

Warning: your diet is bad for your brain

World expert think tank declare a mental health meltdown as rates of mental illness soar

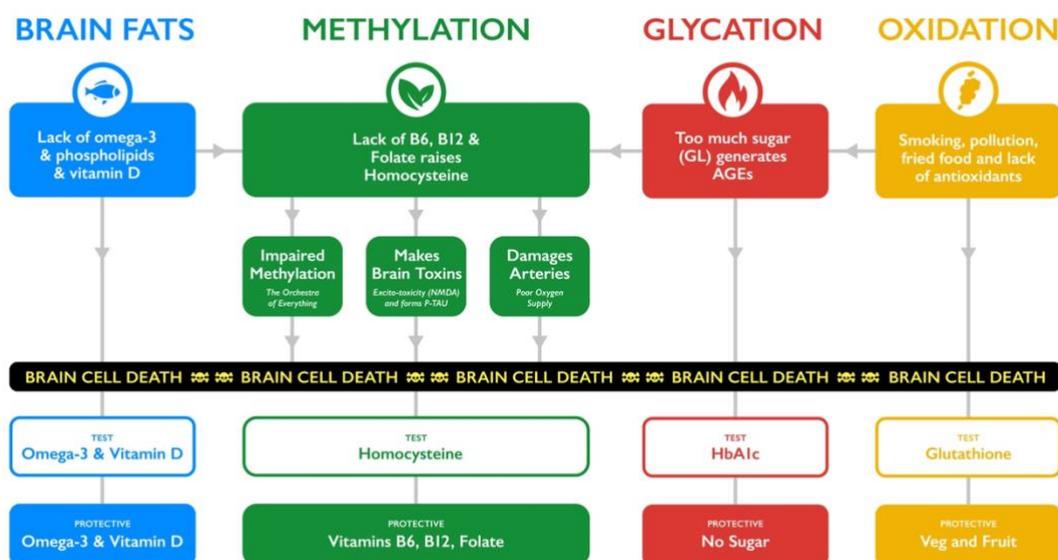
We are facing a new pandemic. Not the result of a return of Covid or bird flu but caused by something much closer to home that affects us every day. The food we eat. It is damaging our brain.

A report, just published in the Lancet, found that neurological diseases, from autism to Alzheimer's, are affecting 43% of the world's population. The Federation of European Neuroscientists have declared a 'brain health emergency'. The Times reports that two thirds of benefit claims are for mental health. Diagnoses of autism and ADHD are steadily increasing.

The good news is that a fightback is beginning. Yesterday a virtual "Upgrade Your Brain" conference, organised by the charitable foodforthebrain.org, brought together leading neuroscientists - psychiatrists, nutritionists and neurologists from around the world - to brainstorm the cause and a solution. They identified the four 'horsemen of the mental health apocalypse' lurking in our diet.

Standard healthy eating advice rarely warns about them all. They are:

- A lack of brain fats, notably omega-3 from seafood but also vitamin D;
- Increased intake of sugar and ultra-processed foods;
- A lack of the many antioxidants and polyphenols (micronutrients) found in spices, vegetables and fruits, especially berries;
- Lack of B vitamins, notably B12, producing homocysteine, a brain toxic amino acid.





The toll exacted by the horsemen is vast. Mental illness is now costing considerably more than all cancer and heart disease combined. “The Children's Society recently reported a tripling in NHS referrals for mental ill-health in the last three years.” says Professor Michael Crawford, at the Chelsea and Westminster Hospital Campus of Imperial College.

According to Crawford the damage begins in pregnancy. Lack of B12 and folate in the mother increases later behavioural problems in their children. Fewer than 5 per cent of children get the basic recommendation of seafood rich in omega-3 and many eat none at all. “Special schools are bursting at the seams,” says Dr Rona Tutt, former president of the National Association of Head Teachers.

“High sugar and ultra-processed foods is devastating mental health and plays a major part in the increase in both ADHD, depression and dementia.” says Professor Robert Lustig from the University of California. Dr Georgia Ede, a psychiatrist from Harvard, reports low carb diets reversing mental illness.

