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SUSTAINABLE FOOD AND THE NHS

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NHS trusts spend about £500 million on food and catering, serving several hundred million meals to patients, staff and visitors every year. As part of its sustainable development strategy, the government has suggested that public sector food procurement might help to promote healthy eating and sustainable development. This overlaps with recent policies to improve the diet of the general population and a growing interest in the NHS's role as a good corporate citizen.

However, the structure of the NHS and its performance management framework is changing. In future, the government will not be able to enforce strategies that encourage corporate citizenship or the procurement of sustainable food within the NHS. The onus will be on trusts to interpret how their food and procurement policies can support minimum core standards and public health and sustainable development aims, and to identify how doing things differently might bring health and financial benefits.

In 2004 the Better Hospital Food Programme (BHFP) commissioned the King's Fund to identify opportunities for managing food procurement sustainably and promoting healthy eating in acute hospitals. The project developed a framework for organisations to assess their procurement and catering practices and offered recommendations for policies, menu designs and contract specifications.

Background

NHS trusts spend about £250 million a year on food alone, or £500 million on food, contract and catering staff costs. They serve about 300 million patient meals a year in about 1,200 hospitals, as well as several million meals to staff and visitors (Towers, Eastwood *et al* 2002). Food budgets are tight and food sourcing and catering is cost driven. In weighing up budgets and priorities, a trust is likely to accord its food and catering system, and its environmental and social impact less importance than clinical patient care.

But food management and sourcing are areas of risk for the NHS and for its reputation. Over the past few years the NHS has had to face down news stories about patient malnutrition, poor-quality food and poor hygiene standards in food suppliers (McWhirter and Pennington 1994; Lawrence 2002; Royal College of Physicians 2002, p 7; Timms 2004). These risks reflect the unsustainability of the food and farming industry in Britain – an issue to which the government has given some thought.

In 2002 the Curry Commission described as ‘dysfunctional’ the existing environmental, social and economic impact of farming. It suggested that public sector procurement might be a way to promote healthy eating and sustainable development (Policy Commission on the Future of Farming and Food 2001, p 104), an idea supported by the Department for the Environment, Food and Rural Affairs (Defra)’s sustainable development strategy (Department for Transport 1999; Defra 2005). In 2003, the government launched the Public Sector Food Procurement Initiative (PSFPI) through Defra, to encourage public sector bodies to purchase food in a sustainable way and to help local and small businesses compete for public sector contracts. At the launch of the PSFPI, Food and Farming Minister Lord Whitty urged that food served in public institutions, including hospitals, ‘meet key government objectives on ... nutrition and the environment’, believing that these are ‘quality issues that, with price, must be considered by buyers when looking for value for money’.

This agenda overlaps with recent Department of Health policies to improve the quality of patient food in hospitals and to improve the nutrition and diet of the general population. There is also growing interest in the NHS about its role as a good corporate citizen, with Sir Nigel Crisp, Chief Executive of the NHS, seeing corporate citizenship as one of the top five priorities for the NHS over the next ten years (Department of Health 2004a). The most recent Chief Medical Officer’s Annual Report (2005) highlighted the economic, environmental, social and health benefits of sustainable food procurement by public bodies (Department of Health, Chief Medical Officer 2005).

These intentions are difficult to translate into practice at a local level. In 2004 the Better Hospital Food Programme (BHFP), which aims to improve the quality of patient food, commissioned the King's Fund to identify opportunities for managing food procurement sustainably and promoting healthy eating in acute hospitals. The project looked at activities in selected NHS trusts and cook-chill food manufacturers and developed a framework for organisations to assess and to begin to change their own procurement and catering practices. This publication concludes with recommendations about what could be done to make food procurement and catering more sustainable, so helping the NHS become a good corporate citizen.

Making food procurement by the NHS sustainable

The NHS cannot control the entire food production, distribution and catering system, but it can change what it does internally, and influence relationships that it has with outside suppliers. To understand what might be possible, and to translate the broad definition of sustainable food (see Box 1, p 4) into practical steps for the NHS, we need to understand how it procures food now, and where opportunities for change might lie.

We interviewed the Purchasing and Supplies Agency (PASA), three acute care trusts and three cook-chill manufacturers about their attitudes to and knowledge of sustainability, their criteria for menu design (where relevant) and their food procurement practices. We wanted a 'snapshot' of the food procurement and catering system so that we could identify areas for change.

PASA is an executive agency of the Department of Health. It offers expertise on purchasing and the strategic direction of procurement, and sets up contracts and framework agreements for goods and services used by the NHS, including food. Over two-thirds of all food procured by the NHS is through PASA contracts, and the remainder is independently sourced by individual trusts. PASA is thus a gatekeeper for much of NHS purchasing and is potentially influential in changing specifications for food contracts to ensure better quality and more sustainable food.

Of the three trusts, two produced patient food in-house and one – a recently built private finance initiative (PFI) hospital whose facilities management, including catering, is now run by private contractors – had outsourced its food production and depended on cook-chill meals. All the trusts had kitchens producing fresh food for staff and visitors served in restaurants or cafés. They served between 2,500 and 5,000 meals a

BOX 1 A SUSTAINABLE FOOD SYSTEM

Conventional agriculture has given us access to cheap fresh and processed food all year round but this system has been bought at a cost. Pretty calculates the environmental and health costs of UK agriculture at £2.3 billion (Pretty *et al* 2001). These costs are not included in prices, thus distorting the market by encouraging activities that are costly to society, even if the commercial benefits are large. A sustainable food system would link food production and health goals and would have the following positive environmental, economic and health impacts.

Environmental:

- agricultural production methods that protect biodiversity and soil and water quality, and minimise the use of pesticides and antibiotics
- reduced energy intensity of production
- less waste and more reliance on reducing, reusing and recycling waste
- high standards of animal welfare on farms, in transport and at abattoirs
- greater reliance on locally produced and seasonal food.

Economic:

- greater reliance on more diverse and smaller suppliers
- reduced food miles
- fair and ethical trade and supply chain
- fair, safe and legal conditions of employment
- assurance codes that evaluate environmental impacts.

Health:

- high level of food safety promoted through traceability of food ingredients and food products, transparent labelling and better regulation
- diets based on higher intake of fruit and vegetables, and less meat and dairy produce
- healthier ready-made meals with lower saturated fat, sugar and salt content and more restricted use of additives
- more consumer awareness of the health consequences of how food is grown and manufactured
- better nutritional standards in public sector institutions
- high levels of food hygiene and safety.

day depending on the size of each venue. All the hospitals also provided vending machines serving soft drinks, snacks and confectionary and some also provided fast-food.

The cook-chill providers were drawn from the top five suppliers to the NHS. Cook-chill meals make up 26 per cent of NHS food purchases and are worth about £65 million (Anglia Crown 2005). It is a growing market, as many of the 72 PFI hospitals completed or under construction have no kitchen. As well as ready-made patient meals, the NHS also buys in a range of frozen, chilled and ambient finished products ranging from peeled potatoes to sandwiches and gateaux.

