

## SOCIAL ACTIVITY AND FOOD

Professor Mark Wahlqvist

It is overdue that I've come to these meetings, which I've followed with great interest. Indeed, a close colleague of mine, Len Collins, who unfortunately died last year, was one of your great supporters. He was the President of the Australasian Guild of Cooks, as some of you will remember, and with him I published the book Australian Kitchen Nutrition (1). So, it is with a little sadness that I get together with you in his absence.

The context of us meeting together is also important for the issue which I wish to explore with you: new evidence that social activity itself is important in determining our life expectancy. In the Lancet in April 1985 an article caught my eye (2). It was one of those articles which quite change the way in which one thinks. This was an article from western Sweden by a group of researchers who had been working away principally on factors determining the chances of coronary disease. One of the key workers in the group is Lars Wilhelmsen, who is a cardiologist from Gothenburg.

In this particular paper, rather than focussing on coronary disease, they addressed total mortality. And rather than talking about this or that risk factor for coronary disease - serum cholesterol level or cigarette smoking, or whatever - they looked at a fairly global index of human behaviour, social activity. And as crude as this index is, there was a striking relationship between what they called a social activity score and the risk of dying in a subsequent nine-year period for two cohorts of Swedish men. This wasn't just an association, because it was done prospectively. That is to say, at the outset, the social activity of these individuals was documented and

then followed, along with whether or not they died in the subsequent nine years. And it didn't matter whether it was going to parties or going to continuing education classes or meeting with your friends in a variety of ways, it was protective against premature death.

Now the thing that struck me was that almost every activity which they described was in one or way or another something you'd expect to be done around food. And so I asked myself the question, whether some of the observations that we are currently are making about the relationships between food and health may not actually be accounted for in terms of our social activity. Indeed, it seemed much more likely, as I looked at their data, that that was the case, because, as we all know, there are social activities which lead to quite different kinds of eating. If you go to an Aussie Rules football match you are likely to have a meat pie and beer. And if you go to a birthday party, it's another kind of fare. And if you come to a gastronomic society meeting, it is yet another. So it wasn't apparent that a particular kind of food, let alone a particular sort of nutrient, was one which would explain this relationship between social activity and life expectancy.

In any case, as you've heard from Rita Erlich and Pat Crotty, we know that factors influencing our life expectancy are many, and it seemed unlikely even to someone these last nine years in the chair of Nutrition at Deakin University (as I have been and from which I've recently moved) that food only would account for life expectancy. So it was really quite intriguing that such a global and crude descriptor of human behaviour could so powerfully predict, as it did in the study, life expectancy.

However, just before one then seeks to account for all the relationship, if you like, between food and health in social activity

terms, I think that there are certain aspects of social activity where there may be some commonality or important factors, that relate to the way we eat, which could in themselves be important. And here I can only be speculative because it's clearly an important area for future research, and one into which I wish to take my new department, if I possibly can.

For one thing, it seems to me that social activity allows us often to bring together different ways of eating, different techniques of food preparation, so that we are likely, by engaging in social activity, to have a wider diversity of foods and beverages. And you will note that one of the two most important dietary guidelines is to have a wide variety of foods each day.

Curiously, it is one of the dietary guidelines which has the least documented evidence and yet it has become something of an article of faith among nutritionists. This is largely on the basis that if we examine hunter-gatherer cultures, then we see that people do have a wide variety of foods - berries, nuts, root vegetables, fish, small animals and so on. And we also know that human physiology depends on us obtaining essential nutrients from lots of different foods. Beyond human breast milk in the first few months of life, there is really no food which is complete, and humans do need to be omnivorous. So at least that is a cogent idea that we should have a variety of foods to achieve adequate nutrition. It is also cogent that if we do not focus exclusively on one food then we are less likely to have too much of something. There is a dilutional effect of factors in food which are otherwise potentially toxic. So it's been an attractive principle espoused in every set of national guidelines.

Only very recently have we been getting actual evidence that food variety might be protective, largely because the instruments of looking at food variety have been weak. We ourselves have developed an

index of food variety which, you may be interested to know, in studies of Melburnians we have demonstrated to be predictive of hardening of the arteries: the wider the variety of foods, the less hardening of the arteries you have (3). But that is really the beginning of what is long overdue as an area of research. It could be that food variety is one consequence of social activity.

There is also in social activity a kind of restraining influence, so that one may not over-eat. One also may not under-eat; there is an encouragement to eat in a social setting. There's an educational effect, so that the experiences of a whole culture or maybe several cultures is brought to bear on our eating. So there may be ways that social eating ultimately leads to preferred eating patterns. Of course, even the knowledge we have of the relationship between food and health from the current scientific work gets shared in this kind of environment, and we often come to understand it better in this kind of discussion than if we read books or engage in a formal learning process.

But, equally, of course, other parts of social activity may be important. In Chinese culture, for example (and my Chinese wife is here today), there's almost no transaction that takes place other than around food. So, the resolution of problems and conflicts might be part of the process. Sometimes we even engage in physical activity when we're engaged in social activity. And one could go on... You could speculate more than I can.

So, I raise this as an issue. I don't think we are by any means entirely clear about the relationship. Nevertheless, my sense of it is that social activity is likely to emerge as important in its own right. If this is the case, we need, firstly, to test the hypothesis much further. Secondly, I think we need to identify, in Australia,

where food and social activity are likely to be, if you like, segregated; where they might not be coming together.

Indeed, I think there is a tendency for the privatisation of the way in which we eat, in many ways. The single person preparing food alone... Even food writers are encouraging people to cope with this situation by themselves. We have recently completed a Meals-on-Wheels study (4). For the first time, this multi-million dollar activity in Australia has been subject to nutritional evaluation. Just what is this program contributing nutritionally to elderly people? It is, of course, a process which often allows elderly people to stay in their own home, often alone. Shouldn't we then be weighing this against activities for elderly people at their elderly citizen's club, not ignoring the social activity aspect. What about the TV meal? How much social activity is involved? Is it a new kind of social activity where one interacts with the screen? I've no idea, but it ought perhaps to be subject to inquiry.

And I don't know whether, as in other areas, if a little social activity is good, more and more is better. Many of you have heard me argue that isn't the case with nutrient supplementation. Maybe I should be cautious that I don't too zealously advocate social activity; clearly, it sometimes also gets us into strife.

In summary, then, we have at long last taken nutrition from nutrients to food. Food is so chemically complex that we cannot predict the food-health relationship only in nutrient terms. For example, in the New England Journal of Medicine just four or five weeks ago there was an interesting article which talked about potassium being protective against stroke rates in a prospective study in the United States (5). What they actually meant was that fruits and vegetables and so on were protective against strokes, and yet it was described in nutrient terms. I think most nutritionists are actually

beyond that now. We're interested in fish and human health, fruits and human health, and so on. But it looks as though we have to take that further and look at eating patterns and the context of eating, social activity. Thank you very much.

(Mark Wahlqvist's spoken paper has been transcribed by Michael Symons.)

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