

comment

“There’s more than one way to provide a universal health system” **DAVID OLIVER**

“Why aren’t GPs routinely discussing end-of-life care?” **HELEN SALISBURY**

PLUS Empowering junior doctors to speak out; the policy generation gap

CRITICAL THINKING Matt Morgan

Time for 21st century wards

As I approach the door of the ward, I see relatives huddled around a buzzer with “ONLY PRESS ONCE” taped over its scratched buttons. Once a minute, once an hour, once a day? A busy nurse hears the buzzer’s call but can’t answer it. As I open the door with my access card, the opportunity is seized and families flow in. Through that one door come meals, x ray machines, dirty linen, nurses, doctors, patients, and dead bodies.

On the ward the relatives peer into the wings, looking for “bed 9 in the 4 bedder,” without knowing what that means. As an overflowing catheter bag is carried to the sluice, the dinner trolley is manoeuvred to make room. The height of the desk at the nurses’ station is an awkward compromise—too low for my knees to fit underneath and too narrow to house a set of paper notes. As I squeeze in, the computer mouse falls to the floor, hanging helplessly by the wire and swinging like a pendulum. I feel the same.

I want to speak to the patient and her family. I think that the patient is going to die. The cloth curtains around the bed are too thin to contain this news from the well wishers next door, so I look for a more private area. (“Just use the office, it should be empty.”) I don’t want to use the office. This is a hospital ward. It should be the perfect environment to do all of this—for conversations to be spoken, for food to be eaten, for patient care to happen, and for medicine to work.

Yet the many hospital wards I’ve visited all over the world have a design that’s changed little since the late 18th century. It’s time to reimagine it. The general ward should have as much consideration as a shiny new operating theatre or boardroom.

Wards need separate entrances for utilities and families—even a circular design with dividing walls. Natural light and noise reduction technology would aid sleep, and communal areas would encourage

socialising, rather than eating in a chair next to the bed. We need separate areas where intimate examinations, treatments, and even difficult conversations can happen. These should be large enough to house a hospital bed and a supportive family. We should replace faded signs and use floor maps, with directions to toilets and exits, that are shown to nudge human behaviour.

Think too about staff. Central workspaces should encourage thoughtful work with areas close to patients, for individualised care. Zoned areas could indicate different levels of need and safe “wander paths,” allowing movement even when patients are unwell. And ageing posters that fail to change behaviour could be replaced with art that encourages reflection and has been shown to aid recovery.

Hospital needs to be a place that promotes healing, not one that simply delivers it.

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The general ward should have as much consideration as a shiny new operating theatre or boardroom





PERSONAL VIEW Peter A Brennan, Mike Davidson

Junior doctors have to be able to speak up to improve safety

A flatter hierarchy is essential to making NHS safer for patients

Aviation and medicine are often compared, but in reality are fairly diverse professions. Healthcare can still, however, learn a lot from aviation and other high risk organisations, particularly in how they've embraced and applied human factors, the importance of looking after ourselves at work, and reducing hierarchy.

In aviation, the steep hierarchy between captains and co-pilots was recognised as a safety threat, with several fatal crashes occurring as a result of this power dynamic and the communication barriers it created. Through training and the understanding of how human errors impact safety, aviation has

managed to change its culture. Yet, sadly, the equivalent steep "cross cockpit gradient" still exists in many healthcare teams.

Today, the most senior captain can be disciplined if they fail to listen to, or act upon, concerns raised by the most junior of co-pilots. Can we say the same in healthcare?

In recent years, healthcare has been hit by several scandals that show the pernicious impact of staff not feeling able to speak up. This includes the 1990s children's heart surgery scandal, in which a number of babies and children died at the Bristol Royal Infirmary. The resulting Kennedy inquiry found that the institution's higher incidence of mortality could be traced back to an imbalance

of power, with "too much control in the hands of a few." Teams within the organisation were "profoundly hierarchical," and this influenced "who gets listened to within the organisation when questions are raised."

Sadly, the fear of speaking out is still widespread in healthcare, with the Gosport inquiry serving as just one recent example.

Non-confrontational

We need a change in culture so that any doctor can question the decision or actions of another in a non-confrontational way and with no loss of face by either party. Too often, junior doctors are afraid of the repercussions, fearing that they may create conflict, harm their career progression, or just upset the status quo. By contrast, in aviation the culture actively encourages employees to share their safety concerns at the earliest opportunity.

The perceptions that people have do not exist in a vacuum; they are set by everyday examples. On day 1 of employment for a major UK airline, new pilots are met by both management and union representatives and empowered by both to speak up on the flight deck, without fear of retribution. During undergraduate and postgraduate medical training, doctors are taught that they have a duty to speak up if they think that patient care or safety is being compromised. Yet hospital trusts and senior staff need to actively apply this principle and give staff opportunities to voice their concerns. This message could be strongly reinforced by trusts during induction days—especially if senior management and consultants actively encouraged it.

