

Van die Redaksie/Editorial

Junk food and empty words

French-fries are junk food, but roast potatoes are not; bread is a basic foodstuff, but biscuits are junk; wine comprises 'empty calories', but fruit juices are health foods; the sugar in cake is detrimental to health, but the sugar in honey and grapes is not. White bread is not 'nutritious', but cauliflower is, although it consists of 90% water, 5% starch, a minute amount of protein, and only traces of vitamins and minerals (other than potassium). What then is 'junk' food?

It is difficult to find professional definitions of 'junk', 'basic', 'nutritious' or 'health' food. They appear to be accepted as entirely natural categories, as obvious as the existence of proteins, carbohydrates and fats or of the division of matter into living and dead. Only the popular press provides more than mere lists of the food items in each of these predetermined categories. Here junk is defined as any food that contains 'refined sugar', 'additives', 'fat' or 'empty calories'. This, however, is clearly not the real definition, since it does not help to resolve any of the contradictions mentioned above. The alternative definition is therefore that junk or non-nutritious food is any consumable that cannot, on its own, adequately support health. Thus, since people cannot live only on chips or only on carbonated soft drinks, chips and carbonated soft drinks are classed as junk food. Why, then, corn-on-the-cob is not junk, but a pizza (unless it is prepared by mother) is, remains unexplained. Indeed, if this latter definition is to be taken seriously, then everything we eat is junk: cabbages, carrots, tomatoes, apples, oranges, grapes, meat, milk, bread, tap water, etc., etc., etc.

The real definition of junk food (or of any of its synonyms) should recognise the fact that the adjective is applied exclusively to food items that children, and especially teenagers, find appetising. Thus, codliver oil, despite its undeniable greasiness and artificially added vitamins and preservatives, is not junk food because children loathe it. Cake, which children love, is, on the other hand, a non-basic (or junk) food, despite containing flour, eggs, milk products, fruit and sugar (which are, with the inexplicable exception of the sugar, all individually classed as 'basic' food items).

Another factor which distinguishes 'junk' from 'basic' (or 'nutritious') food, is the amount of effort the lady of the house expends on preparing that food. All 'fast-foods', 'take-aways' and commercially 'pre-cooked TV dinners' are thus without exception, 'junkous' by nature. Potatoes, if they are peeled and roasted in the home, are 'highly nutritious', but if they are bought appetisingly

ready to eat, then they are 'empty calories'. Popcorn bought at the cinema is junk food, but mielie-pap laboriously cooked by mother is basic food.

The notion that the nutritional value of food is directly proportional to the amount of effort the housewife spends on preparing it, is widely accepted. Thus, coffee prepared from whole roasted coffee beans (which the housewife herself ground to powder) is nutritionally better than instant coffee. Coffee, on the other hand, prepared from dandelion roots, picked and roasted by the hostess herself, is better still; it is, indeed, classified as nothing less than a 'health' food, as is home-baked bread, home-grown beans, and home-cultivated honey. This principle is, in fact, of such fundamental and overwhelming importance that the 'junk food' epithet of almost any childhood delicacy can always be counteracted by the expenditure of enough time and physical effort in the kitchen. Thus a home-baked cake is seldom called 'junk', whereas the factory-baked variety invariably attracts this label.

'Junk food' is therefore any consumable prepared outside the home that children find delicious. The term is neutral about the physiological value of such food. Indeed, no one knows whether the things that children crave are good for them or not. All that is known is that the mortality rate among children who subsist entirely on home-grown and home-prepared 'basic' food is more than 20 times higher than among those who also eat junk food. This is true in both the longitudinal sense (if one compares modern Western children with their counterparts of 200 - 300 years ago^{1,2}), as well as in the cross-sectional sense (if one compares children from different present-day communities^{3,4}). Although this does not prove a cause-and-effect relationship between the consumption of junk food and a low childhood mortality rate, it does suggest that the adjective 'junk' might be unfortunate, if it is not outright misleading. Children's food, if it must be categorised, is probably best divided, as Bremner *et al.* (p. 472) have done, simply and unemotionally into 'what the child chooses to eat' and 'what its parents want it to eat'.

