

Food science confuses general public

Food scientists should only publicize results showing a relationship between nutrition and health if they are able to come up with a plausible biological mechanism, said Sander Kersten in his inaugural lecture on 10 May.

Otherwise, thinks the professor of Molecular Nutrition, scientists only confuse the general public and undermine the credibility of food science. The Dutch consumers' association agrees, but others think this is going too far.

TEXT ASTRID SMIT ILLUSTRATION IEN VAN LAANEN PHOTOGRAPHY GUY ACKERMANS



SANDER KERSTEN
Professor of Molecular Nutrition at Wageningen University

I put forward this proposition because I'm concerned about the reputation of food science. We are being inundated with conflicting reports about nutrition and health; this confuses the general public and reflects poorly on food science. First they say vitamin E is good for you, then a few years later it isn't, or only in certain cases. That's what happened with folic acid and beta-carotene too, so which compounds will be next? We are constantly revising earlier conclusions about links between nutrition and health. As food scientists we are fine with this – such revisions are part and parcel of “new insights” – but the general public doesn't see it that way. It also irritates scientists in other fields and science journalists. Sometimes I even suspect a degree of con-

tempt. You can hear them thinking, “There they go again with their quick and dirty studies”. An American university recently made the news with a report that people who eat loads of chocolate are thinner on average than people who eat little chocolate. The story was picked up by a lot of media companies but there was no explanation at all of why you might get that result. Personally, I don't think they should seek publicity for a story like that. I think food scientists should only approach the media if multiple studies demonstrate a specific relationship between nutrition and health and if they have a clear idea of the biological mechanism causing it. That takes time, but only then do you have genuine news to report, news that will prove lasting.’



SANDRA DE JONG
Consumers' Association
information officer

‘We agree. We are currently working on a campaign about salt because people consume too much of it in their daily diet. Scientists agree that you shouldn’t consume more than six grams of salt as more than that is bad for your cardiovascular system. At least, that’s what we thought. But recently Belgian scientists published a paper in the *Journal of the American Medical Association* saying a reduction in salt doesn’t help prevent health problems. This is very confusing for consumers and leaves us having to put in a huge amount of effort to maintain the credibility of our “eat less salt” message. It turned out afterwards that the study had a lot of holes and that the scientists had given the impression their conclusions were much firmer than was actually the case. But it’s not just scientists who create confusion by seeking publicity too soon whenever they find a relationship; journalists, press spokesmen and the food industry are also guilty. The industry is constantly making claims for links between food and health. Fortunately, as of two years ago the European Commission has been scrupulously testing the basis for these claims. Last spring, they only approved 222 of the more than 4000 nutritional claims. We don’t know who is responsible for most confusion among consumers but it would be good if scientists could set an example by only publicizing links between nutrition and health if there is sound supporting evidence.’

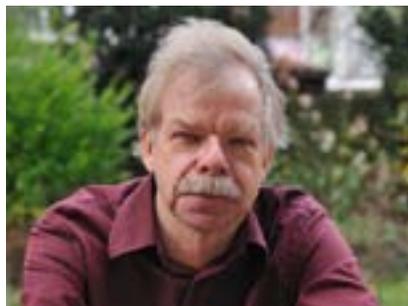
‘The credibility of food science has fallen virtually to zero’





PHILIP DEN OUDEN
 Director of the FNLI (Federation of the Dutch food industry)

‘I agree with Kersten that food scientists shouldn’t publicize any old correlation between nutrition and health. They should have a kind of disclaimer with accountability information about the relationship: the possible causes and what exactly the research results mean for consumers. But I think it’s going too far to say that food scientists need to wait first until they have found a biological explanation for a link between food and health. Incidentally, it should be noted that food scientists are not the only people who need to be more careful in broadcasting research results. The same also applies to information officers, the media and the food industry. Manufacturers are bound by strict rules set by the European Commission. Those rules are so stringent that they have less freedom than scientists in what they can say about links between food and health. A company that has interesting research results for its consumers can hardly report anything on its website or its products, which is a pity. But it is true that in the past manufacturers did sometimes test the permissible limits in the health claims on their products.’



HANS VAN MAANEN
 Science journalist and the man who writes the *Twijfel* (doubt) column in the *Volkskrant* newspaper

‘With Kersten’s diagnosis I agree; the credibility of food science has fallen virtually to zero. But I disagree with the treatment he is prescribing. His solution – only publicizing robust results – sounds good but I don’t think it’s feasible. Once a science journal has published a paper, that information is out in the open. And who is going to decide what is a provisional result and when we can report the definitive outcome? I think the problem really lies more in the poor quality of a lot of research. Food scientists sometimes try and get in the news by going on “fishing expeditions”: they take a big database and look for relationships between X and Y without having an initial hypothesis or ideas about an underlying biological mechanism. I think they can stop now with such random searches. I also feel food scientists – and information officers – should be more open about the size of the risk or health benefit for consumers. For instance, red meat has been linked to cancer and mortality and the newspaper headlines told us the risk of dying early is 13 percent, echoing the researchers. But if you look at the absolute numbers, they are talking about a tiny increase in the individual risk, from 11 per 1000 to 14 per 1000 in a given year for men. If you present the findings that way, everyone will soon see how futile it all is – and then perhaps it won’t make the news anyway.’



DAAN KROMHOUT
 Professor of Public Health Research, Wageningen University

‘I’m sympathetic to Kersten’s point of view but I find his solution impracticable. It often takes years before you can find reliable proof of a biological mechanism explaining a link between food and health. Should food scientists wait all that time before publicizing their research results? If so, they’ll be waiting till the cows come home. It is an epidemiologist’s task to find links – on the basis of a hypothesis – and then look for the underlying biological mechanism. Sometimes you end up qualifying a link you found earlier or having to revise it completely, but that’s inherent in the dynamic scientific process. I don’t think this is damaging the reputation of food science. We have to learn to live with the fact that our research results will always be in the spotlight and the subject of debates as that is in the nature of nutrition – it’s a topic everyone reckons they know something about, just like football. What we food scientists need to do more is place our research results in a broader context and put them in perspective. Often people zoom in on specific results and we get a hype around a single product or ingredient. One moment it’s tomatoes, the next it’s raspberries, chocolate or green tea. This might be a boring message but people will be fine as long as they keep to the general dietary guidelines. You won’t get any healthier by eating kilos of raspberries or tomatoes a week.’ ■