We are not advocating a flat hierarchical gradient across teams, which can be equally as damaging as a steep one. Team leadership

BMJ OPINION Katie Knight

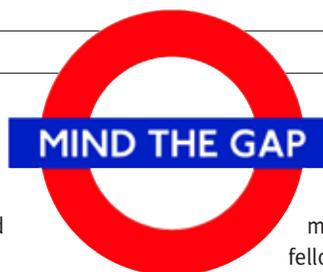
Mind the generation gap

I would guess there were over a thousand years of combined NHS experience in the room. Chief executives, career NHS managers, board members, professors, postgraduate deans, chiefs of nursing, heads of HR. And me—a millennial trainee paediatrician.

Over a series of roundtable discussions we were asked to come up with "novel and innovative solutions" relating to the NHS long term plan. We were acting as the assembled representatives of the NHS, although we were nothing like as diverse as a random sample of staff would be. I listened, nodded, and fumed at some comments—more than once, "millennial lifestyle choices" were proposed

as a reason for the NHS staffing crisis.

Once I'd drowned out the impostor syndrome internal monologue, I dared to politely disagree on a few things and raise a new point here and there. My comments were warmly welcomed as a voice of "youth;" some senior leaders seemed unusually interested in what I had to say. I had the sudden and uncomfortable realisation that some of these vastly experienced people had just never asked anyone in my relatively junior position what they thought about the systemic problems



that affect all of us, or what we thought could be done differently.

I wish this meeting was the exception. I've spent the past few months away from clinical practice on a fellowship, learning about NHS leadership and management. I've often been in meetings where I'm the only trainee, while problems are discussed, and decisions made, that might drastically change our working experience. The fundamental matter is this: the problems we face are complex and in need of radical solutions which might completely change how we deliver healthcare.

Without the input of those who will be working in this environment in the next five, 10, or 25 years, what bright spark of innovation

Pointing out risks to safety (perceived or real) should not be detrimental to the challenger or the challenged

can be an effective lever for patient safety and the “captain” is ultimately responsible for all actions. Yet knowing that any doctor (or other healthcare professional) can speak up without fear of retribution will surely make healthcare safer, as well as improving our working relationships. Pointing out risks to patient safety (perceived or real) should not be detrimental to the challenger or those they are challenging, but serve as a learning opportunity for all. If we want a no blame culture, then we need to encourage people to speak openly about mistakes, not only in their aftermath, but when we see them taking shape in front of us.

Tackling the problem

As the Care Quality Commission recognised in its recent report, *Opening the Door to Change*, hierarchical cultures are “inimical to safety,” but “in the NHS this lesson has not been learnt.” It highlights a number of NHS initiatives that could help tackle the problem, from consultants and junior doctors calling each other by their first name, to involving patients and families in investigations.

Errors will inevitably occur, but failing to learn from them is unacceptable. Empowering healthcare professionals to speak up when they have concerns is essential to making our NHS safer and can't come soon enough.

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Mike Davidson, British Airline Pilots Association

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could we be missing? Are we designing systems in which they could or would not want to work? Could “solutions” proposed by an unrepresentative group of people have the unintended consequences of making things worse for those they are trying to serve?

There is no substitute for experience. The insight and knowledge of those who've gone before, plus the wisdom of hindsight is absolutely invaluable. But if you genuinely want innovation, surely combining all of this experience with the fresh perspective and long term goals of people who will be working in the system for decades to come is the only way to truly change the status quo.

Katie Knight is a paediatric emergency medicine registrar

ACUTE PERSPECTIVE David Oliver

“Restructuring” is not a panacea for the ills of the NHS

Politicians and lobbyists are fond of saying that the NHS needs a radical overhaul. However, the perils of constant structural reorganisation have been described beautifully in the Nuffield Trust's *Doomed to Repeat* report.

Kate Andrews, of the Institute of Economic Affairs (IEA), recently asserted on BBC radio that the NHS was falling behind other systems and needed structural reform. Although she called for restructuring, she specifically meant changing the NHS model of funding and provision. She highlighted that, in some selected outcomes, the NHS performs worse than other EU countries. This is a fair comment, based on comparisons updated yearly by the OECD and other research groups. But data can be cited selectively to suit most ideological lines. And population health outcomes are influenced not just by healthcare but by policy and non-medical determinants: inequalities, housing, welfare, food alcohol, and tobacco pricing, education, and regulation.

