

GLUTEN

Should we *all* be giving it up?

According to a controversial new book, wheat has the potential to cause a plethora of diseases. Is this just another food fad, or something we should take seriously? Eight health experts give their opinion

REPORT *Adriaane Pielou*

WHAT'S THE LINK between Alzheimer's, attention deficit hyperactivity disorder, arthritis, autism, depression, diabetes, epilepsy, numerous intestinal disorders, memory problems, migraines and Tourette's syndrome? Gluten, according to leading American neurologist Dr David Perlmutter. The author of *Grain Brain*, a bestseller in the US and recently published in the UK, warns that consumption of gluten – 'a modern poison' in bread, pasta, cakes and biscuits as well as many processed foods – is a key factor behind these and other grim conditions.

It's not the first time, of course, that a doctor has raised the alarm about gluten. The hundreds of gluten-free products now in supermarkets and the arrival of gluten-free items on restaurant menus testify to how recent warnings about its potential to cause havoc with health have resonated. A few years ago, in his bestseller *Wheat Belly*, Dr William Davis cited gluten as a cause of numerous digestive and other health issues. Compelling talks online by leading gluten experts such as Dr Alessio Fasano, Dr Marios Hadjivassiliou, Dr Peter Osborne and Dr Natasha Campbell McBride prompt torrents of comments.

But Dr Perlmutter's book is the first to link gluten consumption directly to

chronic disease, in particular dementia, and to point out that gluten sensitivity, which some research suggests affects 30 per cent of us, doesn't always manifest itself as a digestive problem. 'People with gluten sensitivity can have issues with brain function without having any gastrointestinal problems,' he writes. In other words, our brains may be being damaged by gluten without our being remotely aware of this happening. So should we rush to clear out the kitchen? Immediately change our diet? Or take his warnings with a pinch of salt (which was also once blamed for all our ills)?

● **WHAT IS GLUTEN?** Stir a cupful or more of wheat flour and water together until it is a sticky mass, knead it, rinse it under a tap to get rid of the starch, and the gluey mass you'll be left with is gluten. This sticky protein composite is found primarily in wheat, which, because of hybridisation, today has many times the gluten content it did 50 years ago. It's also present in barley and rye.

● **WHY IS IT BAD FOR US?** According to Dr Perlmutter, gluten consumption leads to the amplification of a protein called zonulin, which activates inflammation, a cornerstone of brain diseases associated with ageing including Alzheimer's, as well as numerous autoimmune disorders and even cancer.



STEPHANIE MOORE,
nutritionist at Grayshott
Spa, Surrey

Given all the new research, I think we would all benefit from a gluten-free diet, and I now tell everyone that the single most effective step

they can take to improve their health is to eliminate wheat. In this country, we are massively misinformed about health matters. In the 1990s, I thought I was doing the right thing by following the government-recommended 'food pyramid', eating mostly whole grains, and there's no question I was the most unhealthy, fat and sluggish I have ever been. Some of us may manage on wheat, but none of us will thrive on it. Acne, arthritis, hay fever, psoriasis – so many conditions improve on a gluten-free diet.

Children can benefit hugely, too: I've seen huge improvements with children with ADHD, dyspraxia and dyslexia using a gluten-free diet. Basically, we all need to start eating the way we did 50 years ago: butter, meat, fresh vegetables – some of the things we've been brainwashed into thinking are bad – and no processed food. But the big food manufacturers do their utmost to discredit critics like me.

I was on a TV show about health myths and commented that, because commercial bread is now made using the Chorleywood process – where high-gluten flour, enzymes and a large amount of yeasts are used with minimal time for fermentation – it is highly indigestible and irritating for the gut, and I was pursued by the British Federation of Master Bakers. They persuaded Ofcom to investigate me and try to sue me. We asked some experts in the field to support my views, which satisfied Ofcom, but it made me realise what we're all up against.