The following sections describe how PASA, NHS trusts and their suppliers view sustainability policies, menu design and sourcing, and suggest ways of making the system more sustainable. The results of our discussions are summarised in a framework for sustainable food procurement (see Table 1, p 6, 7), which links management, catering and procurement issues under NHS control or influence to sustainability issues, and then suggests the key actions and NHS departments that could implement the change. The framework separates issues into fields of operational management, namely corporate policy, purchasing, catering and facilities management and personnel policies.

Assessment of PASA

CORPORATE KNOWLEDGE AND POLICIES ABOUT SUSTAINABILITY

PASA issued a Sustainable Development Policy in February 2003 and has developed a range of policies and practices around its environmental and social impact (NHS PASA 2003). These range from developing new environmental clauses for contracts, and contracts for 'environmentally preferable' products and services, that are 'less harmful to human health and the environment when compared with competing products that serve the same purpose' (NHS PASA 2001).

It also tries to manage its social impact within the framework of EU and domestic procurement rules, by liaising with contracted suppliers to improve their social performance, in areas such as health and safety, promoting fair wages and working conditions, and equal opportunities.

SOURCING POLICIES

PASA believes that EU procurement rules would interpret local preference contracts as discriminatory, and domestic policy would regard restricted competitive tendering as compromising of best value for money. But it has tried to make the health market more accessible to smaller, local

TABLE 1 A FRAMEWORK FOR A SUSTAINABLE FOOD SYSTEM IN THE NHS

	Issue	Sustainability impact	Instrument
GENERAL	Hospital policies on: <ul style="list-style-type: none"> ■ food as healing ■ food budgets ■ local employment ■ sustainable food procurement ■ healthy food policies 	<ul style="list-style-type: none"> ■ holistic ethos to hospital management ■ positive hospital reputation ■ effective operational management ■ promoting a beneficial environmental, economic, social and health impact ■ good corporate citizenship 	<ul style="list-style-type: none"> ■ chief executive ■ board ■ senior management
PURCHASING	Purchasing food produced through environmentally sensitive farming methods	<ul style="list-style-type: none"> ■ protection of soil, water, biodiversity ■ reduced pesticides and antibiotics ■ high standards of animal welfare ■ less energy intensity in production 	<ul style="list-style-type: none"> ■ assurance standards included in procurement contracts ■ PASA contracts ■ hospital contracts
	Purchasing locally produced food	<ul style="list-style-type: none"> ■ reduced food miles ■ stronger local economies ■ diverse supply chain 	<ul style="list-style-type: none"> ■ menu design ■ contract specifications ■ partnership with regional procurement consortia
	Tenders open to diverse small and medium suppliers, as well as national companies	<ul style="list-style-type: none"> ■ opens potential for local sourcing ■ supports local economy 	<ul style="list-style-type: none"> ■ contract specifications ■ contract lots
	High standards of food safety: <ul style="list-style-type: none"> ■ hygiene ■ transparency about food constituents ■ traceability 	<ul style="list-style-type: none"> ■ promotes healthier and safer food production ■ reputation management for hospital 	<ul style="list-style-type: none"> ■ assurance standards ■ clear labelling ■ procurement specifications ■ PASA contracts
	Food product specifications: <ul style="list-style-type: none"> ■ specify nutrients ■ specify food constituents, eg % of meat, water, additives, added proteins ■ transparent labelling 	<ul style="list-style-type: none"> ■ promotes healthier and safer food ■ better value for money ■ reputation management for hospital and contractor 	<ul style="list-style-type: none"> ■ assurance codes ■ clear labelling ■ procurement specifications ■ PASA contracts
	Choice of cook-chill contractor: <ul style="list-style-type: none"> ■ commitment to environmental improvement ■ commitment to local sourcing ■ commitment to good quality food ■ legal workforce paid at or above minimum wage, union recognition 	<ul style="list-style-type: none"> ■ sustainable supply chain management ■ reputation management for hospital 	<ul style="list-style-type: none"> ■ procurement specifications ■ certification process for potential bidders ■ PASA contracts
CATERING	Menu design promoting: <ul style="list-style-type: none"> ■ seasonal foods ■ traditional PDO or PGI foods ■ fruit and vegetable consumption 	<ul style="list-style-type: none"> ■ potentially opens procurement to local businesses ■ potentially reduces food miles ■ promotes better health by improving consumption of fruit and vegetables 	<ul style="list-style-type: none"> ■ procurement contracts ■ nutritionists ■ catering staff

companies, by producing a guide for, and reducing the documentation costs to, potential suppliers tendering for NHS contracts.

It has also developed a ‘patchwork’ approach to fruit, vegetable, sandwich and meat contracts to open up a public sector market to smaller contractors. Rather than a single national contract, a contract is now divided into smaller lots and companies can bid for specific parts of the contract. With its meat and poultry contract, PASA found that national and regional companies bid for tender, and that national companies

TABLE 1 *continued*

	Issue	Sustainability impact	Instrument
CATERING <i>continued</i>	Promotion of healthy eating: <ul style="list-style-type: none"> ■ five-a-day promotions ■ low saturated fat ■ low sugar ■ low salt ■ reduced or no additives 	<ul style="list-style-type: none"> ■ promotes better health ■ supports five-a-day policy ■ offers customer choice ■ nutrition supports clinical treatment ■ nutrition supports staff productivity and welfare 	<ul style="list-style-type: none"> ■ catering ■ dieticians, nutritionists, nurses, clinicians
	<ul style="list-style-type: none"> ■ healthy vending machines offering water, fresh fruit juices, healthy snacks ■ healthy snacks available 24 hours a day 	<ul style="list-style-type: none"> ■ promotes healthier food ■ wider product range promotes customer choice ■ wider product range potentially opens contract to SMEs 	<ul style="list-style-type: none"> ■ catering ■ procurement ■ PASA contracts
	Fairtrade food products: <ul style="list-style-type: none"> ■ tea, coffee, snack foods 	<ul style="list-style-type: none"> ■ fair economic return to producer ■ customer choice 	<ul style="list-style-type: none"> ■ procurement ■ PASA contracts
FACILITIES MANAGEMENT	Low energy use: <ul style="list-style-type: none"> ■ kitchen equipment ■ regenerating equipment 	<ul style="list-style-type: none"> ■ less CO₂ emissions ■ less impact on global warming 	<ul style="list-style-type: none"> ■ catering ■ procurement ■ facilities management
	Reduce water use	<ul style="list-style-type: none"> ■ reduce waste of finite resources ■ reduce hospital costs 	<ul style="list-style-type: none"> ■ facilities management ■ catering
	Reduce waste <ul style="list-style-type: none"> ■ reduce and recycle waste ■ buy recycled goods ■ reduce packaging 	<ul style="list-style-type: none"> ■ reduce waste of finite resources ■ reduce hospital waste disposal costs 	<ul style="list-style-type: none"> ■ catering ■ procurement ■ facilities management ■ PASA contracts
PERSONNEL	Protected meal times for patients	<ul style="list-style-type: none"> ■ promotes quicker recovery ■ better patient care ■ improves patient turnover and reduces hospital costs 	<ul style="list-style-type: none"> ■ nursing staff ■ ward housekeeper
	Protected meal times for staff	<ul style="list-style-type: none"> ■ promotes better staff welfare and productivity 	<ul style="list-style-type: none"> ■ personnel ■ senior management
	Local staff recruitment	<ul style="list-style-type: none"> ■ supports local labour market ■ ownership of local institution by local employees 	<ul style="list-style-type: none"> ■ personnel department
	Staff training about: <ul style="list-style-type: none"> ■ nutrition, cooking, customer care ■ skills escalator 	<ul style="list-style-type: none"> ■ NHS as a model employer 	<ul style="list-style-type: none"> ■ personnel department

were not always equally responsive to local conditions. Even with lots, and with more suppliers, PASA found it could ensure consistent quality across the regions as its products were from suppliers assessed according to EN45011 standards for each food area (among which is the Red Tractor assurance scheme based on statutory minimum standards for food safety, hygiene, animal welfare and environment) (Defra 2004). PASA does not know if the patchwork approach has increased the number of contractors, but it believes that by opening up the bidding field, the tendering process is fairer.

