

# Not what the doctor ordered

How junk food in hospitals and sports centres is undermining the drive for healthier living



**Soil Association**

in partnership with

**Organix**



Organix is a pioneering children's food company that consistently campaigns to raise standards in the quality of food fed to children. We work in partnership with the Soil Association to produce regular reviews and reports into what children eat. *Not what the doctor ordered* has been produced because both the Soil Association and Organix believe strongly that the issue of vending machines in hospitals and sports centres stocking unhealthy food and drink presents contradictory health messages. This report has been created to catalyse a debate focused on the need for Government action to ensure that healthier options are made available in vending machines in both sports centres and hospitals.

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# Contents

3	Executive summary	1
7	Introduction	
9	Condition critical: food, exercise and health	
9	Obesity and diabetes	
9	Declining physical activity	
9	Bone and dental health	
10	A crisis in food culture	
11	Diagnosis and treatment: the response of government policy	
11	White Paper action plans	
11	Food in schools	
12	Complementary agendas: health and the environment	
12	Changing attitudes	
12	The scale of the challenge	
15	Ill by mouth: food provision in hospitals	
15	Hospital restaurants and cafes	
16	Vending machines	
18	Who makes the decisions?	
21	Out of shape: food provision in sports centres	
22	Mixed messages	
22	Targeting children	
24	Food advertising on television and in leisure centres	
24	Who makes the decisions?	
27	Shaping up: examples of good practice	
31	A prescription for change: recommendations	

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*Slots for  
tots...*

*...vending  
machines near  
the entrance  
of Battersea's  
Latchmere  
Leisure Centre  
are at the  
perfect height  
for the smallest  
of customers*

## Executive summary

Obesity has reached epidemic proportions. Current trends suggest that it will soon surpass smoking as the greatest cause of premature death. To tackle this huge challenge, the Government has pledged action on healthy eating and increasing physical exercise as two of six key priorities for improving public health.

The stakes are high. Diet-related diseases account for 46 per cent of illness world-wide. The cost to society of inactivity is estimated to be around £8.2 billion per year from sickness absence, premature death and direct health care costs to the NHS.

Hospitals and sports centres have a pivotal role in treating diet-related illness and encouraging physical activity. They should be in the forefront of promoting and providing healthier food. But an investigation by the Soil Association reveals a shocking disconnection between the aspirations of government policy on healthy eating and the food and drink on sale in many hospitals and leisure facilities.

The Soil Association visited five NHS hospitals and 17 sports and leisure centres across England and Wales. Much of the food on sale was of appalling nutritional quality, dominated by the fatty snacks, fizzy drinks and confectionery that have been banned from schools to protect children's health.

Our investigation found that:

- instead of taking a lead, most hospitals were lagging far behind schools in the provision of healthy food
- only one of the hospitals visited had its own healthy-eating policy but three had fast-food outlets on the premises
- in both hospitals and sports centres, healthy choices were severely limited and unhealthy food was being sold and promoted extensively to patients, staff and visitors
- foods high in fat, sugar and salt were staples on the menu in canteens and cafes
- vending machines selling junk food and sugary drinks were a constant feature
- snack machines in sports centres were often located close to children's play areas
- few healthy options and hot meals were on offer in NHS vending machines, even though there is a need to give night-shift staff access to nutritious food when cafes are closed
- only a small minority of the leisure centres visited had water freely available, even though it is advisable that people exercising should have easy access to fresh water for rehydration.

The nutritional profile of the types of food and drink we found routinely on sale in a typical vending machine is a far cry from the ideal of a healthy diet.

There are examples, however, of government and NHS initiatives that point the way to a more enlightened approach:

- tough new standards for school meals and a shift towards better-quality ingredients have shown what can be achieved when the Government takes decisive action to make healthier food available
- the Royal Brompton Hospital in London has introduced a healthy eating and nutrition policy which states that patients are to be offered at least two organic dishes per week. An alternative to chips is always on offer, sausages are made to the hospital's own recipe, and the catering manager has identified a vending supplier that can provide machines selling bottled water and organic fruit juices and yoghurts
- three Cornish hospitals have transformed their menus by serving fresh, locally produced and organic food to patients, visitors and staff. Patient feedback shows increased satisfaction with the quality of the food, and the Royal Cornwall Hospitals Trust has cut the annual 'food miles' travelled by delivery vehicles by two-thirds
- St Peter's Hospital in Maldon, Essex, has refurbished its canteen kitchen and sent catering staff on a specialist training course to learn how to prepare appetising and nutritionally balanced meals. The benefits include not only healthier eating but also a reduction in food waste, an increase in revenue from food sales, improved staff morale and a boost to the local economy through the use of local produce.

## Fat and sugar content of typical vending machine products

\* Energy intake (kcal/day): 1850kcal/day for girls (11-14yrs); 2200kcal/day for boys (11-14yrs) = average 2025kcal/day. Therefore girls need slightly less than this average amount

\*\* 1 tsp = 5g

\*\*\* Food Standards Agency (FSA) Traffic Light Labelling: [www.eatwell.gov.uk/healthydiet/nutritionessentials/fatssugarssalt/](http://www.eatwell.gov.uk/healthydiet/nutritionessentials/fatssugarssalt/)

**Sugar:** High is more than 15g sugars per 100g; Low is 5g sugars or less per 100g"

**Total Fat:** High is more than 20g fat per 100g; Low is 3g fat or less per 100g

+ Playing football uses 480 kcal/hr; Swimming uses 575 kcal/hr (Source: "Food & Nutrition" by Anita Tull. Oxford University Press, 1996.)

IGD (Institute of Grocery Distribution) gives GDA (Guideline Daily Amount) for TOTAL sugar for adults as 90g for women and 120g for men (Girls 11-14yrs = 90g; boys 11-14yrs = 110g)

Product	kcal per item	% of daily calorie needs for 11-14yr olds*	g Sugar per item	Teaspoons of sugar per item **	% of GDA (90g) for sugar
Four-finger KitKat bar 45.5g	233kcal	11.5%	22.8g	4.5 tsp	25.3%
Cadbury Dairy Milk 49g	255kcal	12.6%	27.8g	5.5 tsp	30.8%
Coca-cola 500ml (500g)	210kcal	10%	53g	10.6 tsp	59%
Walkers Crisps, ready salted, 34.5g bag	183kcal	9%	0.2g	—	—

The Soil Association believes that concerted action is needed by the Department of Health, NHS trusts and local authorities to ensure that health and leisure facilities – institutions that should be in the forefront of promoting healthier living – follow the lead of schools in making healthy choices available and moving away from selling and promoting mainly unhealthy food.