PROFESSOR DAVID SANDERS,
consultant gastroenterologist at the Royal Hallamshire Hospital, Sheffield, Britain's largest

centre for gluten-related diseases
The publicity about Novak Djokovic going gluten-free by choice in 2010 and then becoming the number one tennis player in the world made medics sit up and think. Mankind is relatively new to wheat and,

personally, I can imagine that in years to come, just as we now ask, 'Have you had your five portions of fruit and vegetables today?' everyone will be urged to restrict their wheat – and therefore gluten – intake. What we've seen in the past 50 years is a huge increase in the consumption of wheat. Concurrently, there's been a huge rise in the incidence of coeliac disease – an extreme immunological reaction to gluten – from one in 8,000 in the 1950s to one in 100 now.

A recent study also suggests as many as 25 per cent of the UK population has the genetic marker for coeliac disease. Last year, a feature about our work on gluten on the *British Medical Journal* website got the largest number of hits for a month, and at the United European Gastroenterology Week conference in Berlin non-coeliac gluten sensitivity was a key issue. Gluten has become a very hot topic.



NORMA MCGOUGH,
director of policy, research and campaigns at Coeliac UK

The recent movement towards nutrition being seen as the elixir of life has led to a huge improvement in the range of gluten-free foods available in supermarkets and in restaurants. However, we



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work with experts including immunologists, neurologists, gastroenterologists, paediatricians and dieticians, and so far we have seen no clear markers to identify any groups other than people with coeliac disease who might benefit from a gluten-free diet.

But, according to the National Institute for Health and Care Excellence (Nice), only about ten to 15 per cent of the one per cent of people in the UK who have coeliac disease are actually diagnosed, at a median age of 50. About one in four has been previously misdiagnosed as having irritable bowel syndrome. That would suggest that there are a lot of people living with the condition, or who may suffer chronic undiagnosed problems, such as feeling tired all the time or severe gas or stomach pains, who might benefit from cutting gluten out of their diet.

coeliac.org.uk



DR ELENA LESCHEN,
MD, nutritional medicine practitioner at One Allan Park Wellbeing Clinic, Stirling, Scotland

I've found that people are incredulous when they experience the difference that avoiding gluten makes. They even see symptoms disappear they thought had nothing to do with diet.

'One patient, for instance – a woman in her 40s – had the first pain-free periods she'd ever had, even though she'd adopted a gluten-free diet for another problem. What we eat has great implications for our health: of course it has. I switched to nutritional medicine in 2008, after practising conventional medicine for 12 years, partly because of the success I had in treating my own chronic fatigue condition nutritionally. Conventional medicine had nothing to offer for that.

Now I see a lot of patients with chronic degenerative conditions – diabetes, asthma, migraine, depression, thyroid disorders, multiple sclerosis – and gluten sensitivity is always a big factor; partly because it leads to inflammation. I always recommend a gluten-free diet in those cases. It's a drastic step, quite hard to make and maintain, but even cutting down on gluten will help.

Even physically active people who don't have any health problems can see benefits. It is often only when people reduce gluten that they realise how much better it's possible to feel. ►

JENNIFER HILES, psychotherapist, London

I have personal experience that going gluten-free can be transformational. Eliminating gluten changed my life. My daughter Rachel, who's 21, was diagnosed as coeliac as a baby. Before diagnosis, she'd always want to eat but after just one mouthful would push the spoon away, crying.

She was lacking in energy and her stomach was distended. At one point, the doctors thought she might have leukaemia. She was eventually given her coeliac diagnosis at about 18 months, and within three weeks of no gluten was a different child. A few years later, I started getting this incredible tiredness – so tired that once I just lay my head on the doctor's desk – along with the bloating and digestive irritability I'd always had.

My GP couldn't really help, but then I read an article about how the symptoms of coeliac vary greatly. I put myself on a gluten-free diet and, again, the results were transformative. I didn't undergo any tests, though, because I didn't want to go back on to gluten to take the test. There must be many people like me who don't show up in the statistics.

Eating out is much easier since so many people started avoiding gluten. Many restaurants now offer a gluten-free menu. But I don't trust a lot of supermarket "gluten-free" labels. Living gluten-free really means always cooking from scratch, being at home and cooking as people did during wartime: eggs, meat, chicken, fish, loads of vegetables – basic, natural foods, with nothing processed.



DR JULIAN KENYON, medical director, the Dove Clinic for Integrative Medicine, London and Winchester

I've been practising for 40-odd years and I can say that food sensitivities – as

opposed to an intolerance to gluten – have become extremely common, with wheat at the top of the list. No one really knows the reason, though.