PASA offers a few organic and fairly traded options within its framework contracts, where these meet value-for-money criteria. For example, it currently has an organic carrot supplier for its National Fruit and Vegetable Scheme (though this contract is not open to the NHS), and it can provide organic meat, poultry, fruit and vegetables on current contracts. It also sources all its tea from the Tea Sourcing Partnership, which represents major UK tea suppliers and is a member of the Ethical Trade Initiative.

DISCUSSION

PASA has put considerable effort into making itself, as an organisation, more environmentally responsible and into opening its contracts to a wider range of potential contractors. The impact of its policies is unknown as, at the time of writing, it had not assessed whether trusts were purchasing differently. Critics from local food organisations argue that PASA could do a lot more. They argue that PASA should be more explicit about its commitment to sustainability in its contracts, and should include sustainability in its evaluation criteria. They also point out that other countries, especially Italy and France, do not see EC procurement rules as an obstacle to local sourcing by the public sector (Morgan and Morley 2002; Peckham and Petts 2003). Critics also suggest that the Red Tractor assurance scheme does not encourage sustainable agriculture, and allows for very intensive farming which ignores environmental and animal welfare impacts (Levett-Therivel, Sustainability Consultants 2004).

To become more sustainable, PASA should consider developing contract specifications promoting:

- environmentally sensitive farming methods
- foods produced with fewer antibiotics and pesticides
- food products, snacks and cook-chill meals with low saturated fat, sugar and salt
- food products, snacks and cook-chill meals with clear labelling, detailing water content and type of additives, starches and modified proteins
- energy efficient and environmentally preferable catering and kitchen equipment
- development of second- and third-tier suppliers who may offer organic or local food products.

Assessment of trusts

CORPORATE KNOWLEDGE AND POLICIES ABOUT SUSTAINABILITY

None of the trusts had policies about sustainability or corporate responsibility. The individuals interviewed also varied in their knowledge and attitude to sustainability and sustainable food procurement. One manager was unaware of Defra policy around sustainability and procurement, whereas another knew of it because environmental issues

were of ‘personal’ and ‘moral’ interest. The PFI facilities manager felt his priority was to do ‘what was good for the business’.

Despite the long history of environmental policies in the NHS, only one facilities manager was aware that his trust had an environmental policy, which ‘wasn’t really publicised much’. None of the trusts had energy or water usage policies in the kitchen or had monitoring systems that allowed facilities management to isolate and analyse kitchen usage.

The trusts were concerned about waste and tried to limit the number of patient food portions that went uneaten because of poor order management. Domestic waste was binned or put down waste disposal units. One of the trusts recycled its deep-fryer oils on its retail side, and supported hospital efforts to recycle cardboard, paper, cans and glass.

MENU DESIGN

Trusts were asked about their criteria for menu design to assess whether seasonality and nutritional issues were significant.

The trusts operated on a two- or three-week menu cycle for patients, with items drawn from the Better Hospital Food programme selection, and with the catering manager conferring with a trust dietician on menu design and NHS guidelines on calories and nutrients.

The key criteria were cost, quality and ‘choice and options for patients’. This meant providing soft food for patients with throat and mouth problems, children’s meals and ethnic meals in areas where there was a diverse ethnic population. There were also low-sugar and low-fat options for patients with diabetes or heart problems, for example, but no over-arching policies limiting fat, salt, sugar or additives to food.

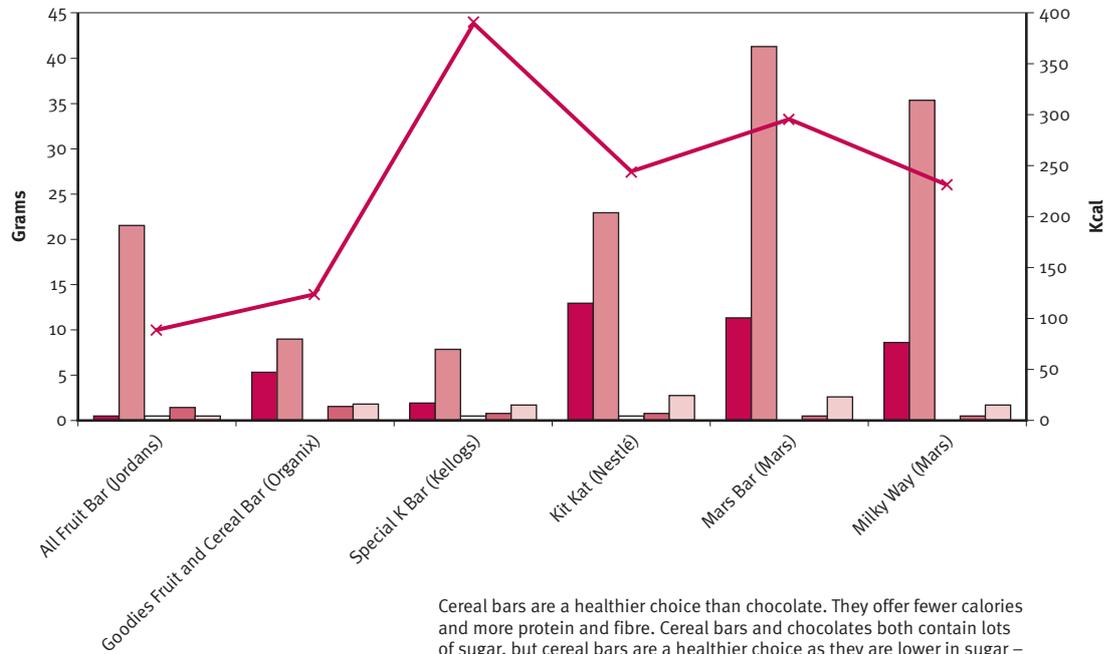
Retail outlet menus also followed a menu cycle. One trust offered some summer and winter options – for example, steak and kidney pie in winter and poached salmon in summer, but not necessarily seasonal fruit and vegetables. Another trust said seasonality guided the menu options for fresh fruit and vegetables.

Retail menu design was driven by price and what managers felt would sell, rather than nutritional values and healthy options. None of the hospitals had nutritional policies for the retail outlets. Catering managers felt they could not ‘dictate what people eat’ and that people might not want healthier menus.