*Not what the doctor ordered* concludes with a series of recommendations to make the healthy-eating vision of the *Choosing Health* White Paper a reality in public-sector food provision.

The Soil Association recommends that:

- **The Department of Health should require all NHS trusts and local authorities to make healthier choices available in hospitals and leisure centres, and to promote these healthier options**

Standards should be developed that include making healthier choices available in vending machines and on retail concourses as well as delivering healthier meal choices in restaurants and staff canteens.

- **All hospitals and sports centres in the public and private sectors should develop healthy-eating policies, with clear national guidelines on what a model policy should include**

Guidelines for a model policy should incorporate both the coherent promotion of healthier living and the consistent provision of healthy food choices to the public, patients, staff and visitors.

	% sugar per item (ie g sugar per 100g)	FSA Sugar levels: High, Medium or Low? ***	g Fat per item	% of fat per item	% of teenagers maximum calorie intake from fat	g fat per 100g	FSA Fat levels: High, Medium or Low? ***	Number of minutes exercising needed to burn off calories consumed <sup>+</sup>
	49.5%	High	12.2g	26.8%	109.8kcal from fat = 15.9%	26.8g	High	Swimming 24 mins Football 29 mins
	57.8%	High	14.6g	29.8%	131.4kcal from fat = 19%	29.8g	High	Swimming 27 mins Football 32 mins
	10.6%	Medium	–	–	–	–	–	Swimming 22 mins Football 26 mins
	0.58%	Low	11.7g	34%	105.3kcal from fat = 15.3%	34g fat	High	Swimming 19 mins Football 23 mins



*“Is it unreasonable to expect places such as hospitals and sports centres to be beacons of best practice, where good food is readily available and healthy eating messages are communicated to the public?”*

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Lizzie Vann, Founder, Organix Brand PLC

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For vending machines in hospitals, leisure centres and similar institutions:

- the Government should develop model contract specifications for vending machines to ensure that healthy eating becomes a key consideration and that healthy choices are always available
- these guidelines should encourage caterers to choose foods with reduced levels of fat, sugar and salt, and to avoid artificial preservatives, flavourings, colourings and sweeteners
- NHS trusts, local authorities and sports centre managers should ensure that free, and preferably chilled, drinking water is readily available at all times in hospitals, and in local authority and private leisure facilities.
- NHS trusts, local authorities and sports centre managers should follow this Code of Practice for Healthy Vending:
  - all vending machines will always offer healthy choices
  - all machines will contain some foods with reduced levels of fat, sugar and salt
  - all drinks machines will contain pure fruit juices and free, preferably chilled, drinking water will always be available
  - all chilled machines will contain some foods made from fresh ingredients such as whole fresh fruit, seasonal fruit salads, vegetable batons with dips and healthier sandwiches
  - all ambient (food that can be stored at room temperature) food machines will contain healthier unprocessed snacks such as dried fruit, seeds, nuts, and snacks made with lower levels of fat, sugar and salt.



# Introduction

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<sup>1</sup> Department of Health (2004). *Choosing Health – Making Healthy Choices Easier*. London: Department of Health.

<sup>2</sup> Russell, C (2007). *A Fresh Approach to Hospital Food*. Bristol: Soil Association.

Government health policy identifies increasing the amount of exercise people take and improving diet and nutrition as two of the six key priorities for improving public health.

The White Paper *Choosing Health*<sup>1</sup> argues that “effective action on diet and exercise now will help to tackle heart disease, cancer, diabetes, stroke, high blood pressure, high cholesterol and a range of factors critical to our health”.

Given their pivotal role in treating diet-related illness and encouraging physical activity, hospitals and sports centres might be expected to be in the forefront of promoting and providing healthier food. These are places where large numbers of people go to get well or to get fit, so the kind of food on offer is important and the messages that accompany it are potentially very influential.

The Soil Association sent a photographer and researchers to examine the food in five hospitals and 17 sports centres in England and Wales in 2006. Sites were chosen to reflect a broad geographical spread throughout England and Wales. The focus of their investigation was not the meals served to patients on hospital wards – an issue covered extensively in another recent Soil Association report<sup>2</sup> – but the food on sale to patients, staff and visitors through canteens, restaurants and vending machines.

The hospitals visited were Great Ormond Street and Guy’s in London, Rotherham District General Hospital, Southampton General and Addenbrooke’s in Cambridge. The sports centres, all publicly funded, were in ten towns and cities – Birmingham, Bristol, Cardiff, Liverpool, London, Manchester, Newcastle, Rotherham, Sheffield and Southampton.

This report is the result of our investigation. It begins with a brief outline of some of the concerns related to unhealthy eating and lack of exercise, coupled with an overview of how government policy is seeking to respond. This is followed by summaries of what our researchers found – first in hospitals and then in leisure centres. Finally we provide examples of innovative initiatives and a series of recommendations for action.

*Not what the doctor ordered* provides a sobering snapshot of the unhealthy food that is the norm in many healthcare and leisure facilities – high in sugar, fat and salt and seriously out of step with the kind of healthier choices encouraged by the Department of Health.

## Get fit or get fat...

... a vending machine for Pringles crisps alongside the noticeboard promoting yoga and fitness classes at the St Paul's sports academy in Bristol. A single 43g pack of Pringles like these provides over a fifth of the guideline daily fat intake for adults, containing more than 15g of fat

[www.pringles-info.co.uk/information](http://www.pringles-info.co.uk/information)



# Condition critical: food, exercise and health

3 Wanjek, C. *Food at Work* (2005). Geneva: International Labour Organisation.

4 Pretty J, Griffin M, Sellens M, Pretty C (2003). *Green Exercise: Complementary Roles of Nature Exercise and Diet in Physical and Emotional Well-Being and the Implications for Public Health Policy*. CES Occasional Paper 2003-1. Colchester: University of Essex.