Faddism in food is commonplace, we all know that. You can come up with all sorts of ridiculous rulings and say everyone has to do x, y or z to cure everything, but you need clinical evidence to support those rulings. So far as I am aware, there is no convincing evidence that gluten per se is inflammatory. I don't think there is enough evidence to make a strong case for us all to stop eating wheat. So, if I'm going to tell patients, 'Don't eat x, y or z,' and if patients asked, 'What evidence do you have?' I'd have to say, 'Sod all,

really.' But we have had a lot of success with low-dose immunotherapy, which allows me to make an objective judgment of which foods a patient may be sensitive or allergic to, and do something about it. Basically, it's a small injection; we put in a tiny amount of wheat, and if the patient is sensitive and/or allergic, that results in a little weal. We will then dilute the amount we have given them until we find a dilution in which there is no weal as a reaction, give that as a medication, and over time – a week, perhaps three months – the patient will be desensitised so they can eat wheat without having a reaction.



DR JENNY GOODMAN, practitioner of nutritional and environmental medicine, London

One of the first things I do when treating children with autism is take them off gluten – and milk products. Then, usually, three or four weeks later, I will get a call from their parent saying,

'This child is making eye contact for the first time', or, 'This child has allowed me to give him a cuddle.' That's a huge breakthrough.

You cannot cure autism but, through changes in diet, you can sometimes bring about some improvement. Look at all the illness epidemics we have: heart disease, cancer, diabetes, Alzheimer's, autism. We are clearly doing something wrong. There are many things that damage everybody's health – such as pesticides – and it is too simple, wrong, to say it's just gluten. But if your body is intolerant to something it has only one way to react, and that is through inflammation, and in some people that will be what is happening. Autistic children fall into that group. But I don't think everyone needs to stop eating gluten; the absence of protein and healthy fats in the diet concerns me more.

Ideally, I would get most people eating butter; cooking with coconut oil, eating organic meat, lots of vegetables, and that would naturally reduce carbohydrate and gluten consumption. I feel profoundly weary of the lack of importance the medical establishment attaches to nutrition. It's as if there's a deliberate ignorance. Conventional medicine is based on the idea that you either have a disease or you don't, and if you don't you're totally well. There is no concept of a spectrum, or of prevention being better than cure.



JESSICA SMITH, research communications officer at the Alzheimer's Society

Research into diet is difficult because it requires looking at a lot of people over a considerable length of time,

so the resultant findings tend to be quite broad. However, there's good evidence that the Mediterranean diet – plenty of good fats, fresh vegetables, fish, etc – reduces the risk of developing dementia.

Inflammation is still not fully understood, although we know it plays a role in dementia: it is a sign that the brain cells are under stress and they send out this signal when they are about to die. Regarding *Grain Brain* and the claim that gluten causes inflammation, from looking at published evidence, it's far from clear. Often these books offer just one interpretation of the debate, and you can't base things on just one study. You have to wait for a consensus to arrive; that's how science works. The reason people develop Alzheimer's is still unknown, which is why we talk about 'risk reduction' rather than avoidance. ▣

GLUTEN NEED-TO-KNOW

- **Gluten is a protein found primarily in grains such as wheat, barley, rye and triticale (a cross between wheat and rye), so if you want to cut down on your gluten consumption, the obvious foods to avoid are bread, pasta, cakes, biscuits and cereals, unless they're labelled gluten-free or made with corn, rice, soy or other gluten-free grains.**
- **Gluten can also be added to a wide variety of foods from sausages and salad dressings to sauces. People who are diagnosed with coeliac disease, an autoimmune condition that causes inflammation in the small intestines, are advised to follow a strict gluten-free diet and must avoid any food containing even a trace of gluten.**
- **The good news is that there are many healthy and delicious foods that are naturally gluten-free, so you can eat plenty of the following:**
- **Beans, seeds, nuts in their natural, unprocessed form**
- **Fresh eggs**
- **Fresh meat, fish and poultry (but not breaded, batter-coated or marinated)**
- **Fruit and vegetables**
- **Most dairy products**