



OMEGA-3
For clever kids!

TRYPTOPHAN
To beat the blues

ZINC
Helps improve
mood

Words Zoë Seymour

Is food the **NEW PROZAC?**

» Can what you eat really make you happy – or make you brainier? There's a wealth of new research documenting the incredible impact your diet can have on your mind...

ULTIMATE MIND FOODS

VITAMIN B6
Combats post-natal depression

WHOLEGRAIN CEREALS
Help fight fatigue

■ **OILY FISH** Whether you choose salmon, mackerel, sardines or fresh tuna, all of these oily fish are rich in omega-3 fatty acids (EPA and DHA, both essential for brain health).

Guidelines suggest that women who intend to have children one day should have a maximum of two servings a week, as mercury levels in oily fish can interfere with foetal development (all other women can eat up to four portions a week).

■ **WHEAT** Research from Cardiff University shows that a diet that includes high-fibre wholemeal cereals has a marked effect on mental health. Within just a week of the trial starting, subjects showed a reduction in fatigue as well as lower depression scores and better cognitive powers.

■ **TURKEY** This lean meat is rich in many brain-friendly nutrients, including selenium, niacin, vitamins B6 and B12, and zinc. Turkey is also well known for its high tryptophan content. Tryptophan is an amino acid (protein building-block) that is required for the production of serotonin, the mood-enhancing and sleep-inducing chemical found in the brain.

With one in four of us suffering from a mental-health problem at some point in our life, mind medicine has never been more topical. But as concern increases over the side effects of SSRIs (among the most commonly prescribed form of antidepressants), many doctors, scientists and nutritionists are arguing for a more holistic approach to mental illness, with nutritional therapy at its centre. 'From childhood conditions, such as attention deficit hyperactivity disorder (ADHD), to adult depression and schizophrenia, there's a growing body of evidence to show that targeted nutrition – especially supplementation with omega-3 fatty acids – works, and that it rivals drug treatment for effectiveness in some instances,' says Professor Basant Puri from Imperial College London, who's also a consultant at Hammersmith Hospital.

Indeed, barely a week goes by without a new study adding further weight to the benefit of omega-3s, the good fats found in

fish that are essential for the development and maintenance of a healthy brain. And this buzz has entered the mainstream, with fish oils now the top-selling own-brand supplement in Boots.

ESSENTIAL KNOWLEDGE

Essential fatty acids (omega-3 and omega-6 fatty acids) are so important in your diet because your body cannot manufacture them – it has to get them from food. Unfortunately, our Western 21st-century diet is low in the sources of omega-3s – oily fish and certain nuts and seeds. This deficit is storing up health problems as omega-3s protect the heart – and the old adage about fish being brain food is also increasingly being shown to be true. DHA and EPA, the two major types of omega-3s, are crucial for the development and day-to-day functioning of your brain. Although deficient in omega-3s, our diet is packed with ▶

omega-6 fatty acids (found mainly in cereals, vegetable oils and grain-fed meat). The ideal ratio of omega-6 to omega-3 fatty acids in your diet is 1:1, but present-day diets have tipped the balance to 16:1, a shift that has, many experts believe, had a knock-on effect on brain health. The argument is persuasive – those of us born in the last 50 years are twice as likely to suffer from depression as our parents. 'Countries that have the highest intake of oily fish (such as Japan and Taiwan) have the lowest rates of depression and bi-polar disorder,' says Professor Puri, 'whereas countries with the lowest intakes (such as Britain and New Zealand) have the highest rates of these conditions.'

START THEM YOUNG

Nutrition is also fast gaining credibility as a treatment method in child health. Dawn Harper, Zest's expert GP, recommends dietary changes in addition to, and even sometimes in place of, medication. 'I always advise the parents of children who have behavioural problems to give them fish-oil supplements,' she says. 'Omega-3s have proven benefits for ADHD, dyspraxia and childhood depression. Children are more commonly deficient in these nutrients than adults, as they often dislike fish. Side-effect-free supplementation is always going to be preferable to medication, if it works.'