5 *ibid*

6 Select Committee on Health (2004). Third Report, 10 May 2004.

7 *ibid*

8 Harris M I, Cowie CC, Stern M P, Boyko E J, Reiber G E, Bennett P H, eds (1995). *Diabetes in America*. Washington DC: National Institutes of Health.

9 Walker et al (2000). *National Diet and Nutrition Survey: Young People Aged 4 to 18 Years*. Volume 2: Report of the oral health survey. London: The Stationery Office.

10 Moynihan, P (2002) *Dietary Advice in Dental Practice*. *British Dental Journal*, 193, 563-568.

Diet-related diseases account for 46 per cent of illness world-wide, and this is expected to reach 57 per cent by 2020. Sixty per cent of all deaths are diet-related.<sup>3</sup>

Meanwhile the cost to society of inactivity is estimated to be around £8.3 billion per year from sickness absence, premature death and direct health care costs to the NHS.<sup>4</sup> It is estimated that a 10 per cent increase in adult physical activity would save 6,000 lives and £500 million each year.<sup>5</sup>

## Obesity and diabetes

Obesity has become one of the major health challenges of our age. Current trends suggest that it will soon surpass smoking as the greatest cause of premature loss of life.<sup>6</sup> According to some official predictions, today's generation of children will be the first for over a century to face a lower life expectancy than their parents.<sup>7</sup>

Hand in hand with rocketing rates of obesity has come a sharp increase in type II diabetes – the most common cause of amputation, kidney failure and blindness in middle-aged adults.<sup>8</sup>

## Declining physical activity

The obesity crisis is being exacerbated by an increasingly sedentary lifestyle – people are not exercising enough to burn up the energy they consume through food.

Only a third of men and a quarter of women meet the Government's target of 30 minutes of physical activity five times a week. A fifth of children undertake less than 30 minutes of activity per day.

With more than a million children under 16 officially classed as obese, a three-pronged approach is recommended by health professionals – children need to become more active, spend less time doing sedentary activities and eat more healthily. And what better place to promote all three aspects of this strategy than in a leisure centre? But as we will see, the third element of this approach is too often missing.

## Bone and dental health

Two-thirds of school children have erosion of either their primary or permanent teeth,<sup>9</sup> and high consumption of sugary foods is a contributory factor. Regular intake of acidic drinks such as carbonated soft drinks, juices and squash increases the risk of dental erosion.<sup>10</sup>



## Uneducated...

*...this vending machine at Oaklands Pool, part of a school complex in Southampton, suggests that the crisps and chocolate bars it offers are 'for the educated consumer'. The dominance of machines selling this kind of food suggests that the managers of sports and leisure centres are out of step with the Department of Health, which believes that "we need to ensure that people have the information they require to make properly informed choices; and that they are presented with genuine opportunities and the practical support to make healthy choices"*

Department of Health (2004). 'White Paper sets out new moves on smoking, obesity and sexual health'. Press release, November 16. Quotation from the then Health Secretary, John Reid. London: Department of Health.

<sup>11</sup> Tucker K L, Morita K, Qiao N, Hannan M T, Cupples A, Kiel D P (2006). 'Colas, but not other carbonated beverages, are associated with low bone mineral density in older women'. *American Journal of Clinical Nutrition* October 2006, 84(4).

<sup>12</sup> Fort M (2003). 'The death of cooking'. *Guardian*, May 10 2003.

Research published in the *American Journal of Clinical Nutrition*<sup>11</sup> found that women who regularly drink cola could be increasing their risk of osteoporosis – a condition that results in bones becoming so porous that they can break easily.

The researchers found in a study of 2,500 people that drinking cola was linked with low bone-mineral density in women, regardless of their age or calcium intake. Osteoporosis costs the NHS £5 million a day and affects half of women over 50 in the UK.<sup>11</sup>

## A crisis in food culture

Rising obesity and the high proportion of processed foods in our diets are symptoms of a convenience culture in which fewer people are able and willing to prepare wholesome meals using fresh ingredients.

Families are spending far less time cooking and eating together than they did 20 years ago, and the ready-meal industry is booming. Sales of convenience foods grew to £11 billion in 2001, and have been projected to grow by 33 per cent in the next decade.<sup>12</sup>

The problems have been occurring over a long time period, and consequently change will take a long time to come into effect. What children eat influences their life-long eating habits. Children who associate healthy food with a healthy lifestyle will be at an advantage. The seeds of chronic illnesses are sown during childhood – teaching children healthy exercise and eating habits go hand in hand.





# Diagnosis and treatment: the response of government policy

11

The Government's strategy for addressing the public health challenges of obesity and inactivity is outlined in the White Paper *Choosing Health*, published in November 2004. It aims to make it easier to adopt a healthier lifestyle so that more people are empowered to eat better, exercise more and smoke less.

*Choosing Health* incorporates obesity targets, including a commitment to work towards halting the year-on-year increase in obesity among under-11s by 2010.<sup>13</sup> It also sets out how the Government plans to "shape the commercial and cultural environment we live in" so that it is easier to choose a healthy lifestyle.<sup>14</sup>

## White Paper action plans

The White Paper promises a cross-government campaign to raise awareness of the health risks of obesity and the steps that people can take, through diet and physical activity, to prevent it.

Among the aims of the White Paper's diet action plan it is pledged that the Government will:

- encourage healthy eating and behaviours in children and young people
- ensure that obesity-education messages are "promoted consistently across the public sector and beyond"
- promote opportunities for healthy eating in the community
- ensure that the NHS promotes healthy eating in all aspects of its work
- ensure that the NHS promotes opportunities for healthy eating in the workplace and ensures that the public sector leads by example.<sup>15</sup>

With these aims in mind it would be reasonable to expect that places such as hospitals and sports centres should become beacons of best practice, where good food is readily available and healthy-eating messages are communicated to the public.

## Food in schools

The most significant progress towards fulfilling the White Paper's vision of serving up healthier food in the public sector has been in the arena of school meals. Following sustained lobbying from organisations such as the Soil Association and the Caroline Walker Trust, and the irresistible pressure of Jamie Oliver's Feed Me Better campaign, the Government agreed to embrace new standards and to fund a shift towards better-quality ingredients. The result has been a dramatic transformation of menus across England and Wales.

