

Don't mention the 'F' word

The National Institutes of Health's plan for obesity research is undermined by the refusal of the Bush administration to commit to regulation. More attention needs to be paid to public health and less to the interests of the food industry.

“**A**bountiful food supply with abundant choices of relatively inexpensive, calorically-dense food products that are convenient and taste good.” If this phrase conjures up images of fresh fruit, fish and coconuts, think again. It refers to an American diet including many calorie-packed convenience foods, soft drinks and snacks, but in the sanitized parlance of the new plan for obesity research from the US National Institutes of Health (NIH). This bountiful supply, it tells us, is to blame for “the current ‘obesogenic’ environment that promotes increased caloric intake”.

Such vernacular fits a consistent trend across the Bush administration's so-called anti-obesity policies: to tiptoe around calling a hamburger a hamburger, and state unequivocally that many of the foods marketed to the public are the biggest single cause of the obesity epidemic. If government or the NIH tells people to eat less, they must then say less of what, and will be in trouble with the powerful food industry. The administration's new anti-obesity strategy (see page 244) is a series of half-measures, doling out lessons to eat better and exercise more, dressed up as personal freedom and choice. It blatantly shirks committing the government to regulating the food industry.

Individual choice is just not working (see page 252). Obesity is

spiralling out of control, with 130 million Americans, or 64%, overweight or obese. They are desperate for help, spending \$37.1 billion annually on diet books and fads offering instant remedies. Bold government intervention, including compulsory calorie labels and a clampdown on junk-food marketing, is needed.

“We're just too darn fat, ladies and gentlemen, and we are going to do something about it,” Tommy Thompson, head of the US Department of Health and Human Services, told a press conference last week to launch the new strategy. “We need to tackle America's weight issues as aggressively as we are addressing smoking and tobacco.” Fighting talk, in contrast with his department's efforts to dilute the World Health Organization's Global Strategy on Diet, Physical Activity and Health, which highlights the food industry's role in reducing obesity.

Americans deserve better. The medical and other costs of obesity to the United States total more than \$117 billion a year. With obesity overtaking tobacco as the main preventable cause of death, this is an issue of national importance. Scientists and others now need to make their voices heard, and to call on the candidates in the forthcoming US presidential elections to clearly state that they will stop tiptoeing around the elephant in the room in the obesity debate. ■

Making data dreams come true

If new bioinformatics initiatives deliver, cancer researchers can expect a gradual revolution in working practice.

Imagine that for selected cancer patients, biopsies are taken before, during and after treatment, made anonymous and the analyses stored promptly in an accessible fashion. These biopsy samples are subjected to gene-expression and proteomic analysis, and these molecular data are also stored accessibly. Imagine also that the patient's data can readily be compared with those from other trials. And imagine that one can drill down into clinical and other databases in an intelligent search in hours rather than months. One end-point might be the rapid identification of individualized molecular profiles correlated with sensitivity or resistance to therapy.

This vision requires common standards of data storage at each level of investigation, new frameworks for cross-referencing terms and their biological contexts (‘ontologies’) between disparate types of data, and new bioinformatics tools to make it all practicable. The benefits? Quicker routes to identifying patients' individual characteristics that make one treatment more appropriate than another; easier integration of genomics research into clinical trials; and much readier access by basic molecular and cell biologists to the early lessons that can be drawn from even a few patients, as well as from large-scale, randomized clinical trials.

Much of this is beginning to be realized. The US National Cancer Institute last week launched its Cancer Biomedical Informatics Grid project, bringing together the institute's Center for Bioinformatics (NCICB) with translational centres and clinical-trial cooperative cancer centres in the United States (see <http://cabig.nci.nih.gov>). The programme, which costs \$20 million a year, will yield networks of clinical-trial information, tissue data, ontological development

and integrative tools that give researchers ready access to data.

In close collaboration, Britain is embarking on the same route. The strategic body that represents most of the relevant UK funding agencies, the National Cancer Research Institute (NCRI), is this week announcing in *Nature* (see page xii and also www.cancerinformatics.org.uk) a framework for similar developments*.

Although the NCRI efforts will involve centres of excellence, they currently lack the dedicated budget of the NCICB. It is therefore critical that funding agencies collectively set aside millions each year for these developments, and that a combination of strategic leadership and peer review is established, as in the US programme.

One unique part of the UK landscape is both a boon and a potential weakness: the National Health Service (NHS). Its existence gives Britain a greater ability to focus its efforts on standards and storage than the patchwork of state and privately funded health services in the United States allows. But information technology in the NHS is in dire need of development. And whatever happens, it is essential that suppliers of the technology do not gain control over access to public data, as has happened in other contexts.

More positively, despite the need of researchers to protect not only their patients but also their competitive interests, the leaders of these bioinformatics initiatives have been gratified by the positive attitudes to data sharing encountered so far on both sides of the Atlantic. Next, and sooner rather than later, comes the challenge of extending cancer bioinformatics collaboration across the disparate research and health systems of Europe. ■

*The framework's steering panel includes the Editor of *Nature*.