VENDING MACHINES

Vending machines are another food source for staff, visitors and patients in the hospital. The machines sold canned soft drinks, crisps and chocolate. One hospital also provided hot meals – such as chicken rolls, meat kebabs and cheeseburgers or chicken nuggets with fries – from

1 NUTRIENT VALUES FOR SELECTED CEREAL AND CHOCOLATE BARS (PER PORTION)



Source: Product information

Cereal bars are a healthier choice than chocolate. They offer fewer calories and more protein and fibre. Cereal bars and chocolates both contain lots of sugar, but cereal bars are a healthier choice as they are lower in sugar – and the sugar is usually fruit sugars rather than added sugar – and lower in fat, especially in saturated fats.

vending machines for night shift staff. Another provided sandwiches and microwave meals for theatre staff. Access to nutritious food on night-shift is a key issue for junior doctors, nurses and ambulance crews, and vending machine options do not necessarily meet this need (Interviews with Stewart Cooper, BMA, 22 July 2004 and John Mercy, Nursing Medical Council, 17 August 2004).

One catering manager believed its machines provided healthy options, offering staff and visitors fresh fruit, fruit juices and sandwiches. The other managers believed a ‘healthy’ vending machine would be unprofitable.

The vending machines were a profit centre for the hospital and the hospitals interviewed had between 50 and 90 machines on site. The hospitals were tied into contracts with companies that owned or managed the vending machines and filled them for a percentage of the profit. This was likely to make efforts to change the vending content more difficult.

A nutritional analysis of commonly available vending machine snack foods showed that they were energy dense and high in sugar, saturated fats and low in protein. These were compared with a selection of healthier snack foods available in supermarkets that were low in calories,

saturated fat and sugars and high in protein, fibre and ‘good’ fats (that is, mono- and polyunsaturated fats).

SOURCING POLICIES

The trusts’ ability to supply new menus depends on their contract specifications and sourcing policies. PASA’s efforts at making its service more sustainable were not reflected at trust level. Food contracts were driven largely by price and quality. None of the trusts had policies about procuring from local, or small and medium-sized businesses. Neither did they have policies about the procurement of Fairtrade products, or the procurement of food certified by environmental or stewardship assurance schemes. One trust had a policy on genetically modified food and required that suppliers provide GM-free food, but this was ‘just a policy and no one checks that it works’. Another stocked Fairtrade chocolate as the brand was popular. All the trusts regularly bought fish but were unaware of marine certification schemes. Their supplies included cod, haddock and tinned tuna, which the Marine Stewardship Council (MSC) regards as fish to avoid as stocks are depleted or harvested using environmentally damaging techniques (Brown 2005).

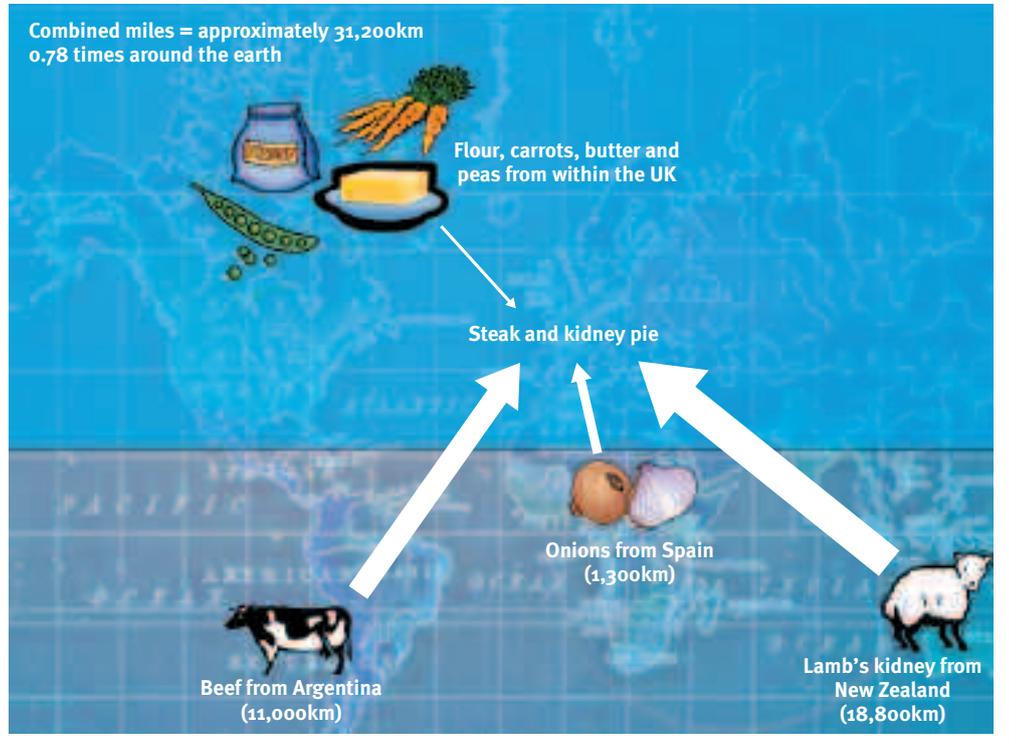
FOOD MILES

Existing food procurement practice means that hospital food travels long distances. We analysed the food miles travelled by five popular hospital meals. The data was pooled from information provided by some of the trusts and cook-chill manufacturers about their vendors. This specified distributors or wholesalers rather than production origin. The distributors were mainly UK-based, and tended to source vegetables such as carrots, potatoes and leeks, and dairy products from the UK, and sweet peppers, tomatoes and onions from Europe. They import beef from Argentina and lamb from New Zealand, although some meat, in particular chicken, is sourced from the UK or Europe. The origins of fish varied from the UK for haddock and salmon, to Europe for cod and sometimes New Zealand for hoki. Dishes dependent on ingredients imported from around the world had high food miles, whereas those using ingredients from Europe, or even better from the UK, had lower food miles. From farm to kitchen:

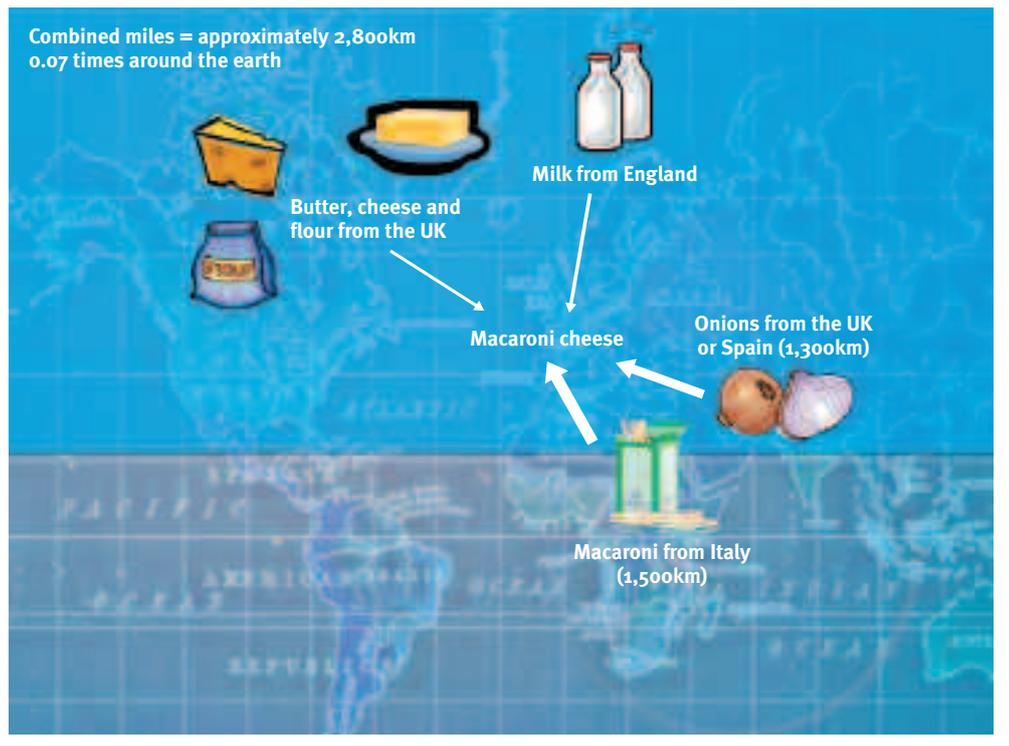
- steak and kidney pie ingredients travelled about 31,200km
- lasagne ingredients travelled about 27,800km
- chicken casserole with rice travelled about 3,300km
- macaroni ingredients travelled about 2,800km.