Action by the Government and the School Food Trust (SFT), an independent body set up to transform school meals, has included the development of tough

<sup>13</sup> Department of Health (2004). *Choosing a Better Diet: a Food and Health Action Plan*. London: Department of Health.

<sup>14</sup> *ibid.*

<sup>15</sup> *ibid.*



<sup>16</sup> Department for Environment, Food and Rural Affairs (2006). *Procuring the Future – Sustainable Procurement National Action Plan*. London: Defra.

nutritional standards for all school food – encompassing not only school meals but also what is served in breakfast clubs, tuck shops and through vending machines. The standards effectively ban ‘junk’ food and drink, helping to ensure that school food contributes positively to children’s health. These changes are an example of what can be achieved when Government takes decisive action to change behaviour.

## Complementary agendas: health and the environment

Pressure from non-government organisations such as the Soil Association, East Anglia Food Link and Sustain has helped to ensure that better nutrition is not the only issue shaping the policy agenda in public-sector food provision. Schools, hospitals and other public-sector institutions have been challenged by the Department for Environment, Food and Rural Affairs to embrace the concept of ‘sustainable procurement’ of food.

Sustainable procurement is “a process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst minimising damage to the environment”.<sup>16</sup>

The Soil Association’s Food for Life Programme is a sustainable procurement initiative that has successfully brought together issues of healthy eating and environmentally friendly food production since 2003. In December 2006 the

## Unhealthy associations...

...prominent signs promoting the McDonald's outlet next door adorn the entrance to Guy's Hospital in London

Big Lottery Fund granted £16.9 million to the new Food for Life Partnership (FFL), led by the Soil Association together with the Focus on Food campaign, Garden Organic and the Health Education Trust. This partnership aims to transform food culture in England by bringing together expertise in revolutionising school meals with opportunities for children, their parents and the wider community to grow and cook food as well as visit organic farms.

Prior to the formation of the partnership over 500 schools and eight local education authorities were working towards FFL targets. This number will increase with the new lottery funded partnership. FFL targets state that ingredients for school meals should be 75 per cent fresh/unprocessed, 50 per cent locally sourced and 30 per cent organic and meet the School Food Trust nutritional standards. The Food for Life targets are also being followed in the procurement of hospital food by the Royal Cornwall Hospitals Trust and the Royal Brompton Hospital. They offer a model for other NHS trusts and the councils in charge of leisure facilities.

## Changing attitudes

The intensity of concern that precipitated changes in school food reflects an increasing public awareness about health and nutrition that has the potential to help push forward the Government's healthier-eating agenda in institutions such as hospitals and sports centres.

There are positive signs of the beginning of a shift in shopping and eating habits, signalled by a stagnation in the market for unhealthy food and sharply increased sales of healthier alternatives. In 2006 sales of yoghurt drinks were reported to be up by 51 per cent, fruit juices by 15.6 per cent and bottled water by 9.6 per cent.<sup>17</sup> Sales of organic food are also booming, growing by 30 per cent a year. Three-quarters of families say they buy some organic food, and around half of baby food sales are now organic.<sup>18</sup>

Fast food and confectionery companies, on the other hand, are feeling the pinch. In 2006 confectionery sales were reported to have dropped by 3.1 per cent, bagged snacks by 1.2 per cent and carbonated soft drinks by 1.7 per cent. McDonalds announced in March 2006 that it was to close 25 of its UK outlets.

## The scale of the challenge

As obesity is such a complex issue, the Government's target for reducing it is jointly owned by the Department of Health, the Department for Education and Skills and the Department for Culture, Media and Sport.

According to the Audit Commission, however, there is a real danger that red tape, a lack of joined-up thinking and inadequate leadership will make progress slow. It pointed out recently that "it has already taken 31 experts 18 months to agree how obesity should be measured".<sup>19</sup>

The Government has so far failed to produce any specific guidance for healthy eating in relation to food vending in institutions such as hospitals and sports centres. There is a programme of work underway at the Food Standards Agency that aims to develop guidance on voluntary nutritional standards for public-sector institutions, including sample menus for catering staff.<sup>20</sup> For the moment, however, all that catering managers in NHS trusts and leisure centres have to guide them is what is indirectly implied in the broad aims outlined by the *Choosing Health* White Paper and the sustainable sourcing mandate of the national procurement action plan.

<sup>17</sup> AC Nielsen, March 2006

<sup>18</sup> Soil Association (2005). *Organic Market Report*. Bristol: Soil Association.

<sup>19</sup> National Audit Office, Healthcare Commission, Audit Commission (2006). *Tackling Childhood Obesity: First Steps*. London: Stationery Office.

<sup>20</sup> Personal communication from Dr Elizabeth Jones, Department of Health, April 2007.







# Ill by mouth: Food provision in hospitals

*The food court by the main concourse at Addenbrooke's Hospital in Cambridge includes a Burger King fast-food outlet. Children's ward C2 has made Saturday night its 'Burger King Takeout Night', when patients can have a Burger King meal brought to them. To burn off the calories in a fast-food cheeseburger, fries and shake would equate to a nine-mile walk*

Department of Health (2004).  
*Summary of Intelligence on Obesity*.  
London: Department of Health

Despite government pledges to tackle obesity, the Soil Association's investigation suggests that fatty snacks, fizzy drinks and confectionery dominate the food on sale in many hospitals.

Researchers visited five NHS hospitals: Southampton General, Guy's and Great Ormond Street in London, Rotherham District General Hospital and Addenbrooke's in Cambridge. In all five they found that healthy food choices were severely limited, while fast food or unhealthy snack food was being sold and promoted extensively.

Far from 'making healthy choices easier' as the sub-title of the Choosing Health White Paper envisages, these hospitals are making the unhealthy choice the easy choice. The nutritional quality of much of the food on offer was appalling. Restaurants, canteens and vending machines were all selling the kind of food and drink that has been taken off the menu in schools across the country.

Only one of the hospitals contacted had its own healthy-eating policy. Where healthy-eating messages are being communicated or healthier food is being put on sale in hospitals, it is likely to be the result of an individual's initiative rather than a coherent strategy. There is a conspicuous lack of leadership from the Department of Health and individual NHS trusts.