Andrews argued that nations with different models still provide universal, largely charge-free or reimbursable health services, often with better outcomes. For her on-air comparison she cited France, Germany, and Switzerland, which the OECD's 2017 statistics show spend a much higher percentage of GDP and more money per capita than the UK—differences

sustained over many years. They also use a funding model based on insurance through individuals and employers, not the state. Germany and Switzerland, in particular, have diverse, competitive, and consumerist service provision and a higher proportion of care privately funded out of pocket. Meanwhile, the Commonwealth Fund repeatedly ranks the UK highly for equity of access and for people not being denied care for fear of cost.

I don't disagree that our outcome data for some conditions are mediocre; that there's more than one way to provide a universal system; or that the systems she cites have managed to avoid funding crises. However, she did not cite systems closer to our own tax funded, single payer model, such as those in Scandinavia, Spain, or New Zealand. She didn't make the argument that, if we made the political decision to fund the NHS to the same levels as Germany, the crisis narrative might disappear.

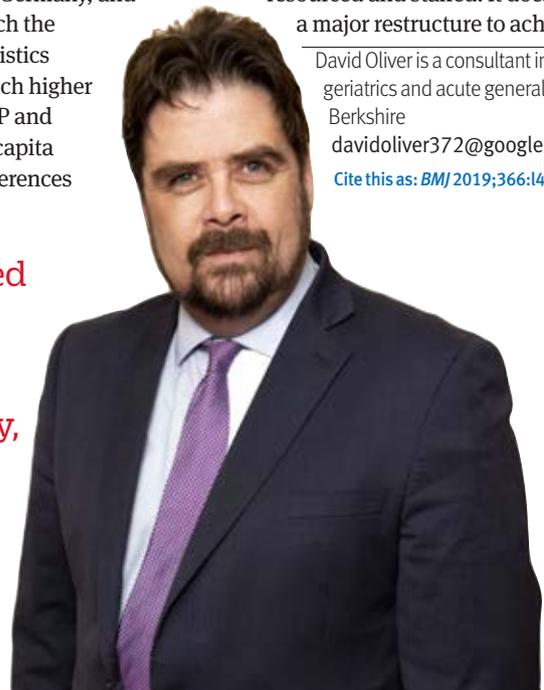
Make no mistake: the IEA would like to see private sector insurers and providers derive profit from public healthcare provision. It certainly doesn't want more government funding.

Of course, the NHS could be better—but this is possible within a tax funded, state provided system if it is adequately resourced and staffed. It doesn't need a major restructure to achieve that.

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If we funded the NHS to the same levels as Germany, the crisis narrative might disappear



Talking about death

Any emergency hospital admission of frail, elderly patients means a decision about what to do if their heart stops beating.

Should we attempt cardiopulmonary resuscitation? The medical answer isn't always clear, and the decision should involve the patient and sometimes relatives. For the admitting team, it would be useful if that discussion had already taken place with a doctor who knows the patient, with a decision recorded somewhere accessible.

This sounds like common sense, so why aren't GPs routinely discussing end-of-life care with patients who may need it soon? NHS England encourages doctors to engage in care planning conversations, but these don't always happen.

One of the main challenges is choosing the right time. Some patients are proactive and inform me that they don't want CPR in any event, often making formal advance directives to this effect even when they have many healthy years in prospect.

Although some illnesses have a well known trajectory, for most patients the future is unpredictable. For doctors, the question "Would you be surprised if this patient died in the next 12 months?" is meant to help us think about when the discussion might be relevant. But our surprise (or otherwise) has been shown to be a very poor indicator of the likelihood of death. I have patients I honestly didn't expect to live long when I first met them 17 years ago, but they're still pottering on. Others

I must beware of creating unnecessary anxiety in a patient and reducing the quality of her remaining life

decline rapidly, having been stable for years, and the right moment for that discussion is never identified.

Getting it wrong clearly has downsides in a culture where discussing death isn't commonplace. If I raise the issue of resuscitation with my patient she may be happy to have a theoretical discussion about her preferences—or she may conclude that I know something about her health that she doesn't, something that makes me think she's likely to die soon. I must beware of creating unnecessary anxiety and reducing the quality of her remaining life.

Even if I do think that the time is appropriate, and gentle exploration leads me to believe that the patient would be happy to have this discussion, it's not a conversation that can be rushed. In reality, I can't see an invitation to an appointment to discuss end-of-life care going down well, so it's likely to be tagged on to a consultation about something else.

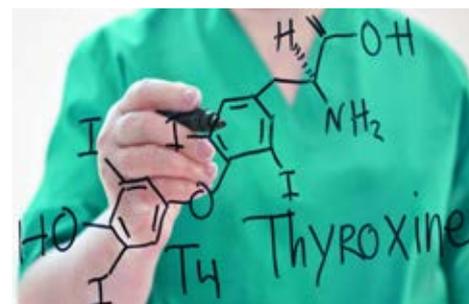
Such conversations are not just about resuscitation but also about where someone would like to be cared for. One barrier to these discussions, identified in research, is the fear of falsely raising expectations. The community services required for a gentle and dignified death at home may simply not be available when the time comes.

