

Nutritionists question study of organic food

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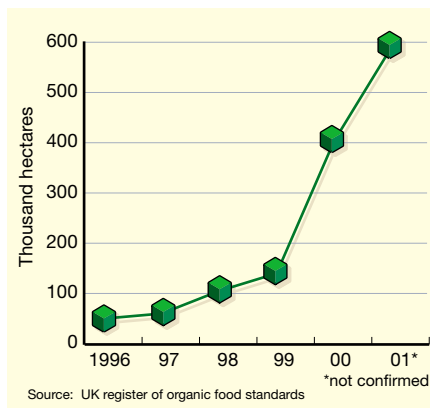
Some food researchers may find the concept hard to swallow, but the British government has pledged to investigate more closely the supposed nutritional benefits of eating organically grown food.

The Food Standards Agency (FSA) says it will host a seminar later this year to consider "how consumer choice between organic and conventional food could be further informed by research". Political pressure has been growing in Britain for some definitive information on differences between the two.

But some food experts have already questioned the value of the exercise, fearing that it will only serve to highlight 'differences' of no real significance to human health. "It seems to me to be quite unlikely that one could do anything reasonably sensible in that area without spending an enormous amount of money," says Eileen Rubery, a public-health specialist formerly with the Department of Health and now at the University of Cambridge.

Sceptics say that direct, comparative studies of organic and non-organic produce are difficult to construct because of extraneous variables such as climate and soil conditions. They also point out that epidemiological studies of people who consume organic and non-organic produce would be expensive and prone to influence by factors such as other lifestyle differences between the two population groups.

The FSA's decision to consider research into the question followed the publication on 6 August of a report by the Bristol-based Soil Association, which was billed by its authors as showing significant differences in the mineral and vitamin contents of organic and non-organic food. The Soil Association is a non-profit organization that promotes organically grown food, which is produced without



Fresh growth: the amount of British farmland under organic cultivation has risen dramatically.

recourse to synthetic fertilizers or pesticides.

The FSA says the new report does not make a convincing case that organic food is safer or more nutritious, but adds that there is enough public interest in the matter to merit further research. Demand for organically grown fruit, vegetables and meat has soared in Britain (and elsewhere in Europe) in the past few years: the UK organic food market is now worth some £600 million (US\$854 million) per year, and the amount of British farmland dedicated to organic farming has risen tenfold since 1996 (see graph).

The image of organic food as a healthy alternative has been boosted in Britain by public scepticism about genetically modified crops, and by the mad cow disease epidemic, which has undermined faith in modern, intensive farming techniques.

The FSA will not elaborate on the kind of research it has in mind, saying only that "a very wide range of options" was being discussed. "It's not possible at this stage to say exactly what that research should be, but it

will have to be something that can establish whether there is or isn't a difference," says a spokesperson for the agency. Some supporters of organic agriculture would like to see long-term human trials, perhaps involving prison populations or people in care homes for the elderly to minimize the effects of environmental factors.

The Soil Association commissioned its report in response to comments made last August by John Krebs, a zoologist and chairman of the FSA. Krebs said of consumers who buy organic produce: "They're not getting value for money, in my opinion and in the opinion of the Food Standards Agency, if they think they're buying food with extra nutritional quality or extra safety."

Soil Association director Patrick Holden claims that the report proves Krebs wrong. "It asserts that there is indicative evidence suggesting nutritional differences between organic and non-organic food," he says.

Holden says the report, prepared by nutritionist Shane Heaton, an independent consultant, is the clearest picture yet of the research carried out so far. Heaton reviewed some 400 previous papers that considered or compared organic and conventional foods, in areas such as mineral and vitamin content, food safety and observed health effects in animals or people. Such reviews have been carried out before, but Heaton says that his study breaks new ground because it excludes many trials that failed to compare the two properly.

For example, of 99 studies that compared the nutrient contents of organic and non-organic foods, Heaton says that only 29 were valid. The rest looked at food that had not been grown according to the strict guidelines laid down by organic groups. Of the legitimate studies, a handful showed significantly higher amounts of minerals, vitamins and dry matter in organic food.

But this is not enough evidence to satisfy other nutritionists. "It's very silly to make claims when so many different factors like the weather, soil and season could result in these changes," says retired food scientist and consultant Ralph Blanchfield. "The old saying that two peas in a pod are alike just doesn't apply; two peas in a pod can still analyse differently."

Some supporters of organic farming also played down the significance of the study, saying that typical consumers of organic food were more likely to benefit from their general eating habits than from extra nutrition in particular foods. "As much as anything it's a question of diet, rather than the individual food items," says Martin Wolfe, an organic farming researcher at Wakelyns Agroforestry, a research farm in Suffolk, UK.

♦ www.soilassociation.org
♦ www.foodstandards.gov.uk



Value for money? Organic food is gaining popularity, but researchers question its touted benefits.