Three of the hospitals visited by Soil Association researchers – in Cambridge, Rotherham and Southampton – had a fast-food outlet on the premises. At Addenbrooke's and at Southampton General there is a branch of Burger King close to the wards, where staff in NHS scrubs queue with visitors for takeaway burgers and fizzy drinks. At Guy's Hospital in London there is a branch of McDonald's next door, with at least two signposts on NHS premises highlighting its presence.

## Hospital restaurants and cafes

Our researchers found that much of the food sold through hospital restaurants was of poor nutritional quality. Foods high in fat, sugar and salt were staples, although there were usually some healthier-eating options on the menu.

Typically we found a proliferation of unhealthy snack foods close to the till, in contradiction of the healthy-eating messages the Government wants the NHS to convey. This is of particular concern in children's hospitals such as Great Ormond Street, which should be reinforcing the healthier approach that is becoming established in schools.

Every Saturday night children on ward C2 at Addenbrooke's Hospital are allowed to order a Burger King takeaway. Once a week may not be often,

## Snack attack...

...crisps, cakes and sugary drinks on sale at the Great Ormond Street Hospital for Children. Future cardiovascular health is linked to high intakes of saturated fat and salt among children

Gregory et al (2000). *National Diet and Nutrition Survey: Young People Aged 4 to 18 Years*. London: The Stationery Office.



16

21 Kings Fund (2005). *Sustainable Food and the NHS*. London: Kings Fund.

but it is still giving fast food an official sanction and encouraging children to view unhealthy eating as a treat. Hospitals should make a healthier burger to a recipe approved by NHS dieticians – as the children's ward at the Royal Cornwall Hospital has done.

## Vending machines

Running a hospital is a 24-hour operation, and staff working night shifts need access to nutritious food as much as anyone else.

Some hospitals, such as those we visited in Southampton, Birmingham and Liverpool, sold hot food such as jacket potatoes and curries through vending machines. This is to be encouraged, as it helps those working shifts to eat well when hospital restaurants are closed. Access to nutritious food during night shifts is a key issue for doctors, nurses and ambulance crews. Few vending machines meet this need.<sup>21</sup>

Our researchers found that most of the machines in the hospitals visited were selling a lot of unhealthy food and drinks. Nearly all the foods on sale were energy dense, high in sugar and low in protein. Drinks high in caffeine were in abundance, and most of those on offer were also high in sugar and/or additives.

The positioning of machines selling snack foods was clearly inappropriate in some cases. In Addenbrooke's Hospital, for example, there was a machine containing crisps and confectionery just outside the door of the children's ward.

Overall, in this limited investigation, we found a distinct lack of choice when it came to the healthy food and drink on offer. A valuable opportunity is

## Mixed messages...

*...vending machines selling junk food and sugary drinks are excluded from schools under new government standards but are still present in hospitals such as Guy's in London, which might be expected to take a lead in promoting healthier eating*





being missed to promote healthy eating by consistently giving patients, staff and visitors a healthy choice, and by communicating the health benefits of making that choice.

## Who makes the decisions?

Decisions about what food is on sale in hospitals ultimately rest with the board members of NHS trusts. In practice there is considerable variation in the extent to which trusts exert control over food provision.

Restaurant services and vending machines are increasingly being contracted out to commercial catering companies. In some hospitals restaurants and vending are still managed in house, while others have adopted a combined public/private approach.

18

### *Prominent position ...*

*...the Burger King outlet at Southampton General Hospital is so centrally placed that it is used as a landmark in directions to hospital departments on NHS websites. A Burger King Double Whopper™ with cheese contains 24g of saturated fat and 2.5g of transfats, according to [www.bk.com](http://www.bk.com). The Food Standards Agency advises that transfats "raise the type of cholesterol in the blood that increases the risk of coronary heart disease"*

Food Standards Agency website. 'What are hydrogenated fats and transfats?' See [www.eatwell.gov.uk/asksam/healthydiet/fssq/#A218438](http://www.eatwell.gov.uk/asksam/healthydiet/fssq/#A218438)





Financial viability is such an imperative in the NHS that income generation can take precedence over the suitability of the food being sold. Vending machines can provide substantial income for NHS trusts, and hospital finance directors may be reluctant to jeopardise this stream of income by curtailing the sale of unhealthy snacks.

The Office of Government Commerce (OGC) has an arrangement that enables public-sector organisations to set up contracts with three approved vending suppliers: Four Square, General Vending and Bunzl Vending.<sup>22</sup> There is currently no guidance from the Department of Health on the types of foods that these machines should contain.<sup>23</sup> Trusts do at least have the freedom to make their own arrangements, should they be unhappy with what the approved suppliers have to offer.

22 Personal communication from the Office of Government Commerce, April 2006

23 Personal communication from Lyn Beedle, NHS Purchasing and Supply Agency

## *Packed with calories...*

*...a 100g bar of Cadbury's Dairy Milk, one of the popular chocolate brands available from this vending machine at Cardiff's Fairwater Leisure Centre, contains nearly a third of a woman's daily calorie requirement*

The Department of Health's Estimated Average Requirements (EARs) are a daily calorie intake of 1,940 calories for women and 2,550 for men.



## *Off message...*

*...sweets are  
a treat we  
all deserve,  
according to this  
eye-catching  
snack machine  
at Oakwood  
Leisure Pool  
in Rotherham,  
which is used  
for school  
swimming  
lessons*



# Out of shape: food provision in sports centres

24 Donaldson, L (2000). *British Journal of Sports Medicine*. 34:409-410

25 Latchmere Lane Leisure Centre in Battersea; Oaklands Pool and Bitterne Leisure Centre in Southampton; Eastern and Fairwater Leisure Centres in Cardiff; Filton Leisure Centre and St Pauls Sports Academy in Bristol; Cocks Moor Woods Leisure Centre in Birmingham; Park Road Centre for Sport and the Lifestyles centre in Liverpool; Levenshulme Pool, Moss Side Leisure Centre and Manchester Aquatics in Manchester; Oakwood Leisure Pool in Rotherham; Springs Leisure Centre and Pond Forge International Sports Centre in Sheffield; East End Pool in Newcastle

26 Water UK – see [www.water.org.uk/home/news/press-releases/wise-up-on-water?](http://www.water.org.uk/home/news/press-releases/wise-up-on-water?)

