

Many thought that it would be impossible—especially in small specialties—to blind a paper so that the referee could not spot where the paper came from. Others thought it would, while Douglas Altman, the statistician, pointed out that there was still a big difference between knowing where a paper came from and being 80% certain that you did.

So amid all this disagreement do we and other editors need to change what we do? I think we do a little. We need to improve the letter we send out to referees, and we need more referees. We ought, too, to provide our referees with better feedback. Finally, we must study in as scientific manner as we can manage

the results of what we do. Who will referee the paper once we have written it or whether we should submit it to the *Lancet*, the *New England Journal of Medicine*, or the *International Journal of Refereeing, Communication Engineering, and Process and Outcome Analysis* are questions that remain unanswered.

Reference

- ¹ International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. *Br Med J* 1982;284:1725-814.

Letter from . . . Chicago

On Oak Street Beach

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On a warm summer's day in Chicago the fashionable models soak up the sun on Oak Street Beach while earnest scientists lying in the sand work hard to confirm the recent theories of a group of Wisconsin investigators. Ignoring the slender beauties in their scant bikinis, these scientists ogle their plumper sisters and can hardly be restrained from applying calipers to determine their waist to hip ratios. About 0.7 is said to be normal, and everything below that characterises the lower body obesity type, with excess fat being distributed mainly about the hips and thighs. In this condition, which is apparently acquired by over-eating during adolescence, the fat cells are increased in number but normal in size, which makes weight reduction difficult. Upper body obesity, by contrast, is often caused by overeating during adulthood. It is characterised by a normal number of fat cells that are enlarged, often tend to lose their insulin receptors, and present an eightfold increased risk of developing diabetes. Testosterone levels are often higher and may play a part in causing the fat to accumulate in the upper part of the body. Weight reduction is relatively easier, because the fat cells need to be shrunk rather than reduced in number. About 25% of all obese women belong to one of these two types, the rest being in between.¹

According to the study, an unbelievable 40% of all American women are obese.¹ This is not borne out by studies on Oak Street, but could require looking at a more representative sample on a less fashionable beach. Perhaps the study could be cautiously expanded to include psychological data, because psychologists have long been interested in the morbidly obese and especially in the effect of surgical correction of such obesity. Earlier reports suggested that surgery for morbid obesity almost uniformly brought about marital discord. A recent study,² however, found that on the whole marriages were improved by correcting obesity. In this study, however, the morbidly obese had more

unhappy marriages to begin with, and among this group there was a high postoperative divorce rate, thought to reflect the liberation of previously unhappy spouses who had put up with the marriage because of physical or psychological handicaps.²

For those selecting non-surgical ways of losing weight, life remains difficult, to say the least. "So difficult, such suffering, so horrible" groaned Soviet maestro Mstislav Rostropovich after slimming down 45 pounds (20 kg) in four months to 185 pounds (82 kg). "For breakfast I eat one hard boiled egg and half a grapefruit. I just cry." To prevent such suffering more than 100 manufacturers have recently marketed "starch blocker" pills made from an amylase inhibitor derived from raw red kidney beans and claimed to prevent the digestion of bread, pasta, rice, and potatoes. In Chicago thousands of bottles were sold each week of this pill, whose safety was established in a four-week study of 36 Indiana women. There was concern, however, about the presence in beans of various noxious substances, including lectins, which may cause haemagglutination. After several patients developed digestive disturbances and had to enter hospital, the Food and Drug Administration moved to ban further sales of the product—which is too bad, because one pill was claimed to prevent the absorption of at least 400 calories of starch, corresponding to three cups of spaghetti, three slices of pizza, or 50 French fries.

Another consequence of undue preoccupation with food is bulimia (ox hunger) or the "binge and bust" syndrome. This often occurs in young well-educated and well-to-do women, not overweight, who on an average of 11 times a week indulge in episodes of ravenous eating, consuming at one sitting anywhere from 1000 to 20 000 calories, and then induce vomiting to avoid gaining weight. This is regarded as a form of relieving tensions akin to abusing alcohol or drugs but less immoral, though physically harmful in that it may lead to rupture of the stomach, oesophagitis, and teeth decay from the acid. Some women are seemingly so obsessed by food that they spend their whole time doing little else but working, sleeping, and going through the eat-purge cycle—a form of behaviour unacceptable in our civilisation though perhaps not unknown to the Romans, whose lavish villas were often equipped with a vomitorium.

A snowblower is safer

Returning to the beach, meanwhile, we find alongside ladies who may or may not have a characteristic type of obesity, men whose fat distribution defies classification. This is because men tend to accumulate excess fat around the waist, thus developing a pot-belly. With advancing years this has been traditionally associated with glasses and baldness—the latter being a characteristic that remains poorly understood. All that seems to be known is that it is caused by inherited genes and not by wearing a hard hat, at least according to a Cleveland dermatologist; that it is not particularly associated with coronary heart disease; and that neither does it seem to be a marker of increased virility. It seems then to have played no part in what the newspapers called the “strange sexual odyssey” of a former vice-president of the University of Illinois. This 58-year-old man, with “an expression so dour that it was impossible to imagine a smile on his face, ever,” apparently had ready access to the funds of the university and wrote over \$600 000 worth of cheques to entertain his female companions, even providing them with cars, new furniture, and trips abroad. But baldness did become relevant in the case of a Long Island woman who bit on something hard and moving while eating strawberry yoghurt and watching her favourite TV programme. She gasped, shrieked, vomited, then spat out a squirming beetle and allegedly lost her hair from shock. Her relatives fortunately saved the evidence for the court, and she was awarded \$425 000 damages as compensation for the humiliation of having to wear a wig.

