

Functional foods

Their long term impact and marketing need to be monitored



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Functional foods, also known as “nutraceuticals” or “designer foods” are foods containing supplements that are intended to improve health, and they are slowly emerging on supermarket shelves worldwide. The market is divided into two main categories. Firstly, breakfast cereals fortified with fibre and sometimes vitamins and, secondly, dairy or yoghurt drinks and yoghurts with probiotic bacteria. Manufacturers of foods, soft drinks, and drugs have invested heavily in this sector to create a market that aims to cover 5% of the value of food sales worldwide.¹ By 2005, global sales were an estimated \$73.5bn (£36.9bn; €54.3bn) and, although slowing, still on target to reach \$167bn after 2010.² In this week's BMJ, de Jong and colleagues³ discuss various aspects of functional foods—their effectiveness, long term safety and marketing.

There are two broad positions on functional foods. Proponents argue that they are a consumer friendly way to improve diets and fulfil the aim of nutrition as a source of preventing ill health. They see them in the forefront of “personalised medicine” and health through consumer choice. Sceptics argue that the market for functional foods is corporate and driven by the need to diversify and create niche sectors in saturated food markets. They also argue that functional foods are affordable and appealing only to the “worried well,” or worse, could be an extra burden on poor people's finances.

Functional foods were developed and first regulated in Japan in the 1980s,⁴ then spread to North Europe and North America, also affluent consumer markets.⁵ The expansion was shaped by these regions' particular consumer cultures and health sensitivities, not least their experience of food scandals.^{6,7} Consumer organisations have lobbied for controls on health claims, sound verification, and accurate labelling. Companies have concurred, but their main concern has been safety. Twenty years after bovine spongiform encephalopathy, no company wants to risk its reputation or share price on unsafe products.

Regulators and policymakers are right to keep a watchful eye on functional foods. The European Union, the world's largest single consumer market, introduced a regulation on the use of nutrition and health claims for such foods in December 2006.⁸ Companies and scientists have worked with relevant regulatory bodies and organisations at different levels of governance from the United Nations to EU to national governments.^{9,10}

Now that functional foods are in the market place—

with more emerging aimed at “mental performance” and sports, for example—the arguments given by de Jong and colleagues for postlaunch monitoring are sound.³ Such monitoring could take a second look at need and synergistic effects, a research direction raised by the impact of food colourings, for example, which are used extensively in food and soft drinks.¹¹

If evidence is robust that these products improve health, then what was wrong with people's diets in the first place?¹² Attention to global nutrition has historically been on underconsumption, but more recently the reliance on preprocessed foods in industrialised society means that obesity has also become a problem.¹³ So where do functional foods fit? Are they the first phase of fine tuning the consequences of the industrialised diet and lifestyle?¹⁴ Or are they part of the wider struggle to improve diet in populations, which the WHO and Food and Agriculture Organization championed in 2004?¹⁵

Proponents argue that functional foods and drinks allow people to eat and drink more healthily without radically changing their diet.² Certainly, big changes in diet are needed.¹³ Functional foods and drinks may be legal, make money, and reshape the way we think about food and drink. However, at best they are likely to be technical fixes, and at worst, another confounding factor that nutritional epidemiologists will have to unravel for years to come.

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