27 The School Food Trust stated in March 2006 that carbonated drinks are “not necessary for hydration”

28 Personal communication from Bill Brown, the council’s Operations Manager

Encouraging us all to become more active is a key part of the Government’s strategy to tackle obesity. The Chief Medical Officer, Sir Liam Donaldson, has called physical activity “one of the most undervalued interventions to improve public health”.<sup>24</sup>

Sports and leisure centres have a part to play not only in promoting physical activity but also in ensuring a joined-up, coherent approach to exercise and eating. The benefits of a more active lifestyle may be undermined if those using sports centres are only encouraged to ‘refuel’ with confectionery and unhealthy snacks.

Unfortunately the Soil Association investigation found the same story of poor food and drink provision in sport centres as it found in hospitals. Confectionery, crisps and carbonated drinks were the standard fare on offer. The centres we visited were in the public sector, but our recommendations apply equally to privately-run leisure and sports facilities.

In schools children have a choice of water, fruit juice or fresh milk to drink. However our researchers found that if a teacher or parent takes children to the local swimming pool for healthy exercise, they are unlikely to see these healthy choices promoted. Instead they will find many of the sweets, fizzy drinks and fatty snacks no longer permitted in schools. From Southampton to Sheffield, heavily-branded confectionery and drinks were on sale in all the 17 leisure centres we visited.<sup>25</sup>

People who are exercising need to be able to rehydrate but in many cases carbonated drinks were the only liquid refreshment on offer. Dehydration can cause serious health problems, and replacing soft drinks in the diet with water can help both with hydration and with weight control.<sup>26,27</sup> Only a small minority of the leisure centres we visited had water freely available.

According to Mansfield District Council, the most popular leisure centre in the town has a sales revenue of £50,000 a year from its eight vending machines selling soft drinks, hot drinks and snacks.<sup>28</sup> With this kind of earning potential from a ‘traditional’ offering of confectionery and fizzy drinks, it is unsurprising that vending companies providing healthier products are finding it difficult to establish themselves.

“Where healthy options are being introduced, sales are starting to generate,” says Mike Steel of FairTrade Vending in Rochester, Kent. “But compared to the leading brands they are very slow, therefore operators will in the main stay with the branded products as this sustains their revenue.”



## Sugar fix...

...healthy activity and unhealthy eating live side by side at the Latchmere Leisure Centre in Battersea, south London, where a Pepsi vending machine and sweet dispensers have been installed next to the children's play area



<sup>29</sup> Department of Health (2005). *Choosing Activity: A Physical Action Plan*. London: Department of Health.

## Mixed messages

The Department of Health's delivery plan for physical activity says the Government will "work with the sports and recreational activity sectors to deliver positive, innovative messages about healthy lifestyles including physical activity".<sup>29</sup>

In sports centres across the country, however, the messages being put across are very mixed. Alongside gyms full of exercise equipment and signs and noticeboards publicising yoga, aerobics classes and swimming lessons, we found machines selling unhealthy snacks and prominent branding for junk-food companies.

Very little joined-up thinking was in evidence. Machines with messages such as 'It's time to treat yourself' are far from helpful in combating the obesity epidemic.

## Targeting children

Vending machines selling food and drink of poor nutritional quality were often positioned in prominent places such as reception areas. One centre in Southampton even had sweet dispensers in the entrance, making them the first thing children see when the automatic doors slide open.

In many places the vending was clearly targeted at children. Leisure centres in Battersea, Birmingham, Cardiff and Southampton all had low-level sweet dispensers with coin slots in easy reach of little fingers. Others had machines selling fizzy drinks, crisps and confectionery close to children's play areas.





### *Sporting chance?...*

*...Lucozade Sport is positively promoted as an energy drink that gives athletes an edge, yet provides 3.5tsp sugar, alongside sweeteners and preservatives that are strongly discouraged for school vending machines*

## Food advertising on television and in leisure centres

The communications regulator, Ofcom, estimates that children in the UK watch 10,000 television commercials every year, including nearly 3,000 advertisements for soft drinks, foods and fast-food chains.

The Government is so concerned about this issue that in April 2007 Ofcom imposed new restrictions banning the advertising of foods high in fat, salt or sugar “in or around programmes made for children... or...programmes that are likely to be of particular appeal to children aged 4-9”.<sup>31</sup> From January 2008 this ban will be extended to cover programmes of particular appeal to children aged 10-15.

In leisure centres, however, this positive step is being undermined. Children playing sport or taking part in school swimming lessons are bombarded with promotional branding for the very food and drink whose advertising is being restricted by Ofcom.<sup>30</sup>

## Who makes the decisions?

Local authorities generally run or at least oversee the running of most municipal leisure centres. They are required to promote health to the public in partnership with NHS primary care trusts.

Many councils are changing the way their leisure centres are managed, selling some facilities to private companies or transferring responsibility to trusts – partnerships between the public and private sectors.

Vending machines are usually provided under a contract which stipulates, among other things:

- which products will go into the machine
- how much rent will be charged
- who will have responsibility for cleaning, maintenance and filling
- how royalties and revenue will be divided.

In some cases contracts may allow either the company supplying the machine or a particular food manufacturer to determine which products will be stocked. In others the sports centre’s manager or catering manager may have more of a say.

Increasingly, leisure facilities are being sold and as more public/private partnerships develop, more decisions are being taken by private companies. This means that it is increasingly likely that maximising profits will take precedence over nutritional and health considerations.

What is lacking is an imperative on the leisure centre/catering managers to search out healthier, less processed foods for vending machines. This may sometimes, not always, result in a short period of lower revenue, but it is likely that matching the health objectives of the centre with the healthiness of the food on offer will result in increasing take up of the new options. And whatever the financial outcome, moves to improve vending choices will improve the health of visitors and reduce the wider costs of obesity to society in general.