I feel for my hospital colleagues who make difficult decisions in emergency situations—but GPs are doing their best, and there are no easy solutions.

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LATEST PODCAST



Talk Evidence

Helen Macdonald, UK research editor at *The BMJ*, and Carl Heneghan, editor of *Evidence Based Medicine*, return for their monthly Talk Evidence podcast.

They start by discussing a recent Rapid Recommendation article on thyroid hormones treatment for subclinical hypothyroidism. Thyroxine is the most prescribed drug in the US and Canada and the third in the UK. The article made a strong recommendation to stop using thyroxine as a treatment for subclinical hypothyroidism.

"I think it's interesting," says Heneghan. "It's almost like we spent 20 years using evidence to put people on treatment, and now we're starting to look at that evidence in detail and say, well, it never mentioned in the first place that you should go on treatment. I suspect quite a significant portion of people with subclinical hypothyroidism are in this category. I guess this is about starting treatment. There's a slight problem if you are already on treatment in terms of what you do here."

Macdonald notes that "For people who are already taking treatment this is a conversation to have with your clinician. I think it would be a personal choice for those people. For people right at the beginning of the process, this gives clinicians and patients greater empowerment to say that treatment isn't the first thing to be reaching for."

"I'm going to say the first thing you shouldn't be reaching for is a test," concludes Heneghan.

They also discuss the US Food and Drug Administration's issuing of black box warnings for common insomnia drugs, with Heneghan observing that: "If we had big black warnings, patients might not come for the next prescription. We should think about how to use these warnings and perhaps introduce them in the UK and in other countries."



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Edited by Juliet Dobson, digital content editor, *The BMJ*

Dietary saturated and trans fatty acids: is it time to change tack?

The 2018 WHO draft guidance fails to consider the importance of food composition when assessing health risks, argue **Arne Astrup and colleagues**

Non-communicable diseases are the world's leading cause of death, responsible for 72% of the 54.7 million deaths in 2016.¹ Cardiovascular diseases are responsible for approximately 45% of all deaths from non-communicable diseases, with modifiable risk factors such as diet, physical activity, smoking, and alcohol intake being major causes of disease.

Among dietary factors, the World Health Organization considers saturated fatty acids and trans fatty acids to be important. Consensus exists on the health benefits of eliminating industrially produced trans fatty acids—that it will reduce incidence of cardiovascular disease and mortality.² Foods containing more than 2% total fat as trans fat were banned in Denmark in 2004, and similar legislation is soon to be implemented throughout the EU. In the US the Food and Drug Administration no longer considers

Scientific and policy missteps may have led to many unnecessary deaths globally and lessons should be learnt

industrial trans fats to be “generally regarded as safe.”

Many governments consider WHO dietary guidelines to be state of the art scientific evidence, translating them into regional and national dietary recommendations. These guidelines have potential health implications for billions of people, so the consistency of the science behind such recommendations and the validity of the conclusions are crucial.

WHO draft guidelines

WHO draft guidelines on dietary saturated and trans fatty acids for adults and children were published for consultation in May 2018. They recommend reducing intake of total saturated fatty acids to less than 10% of total energy consumption and replacing with polyunsaturated fat and monounsaturated fat to reduce incidence of cardiovascular disease and related mortality.²

But this fails to take into account considerable evidence that the health effects vary for different

saturated fatty acids and that the composition of the food in which they are found is crucially important.^{4–6} Food composition has a substantial effect on lipid digestion, absorption kinetics, and postprandial lipaemia,³ which is an independent risk factor for cardiovascular disease.⁷

How robust is the evidence linking saturated fat to cardiovascular disease? Evidence from randomised controlled trials with clinical endpoints

Several recent meta-analyses of observational studies and randomised controlled trials (RCTs) have found that total saturated fat is not associated with non-communicable diseases including coronary heart disease, cardiovascular disease, and all cause mortality.^{8–10}

By contrast, a Cochrane analysis that included data from only 15 RCTs found an association between reduced intake of saturated fat and a decrease in the composite endpoint of cardiovascular events (relative risk 0.83, 95% confidence interval

KEY MESSAGES

- The 2018 WHO draft guidelines on dietary saturated fatty acids and trans fatty acids recommend reducing total intake of saturated fat and replacing it with polyunsaturated and monounsaturated fatty acids
- The recommendations fail to take into account considerable evidence that the health effects of saturated fat vary depending on the specific fatty acid and on the specific food source
- Maintaining general advice to reduce total saturated fatty acids will work against the intentions of the guidelines and weaken their effect on chronic disease incidence and mortality
- A food based translation of the recommendations for saturated fat intake would avoid unnecessary reduction or exclusion of foods that are key sources of important nutrients