Figures 2 and 3 (see p 12) offer an impressionistic view of the impact of far-flung distribution chains. Of course, whether food is transported by plane, lorry, train or ship has an impact on carbon dioxide emissions. Food preparation also has an impact on the environment. Buying potatoes already peeled and partially cooked may mean that they have to come from Holland. Buying frozen vegetables adds carbon emissions of 2kg per kilogram of food – almost on a par with flying the vegetables

2 FOOD MILES FOR STEAK AND KIDNEY PIE



3 FOOD MILES FOR MACARONI CHEESE



across the world. Using disposable containers for pre-prepared ingredients and for cook-chill or cook-freeze meals also wastes resources beyond the impact of the food in the containers (T Wakeman, personal communication 2005).

PERSONNEL POLICIES

Only one trust saw its catering staff as part of the healing mission of the hospital and believed this gave the catering staff higher esteem as their work felt useful. Each of the trusts offered basic skills training in the induction period, and two supplemented this with opportunities for further career development as part of the NHS skills escalator. For example, one trust offered a National Vocational Qualification (NVQ) in hospitality and a certificate in management for catering staff.

DISCUSSION

Despite national strategies about corporate responsibility and public sector procurement and sustainability, trusts had limited knowledge about food sustainability policies and were unclear about how to become sustainable. This matched their limited approach to environmental policies, despite their potentially heavy use of water and energy in catering operations, and the costs of disposing of food and catering waste.

Menus were cost driven. Patient menus were shaped by nutritional guidelines, but retail outlets aimed at staff and visitors had none. Staff eat on hospital premises regularly and food quality and access may affect their diet and nutritional intake. Food quality and access are also indicative of corporate attitudes to personnel. Menus were also standardised to fit the two- or three-week cycle, which meant that catering managers do not build seasonality into their menus or ordering schedules.

Sourcing policies were also cost driven and trusts had not reaped the benefits of PASA's efforts to open national contracts to diverse suppliers or to develop organic and Fairtrade options, as they were either unaware of these options, or did not have policies that might make them more likely to support these contracts. The result is a food system that favours standardised meals, and ingredients that are sourced internationally with little awareness of the potential economic, social, and environmental and health impacts.

That change is possible is demonstrated by projects in Cornwall hospitals and four London hospitals (see Boxes 2 and 3, pp 15, 16). The two projects are unusual in that they have both received generous funding allowing them to invest the time and resources in understanding their local markets and their suppliers and gradually introduce changes. Most trusts will not have access to such funding; however, the lessons and models emerging from the case studies are applicable and transferable to other trusts.

The success of both projects has depended on their:

- finding champions in senior management to support them
- understanding their own needs and researching how local agriculture and suppliers can meet this
- communicating the NHS tendering process clearly and to a wider range of potential suppliers
- communicating the aims of the project to staff, visitors and patients.

Both projects have also clearly identified their own needs and researched how local agriculture and suppliers can meet this.

- The Cornwall project discovered that local cauliflower and goats' cheese producers could not sell produce that was slightly above or below the supermarkets' size specifications – despite having met all other quality standards. For hospitals that needed cauliflower florets, or slices of cheese, size was unimportant. The farmers discovered a new market, and the hospitals got high-quality, local produce.
- The London project found that small one-off contracts were expensive for participating hospitals and unattractive to suppliers. The project manager decided to recruit new local and organic producers to supply distributors with existing contracts with the hospitals. This minimised the costs to the hospitals, used existing supply and delivery infrastructure, and broadened the supply base of distributors. It has written sustainability clauses into new catering contracts.

Hospitals in the US have also demonstrated that it is possible to purchase locally grown, sustainable and nutritious food that is better for human health and for the environment. Some hospitals have developed patient menus focusing on the use of local ingredients, others have decided to buy beef raised without use of hormones or antibiotics, or have developed healthier vending machines. These hospitals believe that not only do they gain nutritional, health and environmental benefits, but they also value the differentiation from their competitors, the positive publicity, better employee morale and the patient satisfaction that they have achieved. They also found that sustainable purchasing did not mean higher costs: they developed menus needing less meat, or let 'unhealthy' foods subsidise the cost of 'healthy foods' and so encouraged employees to buy healthier, and cheaper meals (Institute for Agriculture and Trade Policy 2005).

Numerous European cities and hospitals have also shifted a portion of their food budgets to local and organic food. Where organic food has been more expensive, they have changed menus to include less meat and more seasonal produce (Morgan and Morley 2002; Peckham and Petts 2003).

BOX 2 CORNWALL FOOD PROGRAMME (CFP)

The Cornwall Food Programme (interviews with Nathan Harrow, project manager, CFP, and J Thatcher, 2004) hopes to increase its local food purchasing to 75 per cent by developing its local food chain. The project involves 23 hospitals in five NHS trusts in Cornwall and has a budget of £300 million covering the construction cost of a food-processing unit to make cook-chill meals for all Cornish hospitals, and the costs of developing a local supply chain.

When patients started questioning a hospital catering manager about the origin of sandwiches sold at St Michael's hospital in Hayle in 1999, he decided to look for a local supplier. Since then the Royal Cornwall Hospitals Trust has developed contracts with regional suppliers for sandwiches, vegetables, milk, cheese and cheese products, yogurt, ice cream, meat and fish. It also has plans to introduce an organic meal option in commercial outlets for staff and visitors, and an organic fruit and vegetable box scheme for patients, staff and visitors, to encourage healthier eating.

Developing the scheme required senior management support. The catering manager had to persuade the chief executive and trust boards that sourcing goods differently involved no additional risks for patients and that food costs would not increase. Support from national figures, such as PASA's chief executive and Lord Whitty, Minister for Food and Farming, also strengthened their case. The catering manager also had to convince local suppliers that the public sector offered valuable three- to five-year contract opportunities. This meant developing links with local food networks, local media, and marketing and trade associations. CFP held 'Meet the Buyer' days to explain their needs, and get to understand the market. Now CFP advertises upcoming contracts through local media, contacts potential suppliers already registered on its database, and advises potential applicants about the tendering process.