*Eye candy...*

*... a sweet dispenser at the entrance, within easy reach of young fingers, is one of the first sights greeting children as they arrive at Southampton's Bitterne Leisure Centre*





## Swimming and sweets...

...confectionery dispensers at Cocks Moors Woods Leisure Centre in Birmingham. Children swim free of charge, but some of the money saved is likely to be spent on the unhealthy snacks



## Hidden dangers...

... a hazard sign points out the risk of slippery floors at Levenshulme Pool in Manchester, but there is no health warning about the fatty and sugary snacks on offer in the vending machine

# Shaping up: examples of good practice

Although good practice is hard to find, there are some examples of hospitals (more so than sports centres) that are actively promoting healthier alternatives.

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## The Royal Brompton Hospital

The Royal Brompton Hospital in London is one of the leading hospitals in the country in offering healthier food to patients, staff and visitors. It sources 18 per cent of the food it buys from local and organic producers, and introduced a vending machine for healthier drinks in September 2006.

The new machine was installed in a position in the staff restaurant where it is accessible 24 hours a day. Through a partnership with Abbey Well Water and Medina Foodservice – which supplies the hospital with organic milk - it sells still, sparkling and flavoured water; fruit juices and smoothies; and a variety of milk drinks.

In the first eight months of use this machine sold over £5,500 worth of drinks – 80 per cent more than the sales revenue of a Coca-Cola machine in the hospital in the same period. The Brompton's catering manager, Mike Duckett, hopes to build on this success by introducing locally and organically-grown seasonal fruit into the hospital's food-vending machines.

The hospital's healthy eating and nutrition policy states that adult patients are to be offered at least two organic dishes per week, while for children something organic or at least additive free is available every day. All the milk in the hospital is organic, an alternative to chips is always on offer, and sausages are made locally to the hospital's own recipe.

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## Guy's Hospital

Evalina's Children's Hospital, which is part of Guy's Hospital in London, does not sell confectionery at all. What it does sell includes a range of healthy drinks such as freshly-squeezed orange juice and other fruit juices, flavoured waters and milk shakes.

Where previously the drinks machines at Guy's were Coca-Cola branded, three of the four drinks machines now primarily promote Malvern bottled water – a change prompted by the new catering and nutrition strategy at Guy's. Drinks such as Coke and Fanta are still available alongside the bottled water, but it is the water that claims the eye-catching promotional space on the front and sides of most of the machines.

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## Mid Essex Primary Care Trust

St Peter's Hospital in Maldon, Essex, has transformed the food available through its canteen and saved money in the process.

Most of the food on offer under the old regime was cooked and chilled in Wales then transported 200 miles to Maldon and reheated. Now fresher, locally grown and organic ingredients are being used. These wholesome meals are freshly prepared and cooked on the premises by canteen staff.<sup>31</sup>

The changes stem from the hospital being chosen to take part in a Kings Fund initiative aimed at enhancing the healing environment. Grant support was secured from the Big Lottery Fund to develop a healthy-eating project, and this made it possible to refurbish the canteen kitchen and provide training to enable catering staff to prepare healthier food.

Now that the new regime is established, the benefits include increased income, less wastage of food, higher self-esteem among staff, a greater contribution to the local economy (because local produce is used) and a reduction in the air pollution and greenhouse gas emissions caused by transporting food long distances. The hospital has also installed a 'green' vending machine offering healthy and environmentally friendly choices.

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## The Cornwall Food Programme

Three hospitals in Cornwall are benefiting from an initiative launched in 2001 that has transformed menus by serving increasing amounts of fresh, locally produced and organic food to patients, visitors and staff.<sup>32</sup>

All the contracts for fruit, vegetables, meat, fresh milk, eggs and dried goods are now awarded to Cornish companies. A locally made fish cake has replaced the nationally procured one, which was "as hard and as tasty as a hockey ball", according to one patient. The content has increased from 30% frozen fish to 40% fresh fish, combined with locally grown potatoes.

The Cornwall Food Programme has transformed meals without increasing costs – and within the Royal Cornwall Hospital's food budget of £2.50 per patient per day. The project's successes include:

- excellent patient feedback showing increased satisfaction with the quality and taste of the meals
- spending 83% of the Royal Cornwall Hospitals Trust's £975,000 food budget with companies based in Cornwall in 2006
- a 67% cut in annual 'food miles' travelled by delivery vehicles, from 164,000 miles before the project to just under 54,000 miles in 2006.

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## Southampton Quays and Enfield leisure centres

Healthy-eating initiatives in sports and leisure centres are harder to find. At Southampton Quays leisure centre, however, managers invited a local NHS dietician to look at the café menu and advise on how to offer a more balanced range of choices.

Consideration was given to the glycaemic index of the foods on sale, aiming to offer more foods which release sugars slowly into the blood. Fresh pasta has replaced the pre-cooked variety, and half-fat cream is now being used in the centre's chicken curry.

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<sup>31</sup> [www.maldon-pct.nhs.uk/news/newsitem.asp?news\\_id=127](http://www.maldon-pct.nhs.uk/news/newsitem.asp?news_id=127)

<sup>32</sup> See *A Fresh Approach to Hospital Food* (Soil Association, 2007) for the full story of the Cornwall Food Programme.



## *Child's play...*

*... sports centres like this one in Cardiff often make it easy for children to get their hands on sugary sweets with or without parental consent, thanks to low-level coin-operated machines*



Enfield Leisure Centres in north London offer healthy choices at all six leisure venues in their area. Alongside crisps, chocolate and fizzy drinks, nuts, dried fruit, seed-based snacks, fresh fruit juice and milk-based drinks are also available.

### **Healthy vending companies**

A number of vending companies specialising in healthier choices are succeeding in forging contracts with NHS trusts and local authorities. Mibod, based in Birmingham, has vending machines at four English hospitals and one in Northern Ireland, as well as the Joey Dunlop Leisure Centre in Belfast. Its range consists of sweet and savoury snack foods and drinks free of artificial colourings, preservatives, flavourings and sugar, with organic and Fairtrade ingredients where possible.

Eagle Vending, based in Kent, has developed a range of healthy snacks and drinks which have been approved for use in schools by the Health Education Trust. They include apple crisps, fruit cubes, Fairtrade fruit juice, fruit bars and flavoured milk. The company supplies all the snacks and drinks for vending machines and restaurants within the Medway Maritime NHS trust.



