1025 people, where milk and dairy products were confirmed as the vehicle of infection in 1981-4[5]; a further 28 incidents (18 due to campylobacter) affecting 1100 people were due to other bacterial causes. Most outbreaks followed consumption of raw milk. No general outbreaks due to milk were recorded in Scotland in 1983-4 after the introduction in 1983 of legislation requiring heat treatment of milk for sale to the public.[9]

Several outbreaks of international importance were recorded. Two that occurred with food eaten on aeroplanes showed the importance of identifying high risk foods and preparation procedures for large volumes of food which may be stored some time before serving. Three outbreaks were due to contaminated imported foods, two to paté contaminated with *S gold coast* and *S isangi* and one to lasagne contaminated with *Staphylococcus aureus*. The staphylococcal outbreak was particularly interesting because the food vehicle, pasta, was unusual and because contamination probably occurred early in the manufacturing stage, possibly from unpasteurised egg.[2] All three outbreaks emphasise the importance of quality control of imported foodstuffs and of planned sampling of both raw materials and prepared foods entering Britain. The lasagne outbreak also showed the value of early international exchange of information about contaminated foods and possible foodborne illness, which in this instance probably prevented the occurrence of a much larger outbreak.

The number of recorded incidents of food poisoning and salmonellosis in persons returning from abroad doubled in 1984 over 1983. Although this increase may be related at least in part to better reporting by laboratories, there may be considerable underascertainment of this type of infection, which has financial implications for the National Health Service.

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Letter from . . . Chicago

Pounds of flesh

GEORGE DUNEA

"I wanted power, money, and to make social change. I am doing them all," the administrator of a medium size Chicago hospital explained in a recent interview with a local newspaper. The article was about hospital executives and how they face serious challenges at a time when the use of hospitals is declining, costs are rising, government reimbursement is being scaled back, and many hospitals are in serious financial difficulties. In the past decade 459 community hospitals have failed, explained the article. According to a recent handbook, "hospital chief administrators need leadership ability as well as technical skills in order to respond effectively to the community's requirements for health care while, at the same time, satisfying demand for financial viability, cost containment, and public professional accountability."

Quite a mouthful—and I wish them well. But a picture is worth a thousand words, and the one illustrating the article in point shows the lady administrator presiding over a group of 12 "vice chairmen." Most of them look young, presumably have degrees in hospital business administration, and would see nothing anomalous in reporting to their corporate superior. But to one side sits a lonely doctor, the president of the medical staff, a little older and submerged in the group of fledgling health care executives. Nobody questions the need to "respond effectively to the community's requirements" et cetera. But I keep wondering—from an admittedly prejudiced point of view—how the dickens we ever allowed these people to take over and reduce a once independent profession to subservience within a corporate superstructure. The church never allowed such intrusion, nor did the lawyers, so why did the medical profession?

Whatever the answer may be one thing is clear—namely, that at present the score is: business administrators one, doctors zero. Where the patient with his pain and fears and disabilities stands in all this is not clear. Are administrators more likely to know what is good for him? Are they kinder, more compassionate, more concerned? Are they more likely to know how to solve the problem of the 33 million "working poor" who have no health insurance and live in fear of developing an unaffordable illness? All I can say from my particular perspective is that the doctors seem to have resigned what Dr Lister once called the "medical dominance" to the business school graduates. There are exceptions, of course, especially in the "for profit" corporations owned by doctors, where doctors as proprietors retain the decision making power, though at the risk of incurring the displeasure of the stern editor of the *New England Journal of Medicine*.

Still, one has to take off one's hat to the lady administrator. For here is another newsletter, describing how her hospital has set up family health clinics in stores belonging to a large discount retail chain. This arrangement should prove beneficial to everybody: patients will conveniently consume health care in the same place as they get their groceries, perhaps buying a little more while waiting for the doctor, perhaps availing themselves of special sales such as

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cut rate eye exams on Tuesdays and colposcopies during the slow season. If the hospital should lose money in the venture the accountants will be sure to juggle the figures so that nobody will understand anything. And if the hospital ends up with a few extra admissions to shore up its flagging census it will all have been worth while.

For getting patients is the name of the game, as hospitals are locked in a fierce struggle for survival. In this competitive jungle where many hospitals are losing money under the new reimbursement rules the small hospitals, though charging lower daily rates, are particularly vulnerable, lacking as they do the endowments and cash reserves of the bigger teaching centres. So we find the big fish swallowing the little ones, large for profit or denominational chains buying up the smaller hospitals, often to help, sometimes to destroy. In Chicago we recently had the spectacle of a large university hospital buying up a struggling neighbourhood community hospital, and seemingly being content to let it run down, to avoid the possibility of a national chain taking it over and thus moving into what it considers its own territory.

Eating people is out

But whereas cannibalism has become an accepted way of life in the hospital industry and other businesses, notably the airlines, there has been a recent attempt in anthropological academia to deny that homo sapiens has ever indulged in such practices. This despite a recent episode in which an irate woman tried to board a plane without a pass. In the ensuing scuffle it appears that an airline employee, who subsequently turned out to be positive for the acquired immune deficiency syndrome, not only kicked the woman in the shin but also bit her. The woman lost weight from constant worry, it was stated in the $10m suit against the airline, and the employee was subsequently reassigned to where he would not be able to bite passengers.