And it does work, according to Professor Puri, who's just completed a documentary for Channel 5 (to be screened this month) featuring four children with concentration problems. They were given a three-month trial of an EPA supplement, virgin evening-primrose oil and a supporting supplement to help metabolise the fatty acids. The handwriting, memory and concentration of all four children increased dramatically.

Fish oils also benefit children with no specific behavioural

problems. A study by Dr Alexandra Richardson of Oxford's Institute Of Food And Behaviour Research, which focused on 100 children of normal ability, found that 40% of those given omega-3 supplements made dramatic improvements in reading and spelling, progressing three times as fast as normal.

STRONG MEDICINE

Supplementation alongside medication may also be beneficial in the treatment of serious mental-health problems, such as schizophrenia. One South African study using a 100% pure omega-3 oil EPA supplement combined with the patients' usual antipsychotic drugs showed a significant improvement in schizophrenic symptoms. Supplementation with vitamin B6 and zinc was found to alleviate symptoms in another study of 400 patients by the late Carl Pfeiffer (a leading US biochemist specialising in nutrition and mental health) – again taken in addition to their usual medication. Pfeiffer also used zinc and vitamin B6 as a treatment for post-natal depression.

Dr Mark Atkinson, a medical doctor and fellow of the Royal Institute Of Public Health, combines nutritional medicine with psychological techniques to treat mood disorders at his Whole Body Healing Clinic in London's Harley Street. He believes that in some cases, 'supplements can succeed where drug treatment and therapy have failed', and cites the case of a patient in her late 20s who'd shown little improvement after four years on antidepressants. Within weeks of being prescribed omega-3 capsules and 5-hydroxy-tryptophan (5-HTP), and starting targeted psychotherapy sessions, the woman said she felt alive and happy for the first time in years.

The reason 5-HTP may work is that it is used by your body to make serotonin (the brain's 'happy hormone'). 5-HTP itself is converted by your body from tryptophan, an amino acid that occurs in protein-rich foods such as turkey, seafood, milk, beans and lentils. According to Patrick Holford, nutritional therapist and author of *Optimum Nutrition For The Mind* (Piatkus Books, £12.99), many of us would benefit from taking a 5-HTP supplement as we don't get enough from our food.

FOOD FOR THOUGHT

Slowly but surely we're waking up to the fact that good nutrition can profoundly benefit mental function and behaviour. Take the way in which the Government's new school-meals programme (rolling out to all schools from September this year) is expected to result in not just a drop in the obesity statistics, but also a reduction in disruptive behaviour and an improvement in concentration. There are also plans to give prison meals the same treatment following a trial where inmates were given a fish-oil supplement and violent incidents decreased by 40%.

And, though most GPs will still reach for the prescription pad before recommending dietary and lifestyle measures, attitudes are starting to change. It's worth reading up on the benefits of nutrition for brain health, and talking it over with your doctor. 'With weekly news bulletins bombarding us with new evidence that food is a cheap and effective way to improve our state of mind,' says Professor Puri, 'the future of mental health lies in nutrition.' Watch this space... □



3 BRILLIANT BRAIN-HEALTH SUPPLEMENTS

- **VEGEPA**. £11.95 for 60 capsules (www.vegepa.com). VegEPA is the supplement used by Professor Puri in his studies on children with behavioural problems (see left). It contains completely natural substances – the omega-3 fatty acid EPA (from fish oil), but no DHA, and virgin evening-primrose oil (which contains the omega-6 fatty acid GLA). The outer shells of the capsules are vegetarian (almost all other products use gelatine, derived from animal bones).
- **HIGHER NATURE SEROTONIN 5-HTP**. from £7.50 for 30 capsules (www.highernature.co.uk). Contains 5-HTP, the precursor of 'happy hormone' serotonin. It is not commonly available in food.
- **NEUROZAN BY VITABIOTICS**, £8.95 for 30 capsules, from supermarkets and pharmacies. This is a combined supplement with omega-3 DHA oil, vitamins B6 and B12 (both essential for the function of the brain's chemical messengers), Co-Q10 (which is critical to the production of energy within every cell in the body, including the brain) and zinc (which assists in nerve cell development).