*Tempting fare ... some of the UK's most popular brands of chocolate, including Kit Kat and Dairy Milk, are on sale from this machine outside the C2 children's ward at Addenbrooke's Hospital in Cambridge. A single Kit Kat contains 10.4g of sugars, nearly 12 per cent of the guideline daily amount for children. Today sugars provide about 17 per cent of food energy in children's diets, compared to a recommended average of 11 per cent*

Data from Kit Kat product information on the Nestle website, [www.nestle.co.uk](http://www.nestle.co.uk).  
Gregory et al (2000). *National Diet and Nutrition Survey: Young People Aged 4 to 18 Years*. London: The Stationery Office.

# A prescription for change: recommendations

This report reveals a shocking disconnection between the aspirations of government policy on healthy eating and the kind of food and drink on sale in many hospitals and sports centres across England and Wales.

While the Government is urging children to cut down on high-energy food and drink and take more exercise, the NHS and local authorities seem content to promote and sell these very products extensively through hospitals and leisure facilities.

Hospitals and sports centres have different priorities when it comes to the food and drink on sale. In sports centres the emphasis is on snacks and refreshing drinks to sustain those engaged in physical exercise during relatively short visits. In hospitals there is more of a need for the food and drink on offer to provide consistently good all-round nutrition, both to help patients recover from illness and to ensure a healthy diet for staff working long shifts at unsocial hours. Whether the primary focus is main meals or snacks, however, it is clear from the Soil Association's investigation that the provision of healthy choices is woefully inadequate in many hospitals and leisure facilities.

Concerted action is needed by the Department of Health, NHS trusts and local authorities to ensure that both health and leisure facilities make healthy choices available and stop focusing on promoting unhealthy food. Managers in the private sector also need to act if healthy choices are to be made available to the significant numbers of people who are treated in private hospitals and/or in membership of private health clubs.

In essence, we believe that all trusts and local authorities should have targets to support the Public Sector Food Procurement Initiative developed by the Department for Environment, Food and Rural Affairs, including percentage targets for sourcing fresh, locally produced and organic food. This approach, pioneered in many schools and by the Royal Cornwall Hospitals Trust, has been shown to deliver substantial health, environmental and local economic benefits.

At the national level there are key steps that the Department of Health should take, in co-operation with the Department for Communities and Local Government, to help make the healthy-eating vision of the White Paper a reality in public-sector food provision.

The Soil Association recommends that:

- the Department of Health should require all NHS trusts and local authorities to make healthy choices available in hospitals and leisure centres, and to promote these healthier options



- standards should be developed that include making healthy choices available in vending machines and on retail concourses as well as delivering healthy meal choices in restaurants and staff canteens.
- all hospitals and sports centres in the public and private sectors should develop healthy-eating policies.

There should be clear national guidelines on what a model policy should include, incorporating both the coherent promotion of healthier living and the consistent provision of healthy food choices to patients, staff and visitors.

For vending machines in hospitals, leisure centres and similar institutions:

- the Government should develop model contract specifications for vending machines in health and leisure facilities to ensure that healthy eating becomes a key consideration and that healthy choices are always available
- these guidelines should encourage caterers to choose foods with reduced levels of fat, sugar and salt, and avoid artificial preservatives, flavourings, colourings and sweeteners
- all vending machines should provide a range of healthy snacks and pure fruit juice options, and snacks made from fresh ingredients like whole fresh fruit, seasonal fruit salads, vegetable batons with dips, and healthy sandwiches
- NHS trusts, local authorities and sports centre managers should ensure that free, and preferably chilled drinking water is readily available at all times in hospitals, and in local authority and private leisure facilities
- NHS trusts, local authorities and sports centre managers should follow this Code of Practice for Healthy Vending:
  - all vending machines will always offer healthy choices
  - all machines will contain some foods with reduced levels of fat, sugar and salt
  - all drinks machines will contain pure fruit juices and free, preferably chilled, drinking water will always be available
  - all chilled machines will contain some foods made from fresh ingredients such as whole fresh fruit, seasonal fruit salads, vegetables batons with dips and healthier sandwiches
  - all ambient (food that can be stored at room temperature) food machines will contain healthier unprocessed snacks such as dried fruit, seeds, nuts, and snacks made with lower levels of fat, sugar and salt.



*Soft drinks policy . . . Coca-Cola, with 10.6 tsp of sugar per 500ml bottle, is promoted at the Ponds Forge sports centre and pool in Sheffield. Yet the International Obesity Task Force says that consuming a can a day of fizzy drink can make teenagers gain up to a stone in weight over a year. Water would be a healthier option for the majority of visitors to the centre*

Baur L, Lobstein T, Uauy R (2004). *Obesity in Children and Young People - A Crisis in Public Health*. London: International Obesity TaskForce.

Influencing policy makers, food companies, farmers, consumers and citizens is an essential part of the Soil Association's work, to create the conditions for a major expansion of organic food and farming. Our policy reports include:

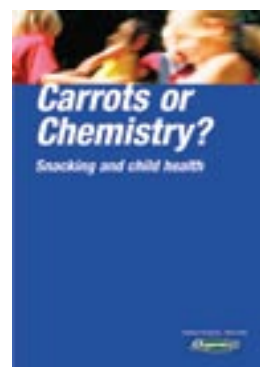
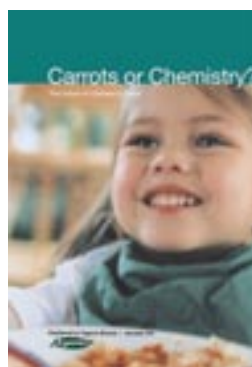
***The Real Meal Deal:*** How family restaurants and attractions are damaging out children's health

***MRSA in farm animals and meat:*** A new threat to human health

***A fresh approach to hospital food:*** The Cornwall Food Programme, pioneering tasty, healthier and environmentally friendly hospital food

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Organix is a pioneering food company who campaign to raise standards in the quality of food fed to children.

Organix have produced two *Carrots or Chemistry?* reports detailing children's food, its impact on health and looking at the quality, availability and promotion of snack food. *Not what the doctor ordered* is a follow up to *The Real Meal Deal*, which the Soil Association produced in partnership with Organix as part of their continued commitment to improving the nutritional intake and health of the nation's children.

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