J. H. Koeslag

1. Hofsten E, Lundström H. *Swedish Population History. Main Trends: 1750 - 1970*. Stockholm: Statistiska Centralbyran, 1976.
2. Wrigley EA, Schofield RS. *The Population History of England, 1541 - 1871*. London: Edward Arnold, 1981.
3. World Bank. *World Development Report*, 1983.
4. World Health Organisation. *Sixth Report on the World Health Situation*. Geneva: WHO, 1977.

Heralds, herons and healers

Heraldry possibly only holds an esoteric interest for modern man — rather like an elderly marathon runner it has outworn its attraction. Strictly, the word means the business of a herald but in common usage it is limited to a knowledge of armorial bearings. Heraldry probably began in Europe about the time of the first crusade in 1095, when knights from many lands found it convenient to have distinctive colours or signs.

The terminology of heraldry is very difficult — who would know that an eagle without a beak or feet is an Alevion or that to be 'embelief' is to be aslant?

Nowadays badges and emblems are commonly used by business syndicates to give an appearance of tradition and stability, and purveyors of cigarettes and potato crisps resort to distorted heraldic emblems in an effort to gain a sense of dignity and establishment. Nevertheless, it is apposite that our own medical organisations should distinguish themselves with relevant badges in a tradition going back to medieval medicine.

In this issue of the *SAMJ* (p. 485) Dr J. L. Couper has drawn attention to the badge of the South African Medical and Dental Council and to that of the Medical University of Southern Africa. Both are based on a fabled healing bird, the caladrius, that seems to derive from the Indian haridrava. There is some dispute as to what bird the caladrius actually was. Was it a curlew, a white magpie or a heron? It was certainly a bird that frequented mountain streams, and indeed its name is derived from the Greek word *charadra*, meaning a mountain torrent or ravine. If it looked straight at the questioner then a good outcome of any illness might be expected, but if it turned its head away the medical outlook was grave. The designer of our medical badges has been diplomatic in that he depicts two birds — one looking in each direction.

One might question why a bird should have such strange power over mankind. Birds, because of their vivid colouring, their inimitable song, and their ability to fly with such speed and elegance, have always been envied by man.

In the caves at Lascaux, in France, there are several isolated depictions of birds, and one of what appears to

be a man masquerading as a bird — he appears to be falling backwards while beside him is a post or stake on which another bird perches.

The vulture and the falcon were sacred to Egypt. Leda was ravished by Zeus in the form of a swan, and swans, which honk and hiss through most of their lives, are said to sing evocatively as they die.

Because of their songs and their powers of flight, birds have been endowed with supernatural powers in the folklore of many peoples. The owls are traditionally wise, the Scottish corbies have mysterious affinities with the shades of the dead, and the hoopoes who guarded King Solomon's magic carpet so well have been given their crests as a reward — crests which were originally of gold but which, at their own request, and perhaps with a prophetic knowledge of the vicissitudes of the stock market, were changed to feathers. Only when birds lose their powers of flight and song, as the ostrich has, do they lose their magical attributes and become objects of contempt and humour.

So we can be glad that we as physicians and surgeons have been given an emblem of a bird with such highly discriminative powers of prognostication as the caladrius.

The term *charadra* is not entirely lost in the vagaries of mythology and heraldry. For those with botanical interests it may be worth while to remember that the little purple wild gloxinia found growing in streams near Caledon and Swellendam is the *Chadraphila capensis* — the 'Cape lover of torrents'. Birdwatchers may know that the family of plovers is known as the *Charadriae* and, although there are 60 species, only 5 are found in South Africa, and none of these are river birds.

Nevertheless, it was an imaginative step, and a perfectly acceptable one, to choose the caladrius as an emblem for the South African Medical and Dental Council and the Medical University of Southern Africa, and I am sure we all look forward to being able to look our patients, or at least the great majority of them, straight in the face.

J. Mac W. MacGregor