0.72 to 0.96). But it also found no significant association between reducing saturated fatty acids and total mortality (0.97, 0.90 to 1.05), cardiovascular disease mortality (0.95, 0.80 to 1.12), fatal and non-fatal myocardial infarction (0.90, 0.80 to 1.01), non-fatal myocardial infarction (0.95, 0.80 to 1.13), stroke (1.00, 0.89 to 1.12), coronary heart disease events (0.87, 0.74 to 1.03), and coronary heart disease mortality (0.98, 0.84 to 1.15).¹¹

Evidence from randomised controlled trials with surrogate endpoints

The WHO draft guidance relies heavily on a meta-analysis of 84 RCTs that tested the effect of modifying saturated fat intake on serum lipid and lipoprotein concentrations, including low density lipoprotein (LDL) cholesterol, and the ratio of total cholesterol to high density lipoprotein cholesterol.¹² This approach—which focuses on total saturated fatty acids, ignores food sources, and uses surrogate endpoints—is problematic for several reasons.

First, not all saturated fatty acids are equal; the magnitudes and even directions of the effects on both surrogate and long term endpoints vary depending on the fatty acid. Using the ratio of total cholesterol to high density lipoprotein cholesterol as a biomarker of cardiovascular disease risk, for example, is a problem because the ratios are different for lauric acid (12:0) myristic acid (14:0), palmitic acid (16:0), and stearic acid (18:0).¹³ Moreover, high plasma concentrations of the heptadecanoic acid (17:0) are associated with a reduced risk of coronary heart disease.¹⁴ Thus, saturated fatty acids cannot be viewed as one homogeneous group with regard to effects of diet on disease risk.

Second, it is unclear whether the observed changes in serum lipoproteins translate into a reduction in cardiovascular



The draft guidelines exclude substantial evidence derived from observational studies and meta-analyses of prospective cohort studies

endpoints and mortality regardless of food source.⁴ Most trials included in the meta-analysis did not investigate whole food sources of saturated fat.

Instead, some studies compared the effect of diets supplemented with fats rich in saturated fatty acids, monounsaturated fat, or polyunsaturated fat (such as cocoa butter, olive oil, soybean oil, and dairy butter) and others used fats not commonly found in diets (such as synthetic fats high in myristic acid).¹² The food matrix (or composition) in which the fatty acids exist (box 1 on bmj.com) might be more important for the effect on cardiovascular disease risk than the saturated fat content (see supplementary file online).

Third, the meta-analysis mainly used LDL cholesterol concentration as a marker for cardiovascular disease risk, which could lead to erroneous conclusions. The atherogenicity of LDL particles is determined by, among other things, size. Small and medium LDL particles show the strongest association with risk of cardiovascular disease.¹⁵ The rise in serum LDL cholesterol concentration from total saturated fat consumption has been linked to a parallel increase in particle size, so it might not translate into an increased risk of cardiovascular disease.¹⁶

The PURE study, which included more than 100 000 people, shows why a broader view of biomarkers of cardiovascular disease is needed to inform guidelines. It found that diets high in saturated fatty acids were associated not only with higher serum concentrations of LDL cholesterol, but also with higher concentrations of HDL cholesterol, lower concentrations of triglycerides, and a lower apolipoprotein B:apolipoprotein A ratio.¹⁷ The study also found that diets high in saturated fat were not associated with cardiovascular disease events, except for a lower risk of stroke.¹⁸ The relevance of this observation is confirmed by at least three randomised trials comparing diets with different fats on clinical endpoints.¹⁰⁻²⁰

Mediterranean-style diets were associated with a significant reduction

in major cardiovascular disease events without any reduction in LDL cholesterol in the Lyon Diet Heart Study¹⁹ and in updated analyses of the PREDIMED trial,²⁰ which both showed that LDL cholesterol concentration is not a valid biomarker for alterations in cardiovascular disease risk caused by dietary changes.

Reanalysis of the Minnesota Coronary Experiment (a double blind randomised controlled trial that tested whether replacing saturated fat with polyunsaturated fat reduced coronary heart disease and death) also supports the claim that serum cholesterol is not a valid surrogate biomarker for cardiovascular disease risk when making dietary changes.¹⁰ Despite the finding that the polyunsaturated fat diet produced a 13% greater reduction in serum cholesterol than the saturated fat diet, there was no reduction in cardiovascular disease endpoints.¹⁰

The reanalysis found a 22% higher mortality for each 0.78 mmol/L reduction in serum cholesterol caused by the polyunsaturated diet.¹⁰ A meta-analysis found that cholesterol lowering using polyunsaturated fat diets did not show any evidence of benefit on mortality from coronary heart disease (1.13, 0.83 to 1.54) or all cause mortality (1.07, 0.90 to 1.27).¹⁰

Evidence from observational studies and food based analyses of cardiovascular disease risks

The WHO draft guidelines exclude substantial evidence derived from observational studies and meta-analyses of prospective cohort studies. The guideline argues that the quality of evidence for relevant outcomes from such studies is lower than from analyses of RCTs and that it was not possible to assess the potential differential effects of replacing saturated fatty acids with different nutrients. But observational studies are valuable for assessing the association between saturated fat and long term endpoints, such as cardiovascular disease.⁸⁻²¹

Observational studies are also useful for examining the foods consumed in people's diets rather than examining individual nutrients.