Turning to other forms of cannibalism, I had always assumed that certain illustrious navigators were unable to turn in their graves, no matter how much power the administrators grabbed, on account of their having been served up either as steak tartare or boiled in a stew on some remote island. But now a New York anthropologist claims that though dog bites dog and fish swallows fish man has never eaten man. This is a sensible way to advance to academic fame, as nobody would have paid attention to a thesis purporting to have discovered that whereas some carnivorous tribes have eaten their neighbours whole others merely chewed up their fingers and toes. But now the whole anthropological world is in an uproar, the procannibals pitted against the anticannibals in a blood curdling confrontation. Already we are being told that the procannibal evidence obtained from older excavations is based on a misinterpretation. There had also been a more recent excavation at Fontbrégoua in France where broken human bones had been discarded along with those of sheep and wild animals, the flesh apparently stripped off the bone and eaten raw rather than cooked, as indicated by collagen chromatography. Yet here again the anticannibalism school contends that this had nothing to do with gourmet cooking but merely with religious rituals, second year medical students trying to get a better understanding of the origins and insertions of key muscles, and clumsy pleistocene haematologists extracting the whole marrow in a fit of diagnostic greed when they should have been satisfied with a needle biopsy. So cannibalism may well fall into disrepute even though it would be a good way to accumulate all the amino acids essential to man in one fell swoop.

Cuts and thrusts

Most Americans, however, have suffered more from being hit by the tax than by the axe. Such blows, always painful, were to be simplified in President Reagan's initial tax reform proposal. Yet tax simplification would have almost certainly died, its bones broken, the flesh filleted, the marrow continuing to be extracted by the taxman's bite. But there was new life breathed into the corpse when Senate leaders came up with a proposal to cut marginal tax rates dramatically. Much haggling followed as we held our breath during the tough rounds of negotiations to reconcile the different versions passed by the Senate and the House. The final bill, signed into law by President Reagan in September, is a major revision of the tax code. Though its immediate effects are imponderable, it is likely to benefit the economy eventually. It cuts top marginal income tax rates to 28% (33% for the very rich and 15% for lower incomes), removes many people entirely from the tax rolls, eliminates a variety of deductions or tax shelters and other loopholes, does away with the preferential taxing of long term capital gains from appreciated assets, and increases the tax paid by corporations. The details are codified in a huge bill and a host of transitional rules (in 1987 the top marginal tax will be 38%), but so far most people think that the new laws are fair and reasonable.

All this being a cause for much self congratulation, Mr and Mrs Reagan and key members of Congress quickly moved, in this pre-election period, to declare war formally on drugs. Proposals include calling in the army, shooting certain drug pedlars, expanding education, pressuring Mexico, Colombia, and Turkey to stop growing poppies and coca, and upsetting civil rights advocates by testing federal employees for drugs. With the election only a few weeks away the war quickly became a crusade, yet Congress remained somewhat nervous about spending money at a time when everybody is fussing about the federal deficit. Furthermore, many people remain unconvinced that crusades of this kind are ever effective.

I close where I began, at the modern hospital corporation and its search for financial viability, in the context of a tiny mole at the angle of my daughter's jaw. The plastic surgeon thought it would be convenient to have it removed in the hospital, under its new outpatient surgery programme, rather than in his office. As a good parent I took the day off work. We arrived in the admitting area at noon. The clerk typed on the computer and I signed forms for 45 minutes. We then went to what obviously had been a ward, now the site of "outpatient surgery." I signed more forms while my daughter changed into a complete hospital outfit. Then she rested in a kind of dental chair, watching television while two nurses kept flitting in and out answering the phones and rearranging schedules. The preceding mole must have been complex because we waited three hours. Then two men came to take my daughter away on a stretcher. I had lunch, went to the flower show, and came back just in time to see her being wheeled back with a formidable 2 cm scar. I signed another form acknowledging that I understood the postoperative instructions. We were home in time for dinner. The hospital charge, billed directly to the insurance company, was $550. The surgeon observed professional courtesy, but the hospital pathologist wants his $65 worth pound of flesh and has sent a statement promising to bill me for what the insurance refuses to pay. The hospital corporate vice president for finance, however, is already scouring the local shopping centre for more tiny junctional naevi, thus hoping to increase share earnings for the third quarter substantially.

In a temperate climate what volume of fluid should be taken during a 24 hour period to ensure maximal renal functions? Does this volume increase with age?

Fluid intake in a temperate climate should not be less than that required to make good insensible water loss (800 ml/day) together with the minimal urine volume required to excrete nitrogenous waste (500 ml/day). Total daily fluid intake should not, therefore, be less than 1300 ml/day. Some foods such as vegetables contain large amounts of water and the metabolism of carbohydrates produces water by oxidation. Thus on an average diet water intake would be around 2 litres a day. With increasing age there is a fall in the ability to concentrate urine as well as a loss of thirst sensation. Both these factors make it imperative that the water intake of old people is carefully monitored and not allowed to fall below the minimum required to prevent accumulation of nitrogenous waste. This minimum may be somewhat greater in old age because of the body's reduced ability to concentrate urine.—A W ASSCHER, professor of renal medicine, Cardiff.