The scheme claims it has increased local sourcing from about 30 per cent to 50 per cent of supplies, and an independent assessment confirms that meal costs have not increased. The trusts spend about £1.2 million annually on food, of which 60 per cent is spent locally – up from 40 per cent in five years.

BOX 3 LONDON FOOD LINKS (LFL) FOUR HOSPITAL PROJECT

London Food Links and the Soil Association began working in January 2004 on a two-year pilot project to introduce local and, if possible, organic food to make up 10 per cent of retail and patient catering budgets (Interview with Emma Hockridge, co-ordinator of the project, and Westley Consulting Ltd, 2004). London Food Links is part of Sustain, an alliance of organisations advocating better food and farming and the Soil Association, which supports organic farming. The project involves four hospitals: Ealing (canteen), St George's (canteen), the Royal Brompton (canteen and ward catering) and the Royal Bethlehem (canteen and ward). The project is funded by Defra and the King's Fund.

The project has successfully trialled supplies of fruit from the Kent/Sussex area, tomatoes from West Sussex, mushrooms grown under the North Circular Road in Newham, organic milk and organic beef from Hampshire, free-range eggs and pre-prepared vegetables from Bank Farm, a co-operative in Kent. The Brompton hospital, for example, launched its new organic options with a Brompton Breakfast morning offering organic porridge, free-range eggs and fruit salad from local suppliers, and organic coffee, milk, bacon and sausages, and low-salt baked beans. Promotional events in the hospitals, such as an apple tasting day with locally grown and rare varieties, highlighted the links between healthy eating and sustainable food. The project has also organised seminars and training events for suppliers and catering staff on public procurement and the tendering process, organic certification and farm visits. It has also set up a 'replication network' to offer advice and information to other hospitals and organisations planning to introduce local and organic food into their supply chains.

What can other trusts do to make their food and catering system more sustainable?

A starting point for any organisation is chief executive, board and senior management support for its guiding policies. In a hospital this means devising policies encouraging the provision of healthy food, recognising that a good diet is an important part of patient healing and contributes to staff productivity, and promoting sustainable catering and procurement as an element of good corporate citizenship and effective business management. These policies would be indicative of a holistic approach to food policy, and would also inform contract specifications and purchasing decisions.

A health-promoting hospital should support national strategies around diet and nutrition such as the Five-A-Day campaign and, through healthy menus, support targets to reduce heart disease and cancers, which are partly diet related. Thus trusts should devise healthy eating policies and ensure menus encourage healthy choices by the selection of foods on offer. They can promote fruit and vegetable consumption, provide low-fat, low-salt, low-sugar meals, and offer healthy vending options instead of chocolates, crisps and fizzy drinks (see Box 4, opposite). Seasonal menus can also be used to reduce purchasing costs, as fresh produce is bought when prices are low, and as a way of developing local supplier networks.

Trusts also need to develop sourcing policies linking food procurement to nutrition and sustainability and work with PASA to develop contracts specifying this. For example, food specifications could define nutrient, additive and nutritional content. Sourcing policies can also link food procurement to more sustainable farming, for example, specifying certified environmentally sensitive farming methods, or developing measurable sustainability criteria for the tender specification, bidder certification process and evaluation. To open opportunities for purchasing locally produced food, tenders should be open to diverse suppliers, or can specify local variants and certified traditional foods and their equivalents, or freshness and delivery times.

Critics argue that the organic sector is too small and expensive to support the large-scale changes needed, and that local food lacks an infrastructure for city-based organisations to access it easily. The criticism is fair but, as case studies will show, change is possible, and if scaled up has great potential benefits (see Box 5, below).

A holistic approach to food policy also means looking at employment policies. As a model employer the NHS should encourage recruitment of local staff, staff training so individuals can move up the skills escalator, and race equality and equal opportunities. Good personnel policy should also ensure that staff take their meal times. Good diets promote productivity at work as well as general health and well-being.

BOX 4 PRINCIPLES OF HEALTH VENDING

Healthy snacks are:

- nutrient dense rather than energy dense
- low in fat, especially saturated fat
- high in complex carbohydrates
- low in added, refined sugar
- high in fibre
- low in salt
- low in additives.

BOX 5 THE BENEFITS OF SUSTAINABLE PURCHASING

Sourcing differently may reduce the environmental, economic and health impacts of the NHS's food supply network. Studies show that:

- conventional farming adds 12 per cent in environmental costs to the price of an average British food basket, whereas organic, locally produced food adds only 1.3 per cent (Pretty 2001; Pretty and Lang 2005)
- if all farms in the UK became organic, then the environmental costs of agriculture would fall from £1.5bn to less than £400m, saving the country £1.1bn annually (Pretty 2001; Pretty and Lang 2005)
- local supply infrastructures dependent on diverse suppliers support stronger local economies (a New Economics Foundation (NEF) study found that every £10 spent with a Cornish vegetable box scheme was worth £25 for the local area compared with £14 when the same amount was spent in a supermarket (Jones 2001))
- if UK consumers sourced all their food from within a 20km radius, then environmental and congestion costs would fall from over £2.3bn to under £230m, saving £2.1bn (Pretty 2001; Pretty and Lang 2005).

Assessment of cook-chill food manufacturers

CORPORATE KNOWLEDGE AND POLICIES ABOUT SUSTAINABILITY

The cook-chill companies monitored government policies on food safety, but not sustainable agriculture, procurement or corporate social responsibility. Only one company had assessed its own operations against the targets of the NHS Food Procurement Initiative. The companies viewed sustainable food procurement as an ‘ideal world’ scenario and believed sustainable practices would be costly to introduce.

The companies said they were driven by customer demand. Some trusts had asked if they had sustainability or environmental policies but did not specify what this meant for the product or service. The companies felt they could not invest in changes unless they were sure that these would be recognised by their customers and by the market as bringing greater value.

The companies had their own environmental policies, or relied on those of their parent company, but these were broad and non-specific. Employees who were not responsible for environmental issues had limited knowledge of them. The companies had done little to monitor their environmental and social impacts, other than where they were easily measurable, and had a direct economic cost, such as their use of energy.

MENU DESIGN

The companies do not plan trusts’ menus but offer them a wide selection of products from which to choose. They followed government nutritional guidelines for hospital food and used their own dieticians. Their key criteria for meal design were appearance, palatability and cost. Seasonality played no role in determining the range of dishes available at any time in the year and they believed that this would limit the choice of dishes that they offered to trusts and make it difficult to maintain consistent quality. They also did not have policies on sugar and salt content but relied on approved meal specifications.

SOURCING POLICIES

Companies’ main criteria for choosing their suppliers are product quality, service and delivery, and price and payment terms. They also consider food safety, nutrition and value for money. They expressed little interest in the environmental performance of their suppliers, which they felt would not add value. The companies had no policies on sourcing local food, and were concerned that this might have steep set-up costs.

Just one company offered a limited organic range and MSC-certified fish dishes, although this was not on offer to the NHS. None of the companies had policies about pesticide and antibiotic use or animal welfare and did not use fairly traded products. Again the companies could not see the business value of these policies and, as developing new supply chains needs resources, they wanted a guarantee of future demand.