Nutrient dense foods that also contain substantial amounts of saturated fat		
Food	Nutrients	Evidence linking food to cardiovascular disease and diabetes
Eggs	13 essential vitamins and minerals (eg, vitamin D, riboflavin, iodine), high quality protein, α -linolenic acid (n-3), lutein, zeaxanthin, and choline	No association with coronary heart disease, reduced risk of stroke. RCT data show that two eggs a day has beneficial effects on cardiovascular disease biomarkers, ^{22,23} and improved glycaemic control in type 2 diabetes ²⁴
Dark chocolate	Stearic acid is the major saturated fat. Also rich in fibre, iron, magnesium, potassium, phosphorus, zinc, and selenium. Contains polyphenols, flavanols, and catechins. Contains added sugar	The WHO draft guidelines state that stearic acid has no harmful effect on "any outcome assessed." Meta-analyses of observational evidence find dark chocolate consumption to be associated with a substantial reduction in risk of cardiovascular disease. ^{25,26} RCTs find beneficial effects on cardiovascular disease biomarkers (HDL and LDL cholesterol, blood pressure, etc) ²⁷
Cheese	Full fat cheese is high in medium and long chain saturated fatty acids (C13:0, C20:0, C18:2t10c12, and C20:2n-6), a wide diversity of typical bioactive fatty acids (conjugated linoleic acid, phytanic acid, trans palmitoleic acid), protein, calcium, magnesium, and lactic acid bacteria (that produce short chain fatty acids), and has a complex matrix structure	Meta-analyses of food based observational studies find that cheese intake is associated with slightly reduced risk of cardiovascular disease and diabetes. ^{28,29} Mechanistic studies and RCTs show that cheese intake has favourable effects on biomarkers of cardiovascular disease (blood lipids and blood pressure) and that these effects cannot be predicted based on content of total saturated fat and sodium ^{30,31}
Meat	Meat is a major source of high quality protein, bioavailable iron, minerals, and vitamins, but is also a source of saturated fat	Meta-analyses of observational studies find that intake of processed meat, but not red meat, is associated with a higher risk of coronary heart disease, which indicates that processing or factors other than the saturated fat content are responsible for any link. ³² A meta-analysis found no difference in cardiovascular disease risk factors between groups with more and less than 0.5 daily servings of meat ³³

Longstanding evidence indicates that the food matrix is more important than its fatty acid content for predicting the effect of a food on risk of coronary heart disease. This was the conclusion of an expert consensus panel, that some of us took part in, nearly 10 years ago.²¹ Ample food based studies have examined whether foods with high saturated fat content, which are likely to be consumer targets for the WHO recommendation, contribute to cardiovascular disease events and mortality (table).

Discussion

To understand why the current misconceptions about saturated fat are so solidly anchored in major public health bodies, including WHO, we must consider the historical evolution of guidelines.

Up until the 1950s nutrition science focused on single nutrients, and major public health policies focused on deficiencies in micronutrients, leading to fortification of selected staple foods; for example, iodine in salt and vitamin B₃ and iron in wheat flour and bread.⁴ Nutrition science then changed focus to policies for preventing chronic diseases such as cardiovascular disease in affluent countries, and the single nutrient approach was maintained. This was based mainly on cross country comparisons between saturated fat intake and cardiovascular disease mortality. The simple two step deductive reasoning that "dietary fat, and saturated fat in particular, increases serum cholesterol" and "serum cholesterol is a risk factor for coronary heart disease" led to

the conclusion that all dietary fat, and saturated fat in particular, should be reduced to prevent cardiovascular disease.⁴ The US dietary guidelines published in 1980, and international guidelines ever since, have focused on reducing intake of saturated fat.