According to the NHS one in five adults in England are on anti-depressants and last year one million teenagers were prescribed them. This year prescriptions are expected to exceed 100 million. Independent researchers have been warning about their lack of effectiveness and damaging side-effects.

But it is not just nutritional deficiencies that are threatening our brains. The way we live can contribute to the damage “The combination of poor diet, lack of exercise, less intellectual and social stimulation, stress and insomnia creates a ‘perfect storm’ for the brain,” says neuroscientist Dr Tommy Wood at the University of Washington.

Wood is leading research at the charity foodforthebrain.org, which has developed a defensive strategy to protect the brain with nutritional and lifestyle changes. It starts by finding out just how well your brain is doing via a free online Cognitive Function Test followed up by personalised advice on how to reduce your dementia risk,

The fourth horseman, high homocysteine (a consequence of a lack of B vitamins) is linked to all of the mental problems that are on the rise because it damages nerves and brain cells as well as arteries, the supply chain for the brain. If your homocysteine is high, which it is in half of those over 65, your memory is declining. Lowering it reduces brain shrinkage in those with pre-dementia by two thirds according to Oxford University research. GP's rarely test it.

Testing and lowering homocysteine is a key target of the charity's prevention plan. Participants are sent a home test kit to measure blood levels of omega-3, homocysteine, HBA1c for sugar balance and vitamin D, lack of which is another contributor to dementia and depression. The charity aims to reach a million people in the largest ever ‘citizen science’ project and have tested 420,000 so far.

The idea that Alzheimer's can be prevented is gaining support. The US National Institutes of Health have attributed 22% of the risk of Alzheimer's to raised blood homocysteine and 22% to a lack of seafood and omega-3 fats.



A recent study using UK Biobank data concluded that up to 72% of dementia cases could be prevented if all risk factors were targeted. “Even this is probably under-estimating the power of prevention.” says Professor David Smith from the University of Oxford, one of the study authors. “The number of preventable cases could be higher if a person’s omega-3 and B vitamin status, measured, by a blood test for homocysteine (not measured by the UK Biobank) were taken into account.” China’s leading prevention expert, Professor Jin-Tai Yu from Shanghai’s Fudan University, a co-author of this study, agrees. “Homocysteine-lowering treatment with vitamins, especially B12, is one of the most promising interventions for dementia prevention.”

“The same diet changes that reduce the risk for dementia also help everything from ADHD to depression,” says charity founder Patrick Holford, author of a book, *Upgrade Your Brain*, out today. He is visiting 30 cities in the UK and Ireland over the next month to kick start a nationwide ‘Upgrade Your Brain’ campaign. “We need to engage with millions of people, get nutrition education happening in school, and most of all get health authorities and governments around the world to take the mental health meltdown seriously and put brain health at the top of the health agenda.” Professor Crawford says “Today’s diet bears no resemblance to the wild foods we ate during our species’ evolution to which our genome is adapted. As a consequence our brain size is shrinking- If we don’t prioritise brain health and nutrition the continued escalation of mental ill health, starting in the 1950s, can only end in disaster.”

The group are launching Alzheimer’s Prevention Day on May 15th – see alzheimersprevention.info with a free 3-minute online Alzheimer’s Prevention Check to motivate people to make the eight brain friendly diet and lifestyle changes (see below). “You are the architect of your own brain’s future health.” says neurologist Dr David Perlmutter, another member of the group.

To join the Upgrade Your Brain campaign; attend a seminar; take the Cognitive test to become a ‘citizen scientist’; or attend the recorded Upgrade Your Brain conference; or participate in Alzheimer’s Prevention Day visit: foodforthebrain.org/upgradeyourbrain.



8 Things You Can Do to Help Prevent Alzheimer's



Low Carbs & GL

Avoid sugar and eat a low glycemic load diet



Healthy Gut

A healthy gut and gums (dental health) is key



Up Brain Fats

Eat fish and supplement for omega-3 & vitamin D



Active Body

Exercise, build muscle and keep physically active



Ensure B Vitamins

Keep your homocysteine low with B vitamins



Active Mind

Keep yourself socially and intellectually active



Antioxidants

Eat antioxidants & polyphenol rich veg, berries, spices



Sleep & Calm

Sleep Well, Build Stress Resilience, Live Purposefully

