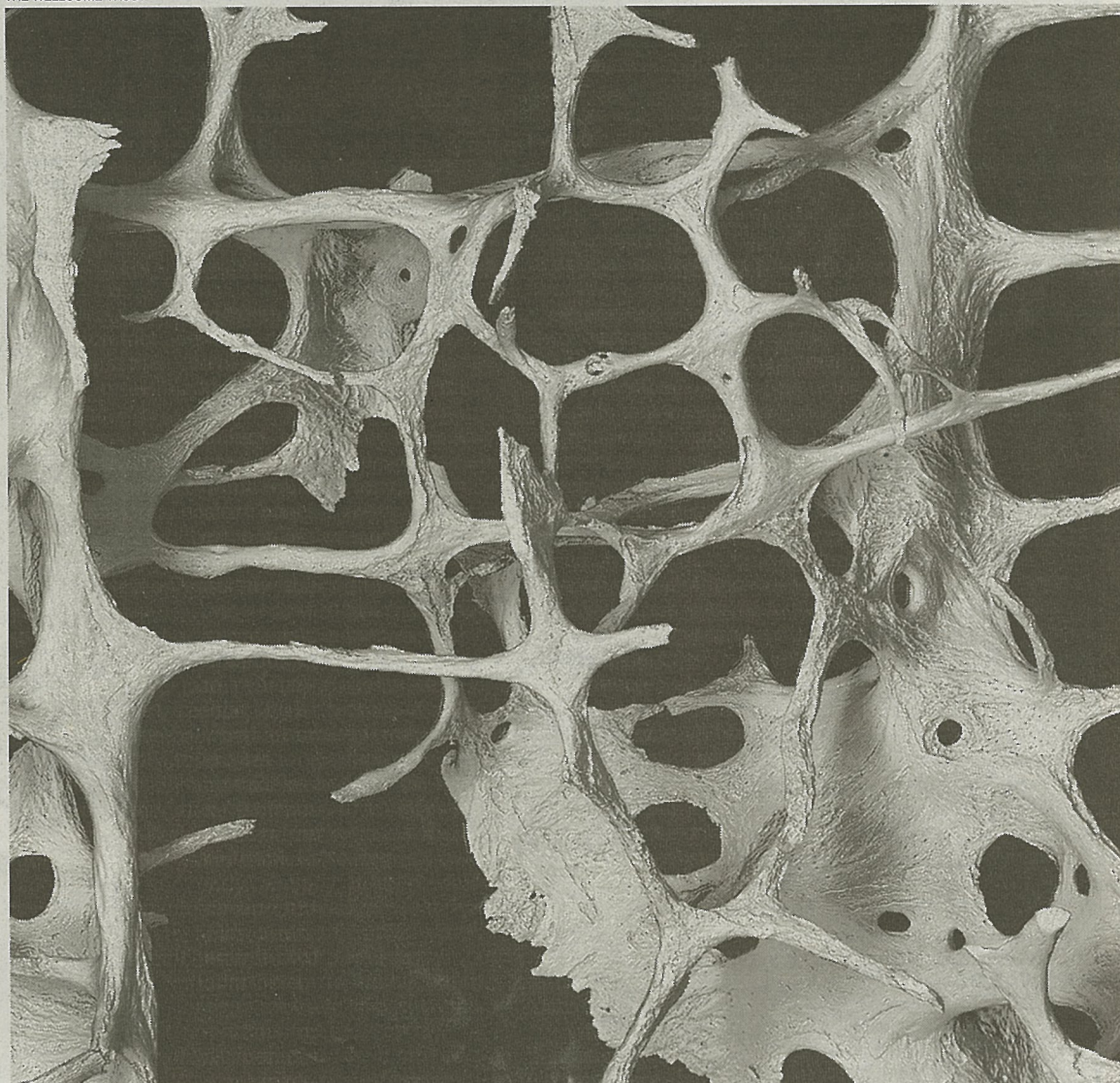
It is not just anorexics who are at risk. Modern lifestyles could mean that millions of young people already have osteopenia. A balanced, calcium-rich diet and regular high-impact exercise — such as football, netball or running — are essential for healthy bones.

Children today often eat badly and take less exercise than did previous generations, which is a killer combination for the skeleton. Experts predict an explosion of osteoporosis in the UK.