And still on the beach, as we watch countless young men and women jog up and down the water's edge, we are reminded that in a decade the mortality from heart disease in the United States has declined by some 25%. The interpretation of these statistics remains subject to some controversy, as noted in a recent editorial in this journal.³ It is hard to believe, however, that increased physical activity, changes in dietary and smoking habits, and better control of hypertension have nothing to do with it. It was also noted in this context that in England, where preventive methods seem to have been viewed with more scepticism and apathy, the death rate from heart disease has remained “depressingly constant.”⁴ Thus whereas in 1968 a middle-aged American had a 40% higher chance of dying from coronary heart disease than an Englishman, in 1976 the risk had become lower than in his transatlantic counterpart.⁴ Yet there remain other intangible factors. Living in a cold climate and having to shovel snow can result in fatal heart attacks, warned a Chicago cardiologist, especially if one smokes or drinks at the same time. The alcohol is said to give one a false sense of energy and lead to overexertion; the cold and smoking cause vasoconstriction; all this may become a dangerous combination during unaccustomed heavy labour; and the remedy may consist in using a snowblower. Also presenting a potential danger to the middle-aged heart is the wife—warns the director of the National Institute on Aging—either because she may overfeed him or because she may nag him to death. Nagging certainly does not prolong life, he said, and it may well shorten it.

Psychoneuroimmunology

Other findings on the influence of mind over body have now given rise to the new science of psychoneuroimmunology.⁵ In one study relevant to this new discipline the use of a placebo increased the effectiveness of cyclophosphamide in lupus nephritis in New Zealand hybrid mice; in another a decreased immune response was noted in animals with induced lesions of the hypothalamus; and some five years ago an Australian group showed decreased T-cell function in bereaved people whose spouses had just died. Altered histamine and corticosteroid release may play a part in causing these effects, as may impaired regulation of cellular immunity by the hypothalamus; and there is implied support from all this for the old belief that patients can fight

disease by having a positive mental outlook, or that indeed they may control their illness through thought processes.

On the converse issue of the influence of matter over mind, we note that shyness appears to be an inherited trait, being manifested in identical twins reared apart, and to a lesser degree in fraternal twins. A study from the University of Chicago disproves the earlier contention that girls are worse at mathematics than boys, the initial findings now being attributed to differences in environment and education. Slow learners, according to a paediatric neurologist from Cincinnati, may be greatly helped by taking the stimulant methylphenidate (Ritalin), which enabled several schoolchildren to learn to swim, enhanced their performance in music classes, and even allowed them to learn cursive writing in two days—when they had previously tried unsuccessfully to learn this skill for several months. Then there are reports of vitamins and mineral supplements increasing the intelligence of children afflicted with Down's syndrome. On the same lines, rats treated with vasopressin were able to find their way through mazes much more successfully than the controls. From West Germany comes the suggestion that treating hypertensive patients with beta-blockers can mellow type A personalities and change some to type B behaviour—which may decrease their chances of developing coronary heart disease. Diuretics, on the other hand, had no such effect, and in fact changed several B types to the type A behaviour pattern of “loud explosive speech, rapid and accelerated speaking, response latency, hostility, and verbal competition.”⁶ And the *Wall Street Journal* reports that lead poisoning remains an important cause of mental impairment, costing the United States up to \$1 billion yearly, affecting preschoolers in all social classes (1 in 25 have been found to have unacceptably high lead concentrations), “making them a little dumber, making life a little harder, and draining the quality of their lives.” Much of the lead comes from peeling paint being eaten by children, who like its sweet taste, but there is also concern about lead in gasoline, especially when the Government is planning to ease restrictions on industry.⁷

Scientists also remain puzzled by the problem of amnesia, at least in part because it is sometimes faked by teenagers running away from home. But last year the newspapers reported the strange case of a young woman found naked and neglected in a park in Florida, unable to remember who she was or why she was there, and apparently totally insensitive to pain. Daughter of a suburban Chicago family, she has now returned to her parents but has improved only minimally and is regarded as the fifth case of global amnesia ever reported. Finally, on the subject of unconsciousness and its differential diagnosis by mnemonic, I must acknowledge several letters pointing out that, at least before the second world war, A often stood for apoplexy, I for injury or insulin, and O for opium—since laudanum was widely available for symptomatic relief and suicide. There was pretty much unanimity that Y “must have crept in later.” From Scotland, however, comes the version DAAEIOUY (D for drugs, A for alcohol and accidents), which “then also becomes almost Gaelic and could be sung”; while in the early 1900s there were the three Ds of dead, drunk, or diabetic—presumably the precursors of the more recent three inevitables of death, taxes, and tuition fees.

References

- 1 Maugh TH. New marker for diabetes. *Science* 1982;215:651.
- 2 Rand CSW, Kuldau JM, Robbins L. Surgery for obesity and marriage quality. *JAMA* 1982;247:1419-22.
- 3 Hampton JR. Falling mortality in coronary heart disease. *Br Med J* 1982; 284:1505-6.
- 4 Kannel WB. Meaning of the downward trend in cardiovascular mortality. *JAMA* 1982;247:877-80.
- 5 Macek C. Of mind and morbidity: can stress and grief depress immunity. *JAMA* 1982;248:405-7.
- 6 Martin J. “Type A” personality in men mellowed by beta blockers. *JAMA* 1982;247:2759-60.
- 7 Waldholz M. Lead poisoning takes a big, continuing toll as cures prove elusive. *Wall Street Journal* 1982;158:1982.