The companies relied on assurance schemes for food safety and quality to meet their legal obligations. Suppliers had to be registered with a local authority or have an environmental health officer report and comply with standards such as the NHS Code of Practice Audit or British Retail Consortium registration. They knew of the Red Tractor certification scheme but did not purchase from accredited suppliers as a matter of policy.

PERSONNEL POLICIES

The companies tended to employ local labour, and one company believed its staff turnover was lower than the industry average, because of a profit-linked pay policy. The companies provide on-the-job, in-house, NVQ or higher-level training in areas ranging from food safety and manufacture, to warehousing and business administration. They supported employee representation and union representation with varying levels of enthusiasm.

DISCUSSION

Sustainable development – the idea that growth should meet today’s economic, social and environmental needs, without compromising the needs of the future – has been on the international business agenda for the past decade. Leading multinationals have found that eco-efficiency reduces waste, lessens a company’s environmental impact and improves the balance sheet (Arnold and Day 1998). Environmental and social stewardship also reduces companies’ potential legal liability and seems to correlate with them out-performing their peers financially (WWF 2004).

The food and drink manufacturing industry in the UK has a gross output of over £67 billion – about 15 per cent of the total manufacturing sector – and employs around half a million people, about 13 per cent of the manufacturing workforce (Food and Drink Federation 2004). Just in terms of size, it is potentially influential. The Food and Drink Federation made sustainable development a priority area in 2004, and developed indicators for the industry to measure and report on their performance but it is too early to assess if this has had an impact.

Certainly the interviews with cook-chill manufacturers suggest that they have done little to assess their wider social or environmental impacts, and have not explored the potential benefits of sustainability, pleading higher costs. The companies consistently describe themselves as customer focused and demand driven. However, when it came to ‘being sustainable’, they were not sure about what they were being asked to provide. They wanted trusts to clarify what products, services or measurements they were seeking.

Changing the way companies operate and manage their supply chains is an enormous challenge, which the industry is only just beginning to think about. Examples of good practice are isolated, rather than industry-wide, as elements of sustainable food procurement conflict with business models that emphasise homogeneity and scale. Nevertheless, examples illustrate the potential for innovative thinking and service redesign.

- *Transparency* Sainsbury's reports publicly on its environmental performance, including carbon emissions and transport (Sainsbury J plc 2001).
- *Local sourcing* Booths, a chain of 26 stores in the north-west, actively promotes regional foods. It sources about a quarter of its supplies from producers in Lancashire, Cheshire, Cumbria and Yorkshire and has a large enough supply base to offer consumer choice and a stable supply. It believes that access to its stores keeps many small, local farmers afloat and in return it gets loyalty from suppliers and customer (Wolk 2004).
- *Sustainable sourcing* Unilever, owner of the Birds Eye brand of frozen and ready-to-serve meals, committed itself in 1996 to purchasing fish from sustainable sources for most of its products by 2005. The decision was commercially driven as it feared its future was threatened by dwindling fish stocks. Unilever now sources from fisheries that have or are working towards MSC certification (Unilever 2005a, 2005b).
- *Pesticide phase-out* The Co-operative, Marks & Spencer, Sainsbury's, Kwik Save and Somerfield signed up to Friends of the Earth's Risky Chemicals Pledge. The pledge commits them to phasing out specific pesticides, including hormone disrupters and organophosphates, used by their suppliers in the UK and overseas for their own brand products (Friends of the Earth 2004).
- *Environmental protection policies* Sainsbury's works with selected suppliers on developing environmental action plans, which are regularly reviewed. Nearly 700 UK farms, which supply Sainsbury's with its fresh and frozen produce, must also have a Farm Biodiversity Action Plan. This is now being rolled out to overseas suppliers. The Plan promotes wildlife and habitats through more environmentally sensitive farming and conservation of native plants and animals and their habitats (Sainsbury J plc 2003).

These examples demonstrate that change is possible where companies are innovative and see the benefits of change. In some cases companies worked with their suppliers over several years, introducing changes to sourcing, pesticide use or environmental protection policies. This seems a useful start for prepared food companies. Positive change is possible, but it also needs to be systematic. Cook-chill companies need to begin systematically analysing the sustainability impacts of their business and supply chains, possibly working with non-governmental organisations, who bring a wealth of experience with them. Packaging and food sourcing are likely to be among their bigger impacts.

The DH, National Patient Safety Agency (NPSA), PASA and NHS trusts also need to be specific about new needs and standards, and send clear messages to food contractors about their new expectations through contract specifications. Food contractors can then work with existing and new suppliers to develop new food products and services that benefit both parties.

Contract bidder selection criteria can encourage food processing companies to use their resources, energy and water more efficiently and promote recycling or use of products with recycled content. Specifications can assess whether bidders have environmental, safety, training and equal opportunities policies that are in line with trust policies. For environmental performance a tender can ask that bidders have an Integrated Pollution Prevention and Control (IPPC) permit, which has covered the food industry since June 2004. It covers issues such as minimising waste at source, efficient use of energy and prevention and reduction of emissions. Compliance with Environmental Management System ISO 14001 allows manufacturers to meet the IPPC standard. Potential subcontractors, especially if working on a trust site, should have environmental, safety, training and equal opportunities policies in place that are in line with trust policies. A purchaser could ask for suppliers with SA8000 certification, an international accreditation certificate, which guarantees that a business adheres to high social standards, especially in relation to labour conditions.

To ensure the nutritional value of food, tender criteria need to specify the nutrient content of meals and food products, and specified percentages of added water, additives, starches and modified proteins. Specifications can also ask for food products produced through assurance schemes that promote more sustainable agriculture.

Paths to sustainable procurement

There is no single path to sustainable catering and procurement, and the framework in Table 1 (see pp 6, 7) shows that there are many elements that create a sustainable food system in a hospital. NHS organisations can use the framework to assess their own operations and then, having defined their priorities, use the framework as a guide for changing practice. As an example, we offer three possible models derived from three different starting points.

- *The health protection model* For a trust that decides its mission is to protect and to improve health, food policy is a significant way of limiting its environmental impact and promoting a good diet. This model focuses on the purchasing sections of the framework. Its contract specifications rely on assurance schemes restricting pesticide and antibiotic use for crops and livestock as these are detrimental to human health. It develops seasonal menus to indirectly promote local procurement, with the aim of reducing food miles and air pollution and related respiratory disease. It also develops specifications for prepared and processed foods with low levels of saturated fat, salt, sugar and specified levels and types of added water, proteins, starches and additives.
- *The healthy menu model* focuses on catering and develops new menus for retail and patient services that offer a range of foods containing low levels of saturated fat, salt, sugar and additives.

It integrates seasonality into menu design to encourage fruit and vegetable consumption, and to lower the cost of purchasing fresh ingredients. It opens up its vending machine contracts to offer customers healthy snack options. It emphasises protected meal times for patients to ensure weak patients are fed, encourages staff to take meals, and makes healthy food available to night staff. This model will not necessarily promote local procurement, or food grown in a more environmentally benign way, but it will encourage better diets.