"Childhood, adolescence and early adulthood are critical periods for building up your bone bank for later life," says Peter Selby, a consultant physician from the Manchester Royal Infirmary and a member of the National Osteoporosis Society (NOS) council.

The teenage years are most important for building bone strength, he explains, because osteoblasts — bone-building cells — are work-

THE WELLCOME TRUST



BONE IDLE AND AT RISK

POOR DIET AND LITTLE EXERCISE ARE EXPOSING CHILDREN TO THINNING BONES, SAYS HEATHER BERESFORD

ing fast, and the skeleton is growing rapidly and increasing in density: "A life of computer games, television and fast food prevents bones building up. While young people are unlikely to have fractures now, they are sitting on a time bomb."

No one knows just how badly modern lifestyles will affect children's bones because this is the first generation to be truly inactive for long periods while simultaneously growing up on a diet of fast food. Although no one yet knows the scale of the problem, experts are concerned that parents and children are oblivious to the dangers.

"Children need guidance, but even milk in schools has been replaced by fizzy-drink dispensers," Selby says. "We have taken away something that builds bone and replaced it with a product that actively breaks it down."

Bones stop growing in length between the ages of 16 and 18, although bone mass continues to increase slowly into your mid-twenties. It then remains relatively stable until 35, when it starts to decline slowly. In women, after the menopause, bone mass declines rapidly as levels of oestrogen — the hormone needed to absorb calcium — drop.

Little is being done to warn young people about the dangers of inactivity and the link to osteoporosis, mainly because there is little awareness of the disease in the UK, but also because of the staggering lack of bone-density scanning facilities. This makes it difficult to identify potential sufferers and provide swift remedial action.

"Compared with the rest of Europe, Britain is at the bottom of the league," says Mel Read, Labour MEP for the East Midlands and chairman of the European Parliament osteoporosis

Above: the internal structure of bones damaged by lack of calcium

group. "Only Luxembourg has fewer specialist bone-density scanning (DXA) units than Britain." (Luxembourg has 2.3 DXA units per million people, the UK 4.2. In stark contrast, Greece and Portugal have about 25 scanners per million people.)

Early diagnosis is critical because much can be done to rebuild bone — and the younger sufferers are, the more effective treatment will be. Bone is alive, constantly replenishing and highly responsive to lifestyle changes.

Nourish and stimulate your skeleton properly and worn-out bone will be broken down continually by osteoclasts and replaced by bone-building osteoblasts. This process of renewal, called bone turnover, is boosted dramatically by a good diet and regular exercise.

A major barrier to treatment in the UK has been the cost of scans, yet the disease costs the country nearly £5 million a day — a figure that could be reduced greatly by early diagnosis.

"There are 40 premature deaths in the UK each day as a result of osteoporosis and more than 800 broken bones, many of which could be avoided with earlier treatment," according to the NOS.

"Implementing these services would cost less than £100 million a year, as opposed to the £1.7 billion spent on repairing osteoporotic fractures. The savings are obvious."

WARDING OFF OSTEOPOROSIS

DIET

Ian Marber, a nutritionist and author of *The Food Doctor*, recommends:

Calcium-rich foods: adults should eat 700mg of calcium a day, teenagers 800-1,000mg. A diet incorporating the following will provide adequate calcium: Dairy produce — milk, cheese (especially Edam, cheddar, camembert), yoghurt. Vegetables — broccoli, kale, okra, cabbage, carrots, onions, watercress and turnips. Fish — particularly sardines, salmon, cod, haddock and prawns.

Grains, seeds and beans boost calcium levels, but sesame seeds, oats, buckwheat, brown rice and tofu are best. Sesame seeds should be ground up.

Dried fruit — 100g of figs contains 250mg of calcium; 100g of currants provides 93mg.

Supplements: if children eat healthily, they won't need supplements. Everyone should avoid calcium inhibitors such as carbonated drinks — these contain high levels of phosphates, which cause the body to eliminate calcium. Also avoid more than one cup of coffee a day. More than 3-4 units of alcohol daily can reduce bone turnover, but one or two glasses of red wine may have a beneficial effect. Smoking is toxic to bones.

EXERCISE

Weight-bearing exercise puts force through the bone, stimulating growth and strength. Youngsters simply need to be active: walking to school, running and doing sports.



The National Osteoporosis Society provides a helpline and a wide range of free information leaflets: 01761 471771 or www.nos.org.uk
The Eating Disorders Association
helpline: 0845-634 1414 www.edauk.com