Historically, the focus on reducing saturated fat led to the proliferation of industrially produced food products low in fat, saturated fat, and cholesterol and to the dissemination of products based on technologies to replace saturated fat. One example is the production of margarine and spreads based on partial hydrogenation of vegetable oils.³⁴

The widespread consumption of trans fat is considered to have been responsible for 6% to 19% of all coronary heart disease events in the US in 2006³⁵ and to have caused about 2700 deaths annually and loss of 570 000 life years in the UK every year.³⁶ Denmark banned trans fats in 2004, and analyses have attributed the subsequent larger decline in coronary heart disease mortality in Denmark than in other EU countries to the elimination of trans fat from foods.³⁷

Scientific and policy missteps

Consumption of trans fat is considered to have been responsible for 6% to 19% of all coronary heart disease events in the US in 2006

may have led to many unnecessary deaths globally, and lessons should be learnt. We think that recommendations to reduce intake of total saturated fat without considering specific fatty acids and food sources are not based on evidence and will distract from other, more effective, food based recommendations. Recommendations to reduce saturated fat might cause a reduction in the intake of nutrient dense foods that are important for preventing disease and improving health. We're concerned that, based on several decades of experience, a focus on total saturated fat might have the unintended consequence of misleading governments, consumers, and industry towards promoting foods low in saturated fat but rich in refined starch and sugar.

We strongly recommend a more food based translation of how to achieve a healthy diet and reconsideration of the draft guidelines on reduction in total saturated fatty acids.

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The authors have declared several competing interests including with food industry organisations. The authors' full declaration is on bmj.com.

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LETTERS Selected from rapid responses on bmj.com

LETTER OF THE WEEK

NHS duty to ethnic minority staff

The UK government website says: “The public sector equality duty requires public bodies to have due regard to the need to eliminate discrimination, advance equality of opportunity, and foster good relations between different people when carrying out their activities.”

Poorer quality care for patients from black and minority ethnic (BAME) groups has been documented in many British institutions (Editorial, 1 June). BAME clinicians experience inequalities long before they start practising. Clinicians qualified in the UK have all spent extended periods in higher education. Recent research from two multidisciplinary London universities by Advance HE was driven by the same need to enhance diversity at the top of organisations as described in *The BMJ*.

Discrimination is already present in academia. Participants in a programme to diversify leadership reported that “using diverse role models and speakers can help convey the message that leadership can take many forms and can incorporate different identities and cultural backgrounds.” Equality of recognition and promotion came up as sensitive issues for many BAME staff. Over the year of the programme, ratings of “my formal appraisal/performance review is useful/valuable” improved substantially.

Advance HE makes three recommendations for developing new academic leaders that might also apply to the NHS. First, pay particular attention to the advertising strategies used for senior posts, identifying ways to increase the breadth of the audience reached. Second, start discussions with BAME staff to explore what barriers they face to progression and leadership in the institution and more broadly. Third, implement equality impact assessments as a standard accompaniment to all decision making agenda items.

Actually, these recommendations are a duty.

Woody Caan, occasional teacher, Duxford

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ETHNIC MINORITY STAFF

Whitewashing of doctors in photos



I look forward to *The BMJ*'s special issue on ethnic minority staff and patients (Editorial, 1 June), in particular further information about complaints against NHS staff, which can be arbitrary and dependent on bias (conscious or not).

The results of an internet image search for the term “doctor” show a disparity between expectation and reality. Of the first 10 results, everyone seems to be white. Such imagery is pervasive throughout our society, whether it is online, on television, or in advertising.

Is it surprising that patients' ideas of what a doctor should look like are sometimes different from their experience? Do mismatches between expectation and reality increase the likelihood of a complaint?

Perhaps even more pernicious is the effect that such imagery could be having on potential medical school applicants, who might think that they have to conform to such stereotypes and might not bother applying at all.

Sati Heer-Stavert, GP, Birmingham

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HOSPITAL SAFETY

Listen to staff's complaints about workplace

Although many healthcare bodies seem prepared to divert resources in advance of a visit from the Care Quality Commission (CQC) (David Oliver, 1 June), they do ultimately take heed of the commission's recommendations and opinions. This can only be a good thing.

Personal experience of CQC visitors is that they are appropriate to the role, prepared to

listen, and, most importantly, seem to form a balanced opinion.

What should be of concern is the tendency for some organisations to be disproportionately reliant on external “adverse” opinion from the CQC to provoke change, rather than listening to the opinions of their own clinicians, nurses, and allied professionals about potential shortcomings in the workplace.

Ian Botterill, consultant colorectal surgeon, Leeds

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NHS WORKFORCE PLAN

No trust in this government

Mahase reports that doctors will be able to halve pension contributions to ease tax burden (Workforce, 8 June). A consultation will start at the end of June. Meanwhile, many doctors are worried about the prospect of huge tax bills.

I gave up my 20s to prop up the NHS, working up to 136 hours a week, with overtime paid at a fraction of the hourly rate. Barely able to keep my eyes open as I drove home from work, I comforted myself that at least I would retire with a nice pension. I won't be poor, but my pension will be a lot less than I was promised. All trust has been eroded with this government.

We need the BMA to be tough negotiators on this. The government will offer a poor deal, hoping that we are desperate enough to accept it as a quick fix. But as doctors we know that a quick fix is rarely worthwhile.

