

Relying on magnets may be moonshine

Some individuals have a remarkable faith in the therapeutic power of magnetic devices worn on the body or distributed in the home. But serious doubt has been cast on this faith by Bruce Flamm, a gynaecologist from Philadelphia, writing in the *BMJ* for 7 January.

Magnetic bracelets, insoles, wrist and knee bands, back and neck braces, pillows and mattresses all have their advocates and the devices show enormous sales throughout the world. They have in particular a reputation to reduce or abolish pain, which makes them attractive.

The difficulty of performing controlled therapeutic trials is one factor in evaluating claims for the health-giving effect of magnets. Because real magnets stick to keys and other ferromagnetic objects in the pocket or handbag, patients can easily distinguish them from inactive controls, so that blind comparisons become problematical. In modern living conditions, where ferromagnetic



surfaces abound, the wearer of a magnetic device can detect the pull of force when such a surface is encountered.

In a study of magnetic efficacy in the pain of carpal tunnel syndrome, patients have shown improvement with both magnet and inactive control. In patients with low back pain, no significant difference has been found.

It is suggested that financial harm may accompany treatment, since money spent on expensive magnet therapy might be better expended using evidence-based medicine. Moreover, an underlying medical condition may go untreated if self-treatment with magnets is encouraged.

Claims that magnets are effective in treating cancer and increasing longevity cannot be supported by evidence and if the much higher fields produced in magnetic resonance imaging do not affect human tissue, there is no reason to think that the feeble one induced by magnets will do so.

The gentle art of doctoring a dictator . . .

In *The Journal of the Royal College of Physicians of Edinburgh* recently, Dr D. Doyle described the medical care of Adolf Hitler. The dictator was a lifelong hypochondriac who chose as his attendant physician a remarkable individual, Theodor Morell.

A venereologist, Morell was the last of a series of eight doctors known to have treated Hitler at various times. Morell had built up an unconventional practice and had declined invitations to attend the Shah of Persia and the King of Rumania. He joined the Nazi party in 1933 and, in 1936, was asked by Hitler to cure the leader's chronic eczema and thereafter a host of other conditions. Morell was described as a gross, cringing and unhygienic old man, but Hitler found him amenable.

On Hitler's instructions, Morell administered injections of glucose, methamphetamine

cardiac glycosides, corticosteroids, strychnine and atropine, as well as pills containing 28 different formulations and numbering some 90 in all. Vitamins, bromides and barbiturates were among them. A curious remedy, apparently chosen by the dictator himself, was a preparation made from gun-cleaning composition. This was discovered to be toxic, producing headache, diplopia, dizziness and tinnitus.

Apart from the many complaints brought on by highly doubtful treatments, Hitler had to contend with recurrent abdominal colic, alternating diarrhoea and constipation, eye inflammation, insomnia, depression and panic attacks. It seems doubtful whether Theodor Morell really helped him to overcome any of these conditions. The indications are that the remedies made his life even more painful than it might otherwise have been in his final days.

A question of taste

"In matters of food and drink", remarked Stephen Potter in 1952, "a good general rule is to state that the bouquet is better than the taste, and vice versa." A comment in *New Scientist* for 7 January draws attention to the effect of temperature on the taste of food and drink. It states that what we normally call taste should more accurately be termed flavour. This, in turn, is a combination of three things — taste, irritation and aroma. Strictly, the human tongue can distinguish five taste sensations. Irritation, produced by peppers, for example, is different. Aroma, however, depends for its detection on the nose, not the tongue.

Food temperature has no effect on the taste factors or on irritation but it has a marked effect on aroma, since this depends on the release of volatile oils from the material about to be consumed. Obviously, the higher the temperature the greater the liberation of volatiles. This in turn strengthens the aroma and enlarges the total perception of flavour.

Thus, it follows that foods lacking in aroma may undergo enhancement through heating. Others rich in natural aromas may become unpleasant if submitted to excess heat. In practice, it is usual to drink a red wine at room temperature when combined with a strongly flavoured meal. White wines tend to be drunk cold when they accompany fish or other foods of relatively weak flavour.

Temperature has an influence on the viscosity of sauces which have been thickened with starches and this may affect the attitude of the eater to the sensation produced. Nevertheless convention and cultural preferences may determine how hot or cold a food or drink product is served to the diner.

. . . and prescribing for a president

In a book published in 2004, entitled 'Grace and power: the private world of the Kennedy White House', Sally Bedell Smith outlined the problems attending the sickness of John Fitzgerald Kennedy, who was only 46 when he was assassinated.

The American president suffered from a wide range of illnesses, including Addison's disease, colitis, urinary tract infections and a degenerative spine. His extensive medication called for strict oversight and calibration of dosage. He received corticosteroids, daily injections of procaine, and routine doses of co-phenotrope, paregoric, phenobarbital,

testosterone, fludrocortisone, penicillin, barbiturates, antihistamines, ascorbic acid and calcium supplements. When he had to face stressful situations his physicians boosted his cortisol dose to avert an Addisonian crisis.

The president's day began with the perusal of a batch of newspapers followed by a soak in a hot bath and a hearty breakfast of orange juice, lean bacon, toast and marmalade, two eggs and coffee with cream and sugar. He later left his office for a swim in a warm pool, with another swim in the early evening. For his severe back pain he had a special padded mattress and a rocking chair to relieve tension.