- *A health-promoting supply chain model* looks at opening public sector contracts to a wider range of small and medium-sized businesses, and suppliers of organic, local or Fairtrade products. It suggests dividing large contracts into lots or developing new second- and third-tier suppliers for existing distributors. Trusts may partner together, or with local authorities, or work through regional consortia, to develop new, secure, local supply chains. The model includes existing statutory or industry standards on environmental issues in the selection criteria for contract bidders. This model could promote local suppliers and particular assurance schemes, and could encourage environmentally responsible contractors, but would not affect menu choices and food quality.

Trusts may also develop other models, depending on the operational vision driving their organisation. In trusts where senior management is unenthusiastic about food standards and catering, catering staff could develop a model which, although it might not focus on food procurement, can influence it.

- *Low energy model* Trusts are supposed to reduce their energy use and use renewable energy. Extended to food procurement, this could mean energy-efficient catering and regeneration equipment, specifications for assurance schemes, which foster low energy use, and low energy policies as part of criteria for contract bidders.
- *Good employer model* NHS trusts are supposed to become model employers and offer flexibility of employment and training opportunities for staff. Applied to a hospital food system, this could mean assessing the conditions and training for in-house catering personnel and ensuring that the contractual obligations of sub-contracted services operating on hospital premises uphold hospital employment practices. It could also mean creating a staff food policy, and providing affordable, fresh, nutritious meals for staff, especially those on night duty.

These examples show that with a little thought and creativity, trusts can fashion the framework to match their local needs and aspirations. In the most ideal world, however, trusts should assess and make changes through their entire food system following the framework in Table 1 (see pp 6, 7).

The structure of the NHS is changing and by 2008 the government intends all hospitals to be foundation hospitals. The government will not be able to enforce strategies for being a good corporate citizen or procuring sustainable food on the NHS, but will have to rely on indirect pressure from commissioners.

With the dissolution of NHS Estates, the Better Hospital Food Programme functions are now split between the Department of Health and the National Patient Safety Agency (NPSA), which oversee policy and implementation respectively. The quality of hospital food is now guided by the performance framework outlined in *Standards for Better Health* (Department of Health 2004b). Standard C15 requires that health care organisations providing food should ensure that 'patients are provided with a choice and that [food] is prepared safely and provides a balanced diet'. The public health standard (C22) has a broader remit to improve health and reduce health inequalities. These standards set the minimum level of service patients can expect and are the basis of performance management assessments carried out by the Healthcare Commission.

The core standards do not directly support sustainability. The public health developmental standard on corporate citizenship may help shift the balance. It will go out for consultation in late 2005 and will be introduced in 2006/07. The Sustainable Development Commission has also developed a Good Corporate Citizenship Assessment Model for trusts to assess their activities and to develop programmes for change – though on a voluntary basis. The new performance management framework shifts the responsibility onto trusts to interpret how their food and procurement policies can support public health and sustainable development aims. This means that trusts need to look holistically at their food and procurement systems in order to identify how doing things differently could bring health and financial benefits.

Procurement is also changing. Regional centres of excellence, local government purchasing consortia and sub-regional NHS collaborative procurement hubs have been set up. Some fear that the new drive to efficiency will undermine policy drives for sustainability. However, some centres of excellence, such as that in the north-west, have made sustainability and sustainable local communities part of their workstreams (Association for Public Service Excellence 2005). This suggests that opportunities may arise to develop professional procurement expertise around sustainability and food procurement in these new bodies, and that regional consortia and collaborations between NHS trusts and local authorities may help strengthen the demand for locally produced food.

However, there is a gap between intention and practice. A recent report by the National Audit Office found that strategic commitment to sustainable procurement by central government departments was not translated into operational practice. Procurement teams felt the main barriers were a conflict between sustainable procurement and reducing costs, a lack of leadership on these issues, failure to integrate sustainability into standard procurement processes and a lack of training and guidance about how to implement it (National Audit Office 2005a). The NHS is likely to experience similar problems. The National Audit Office is currently examining food procurement in the public sector, including the health service, with a particular focus on improving efficiency without compromising nutritional quality and sustainability. The report is due in 2006 (National Audit Office 2005b).

Organisational inertia works against change. Regulation and performance management can help shift the balance, but evidence that sustainable food procurement brings financial, as well as environmental, social and health benefits, can also be a driver for change. The changes PASA has made to contracts and the contracting process are cost neutral for trusts, and the case studies also show that it is possible to procure differently and without added cost.

Recommendations

Recommendations for the NHS

- ✓ If the DH and the NPSA are to encourage sustainable catering and procurement in the NHS, then they need to:
 - urge hospitals to develop healthy eating policies for staff and patients
 - support Defra's Public Sector Food Procurement Initiative.

- ✓ The DH, NPSA and individual trusts need to work with PASA and develop contract specifications promoting:
 - environmentally sensitive farming methods
 - foods produced with fewer antibiotics and pesticides
 - food products, snacks and cook-chill meals with low saturated fat, sugar, and salt
 - food products, snacks and cook-chill meals with clear labelling on percentage of added water, and percentage and type of additives, starches and modified proteins
 - healthy vending machines
 - energy efficient and environmentally preferable catering and kitchen equipment
 - development of second- and third-tier suppliers who may offer organic or local food products.

- ✓ Trusts need to play an active role in changing their food procurement and catering systems. They need to:
 - win senior management, board and chief executive support for healthy eating and sustainable procurement policies
 - decide on priorities and use them to develop new ways of purchasing and catering
 - develop new patient and staff menus promoting seasonality and traditional foods
 - promote healthy eating for patient menus, for staff and visitor outlets and vending machines
 - work with PASA on developing contracts that specify environmentally sensitive farming methods that are less damaging to health
 - hold 'meet the buyer days' to explain hospital procurement to potential new suppliers
 - investigate local supplier markets and look for win-win supply chains
 - draw on and develop the expertise of regional procurement consortia for

the NHS or local authorities and regional centres of excellence to promote sustainable food procurement

- work with voluntary organisations with expertise and experience in local food chains and public sector procurement
- examine ways of making catering operations energy and water efficient
- reduce food and packaging waste
- ensure new build hospitals include patient, staff, and ward kitchens in their design.

Recommendations for contracted food processors



If the NHS is to encourage sustainable catering and procurement in cook-chill contractors and producers of other ready-made snacks and food products, then PASA and NHS trusts need to:

- clarify which aspects of sustainability are important and which changes are most valued and communicate this clearly to suppliers
- use contract bidder selection criteria to encourage food processing companies to use resources, energy and water more efficiently and promote recycling and use of goods with recycled content
- use procurement specifications to ensure that processors produce healthy meals, with specified nutrients and low saturated fat, sugar and salt content
- use procurement specifications to ensure that processors produce healthy meals, with specified percentages of added water, and percentages and types of additives, starches and modified proteins
- use procurement specifications to develop more sustainable food options, such as fish dishes using MSC-certified fish, or meat or poultry raised without dependence on antibiotics used on people.

The road to sustainable procurement and catering is one of gradual change and innovation. With foresight and energy NHS trusts can begin this journey, leading to healthier food and a healthier environment.



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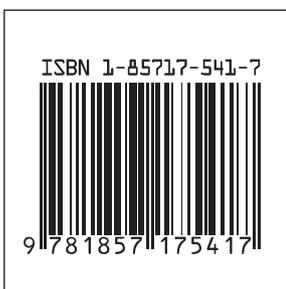
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