Robert I J MacDermott, consultant gynaecologist, Dartford

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I gave up my 20s to prop up the NHS, working up to **136** hours a week, with overtime paid at a fraction of the hourly rate

GIANT CELL ARTERITIS

Jaw pain and visual symptoms

Lazarewicz and Watson provide a timely and authoritative update on giant cell arteritis (Clinical Updates, 1 June). An important clinical sign is the absence of a palpable superficial temporal pulse. This is best palpated just anterior and superior to the tragus.

Jaw claudication can be missed, particularly in patients who do not chew food, such as those on soft diets or with dental problems. Differentiating claudication from other causes of jaw pain can be difficult. Some authors have advocated the chewing gum test for two minutes (at a rate of one chew per second) to elicit this symptom.

In addition to anterior ischaemic optic neuropathy, giant cell arteritis can cause several other vascular events in the eye, including nerve palsies, cilio-retinal and retinal artery occlusion, retrobulbar optic nerve ischaemia, and ocular ischaemic syndrome. Patients might report vague visual

symptoms including longer amaurosis fugax-like episodes, photopsia, or purple vision.

Colm McAlinden, specialty trainee in ophthalmology, Bridgend; Eirini Skiadaresi, consultant ophthalmic surgeon, Llanelli

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ALCOHOL EXCESS

Schools, police, and the media could all play a part in reducing drinking

We need a positive and multifaceted strategy towards drinking that targets different settings and supports different age groups (Helen Salisbury, 25 May).

Early identification and brief advice provided by primary care can reduce alcohol consumption, preventing future health problems and sparing the need for costly future NHS services. But primary care needs investment.

Factors limiting health education include competing demands, time constraints, insufficient training, and lack of support. General practice needs to be made fit for

current needs and “Fit for the Future.” Other settings that need to be involved include schools, the police, mental health services, housing, licensees, and the media. Public health professionals are crucial to local success as they can coordinate, support, and galvanise people into action.

The forthcoming green paper on prevention must include alcohol and the provision of sufficient resources. Investment in public health must be adequate for local and national population health needs.

Michael Craig Watson, trustee, John Lloyd, honorary vice president, Institute of Health Promotion and Education

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CATARACT SURGERY

Leave it to commissioners

We have insufficient resources to give every patient the treatments that they and their surgeons would like. This is not unique to ophthalmology (Exclusive Investigation, 1 June).

NICE guidance is just that, guidance. It's not an instruction to commissioners, but advice for best practice if considered affordable by those responsible for implementing in the NHS.



Specialists must accept that they are part of a larger healthcare community and that available resources must be allocated by those in the statutory position to do so.

This debate will continue until our elected representatives in government are honest about what the NHS can provide. Until then, leave it to the commissioners to use the systems of rationing they think are appropriate.

Or perhaps the Royal College of Ophthalmologists can suggest a way to halve the costs of providing cataract services so that twice as many people can have the treatment.

Bruce Braithwaite, consultant surgeon, Nottingham

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QUALITY IMPROVEMENT

Careful evaluation of change

Fulop and Ramsay describe how organisations can drive changes in practice to improve care (Quality Improvement, 4 May). Their underlying assumption is that all such change is beneficial.

All humans are capable of self interest, which can lead to errors. The authors don't acknowledge that local experts might have valid grounds for opposing a change. The self interest here is that of those who seek recognition for bringing about change whether it is beneficial or not.

Organisational changes should be subject to rigorous evaluation. Fulop and

The authors don't acknowledge that local experts might have valid grounds for opposing a change

Ramsay offer the reorganisation of stroke services as an example of how a major project can bear fruit. That this process has only been shown to be effective in an urban context is mentioned but is not part of the general discussion.

Evaluation of changes in healthcare delivery should include the question: do these changes restrict access to care?

S Michael Crawford, clinical lead for research, Keighley

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Authors' reply

We agree that the evidence base for reorganisation of specialist services has limitations. We are currently assessing centralisation of specialist cancer surgery services, and we recently published findings indicating that patients, professionals, and the public might be willing to travel further to a specialist centre for better care and outcomes.

We agree that change might not automatically be beneficial and that resistance might be a reasonable response. But, as noted in our analysis, professional resistance can be driven by vested interests and under such circumstances needs to be challenged to achieve the goal of improving patient care.

The people who plan change—nationally or locally—must take a critical view of the research they use (ie, go beyond headline findings) to weigh potential benefits against ensuring that patients are not systemically disadvantaged by a proposed change. This critical interpretation of the evidence should be incorporated into planning, consultation, implementation, and evaluation.

Naomi J Fulop, professor of healthcare organisation and management, Angus I G Ramsay, NIHR knowledge mobilisation research fellow, London

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