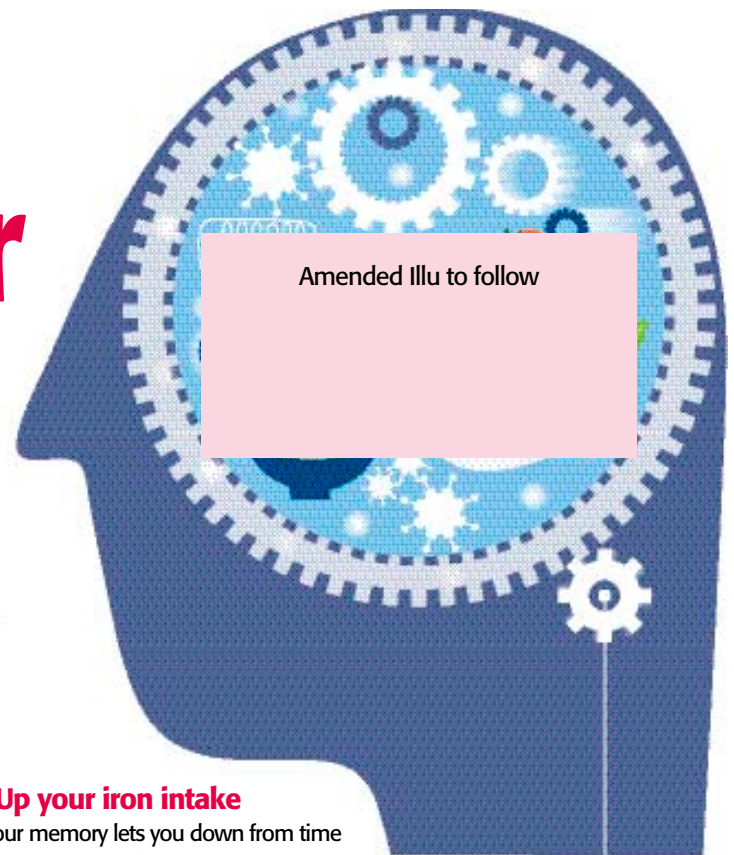


Boost your brain power



No matter how old you are, what you eat affects your mind, mood and memory – so make sure your shopping list includes the right buys, says nutritionist **Fiona Hunter**



✓ Oily fish

Salmon and mackerel are the stars of the show when it comes to brain function – they are two of the very best sources of long-chain omega-3 fatty acids: eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA).

The importance of these acids in early life is highlighted by a study published in *The Lancet* this year. The study revealed that mothers who ate three portions of seafood a week gave birth to children who performed better in development tests designed to measure communication and social skills as toddlers, and who had a higher verbal IQ score at the age of eight.

A lack of omega-3 fatty acids may be implicated in behavioural and learning problems, including dyspraxia, dyslexia, autism and Attention Deficit/Hyperactivity Disorder. Studies show that giving omega-3 supplements to children with these problems can often lead to an improvement. Omega-3 fats can help with depression, too, and studies have shown that people who eat oil-rich fish regularly throughout their life are less likely to suffer from Alzheimer's disease and dementia.

● **How much to eat** Dr Alex Richardson, from Food and Behaviour Research, recommends eating four portions of oil-rich fish a week.

● **Don't eat fish?** Consider an omega-3 supplement that provides about 500mg of omega-3 fatty acid a day with a ratio of 5 to 1 in favour of EPA.

● **Get the right omega-3** It's important to check that you are getting long-chain omega-3 fatty acids. Although flaxseed oil and some fortified foods claim to contain omega-3, it's a short-chain omega-3, alpha-linolenic acid (ALA), and the body is not very efficient at converting this into a long-chain variety.

● **Are fortified foods worth trying?** Check the amount and type of omega-3 that they contain. Some of these foods contain such a small amount that they're hardly worth taking. (You need about 500mg of omega-3 a day.)

● **What if I'm a vegetarian?** Choose supplements containing EPA and DHA from algae.



✓ Eat plenty of fruit and veg

One of the reasons our memory fades with age is because our brain cells become damaged by free radicals – highly reactive molecules that are produced naturally in the course of everyday life.

A study by the University of Sydney found that men and women who consumed the most vitamin C scored best in tests for recall, memory and attention.

● **How much a day?** Five a day is the minimum.

● **Best choices** All fruit and veg contain good amounts of vitamin C, but the real stars are kiwi fruit, citrus fruits and red peppers. When choosing fruit and veg, try to eat a rainbow of colours.

✓ Up your iron intake

If your memory lets you down from time to time, or you find your concentration flagging during the day, you may not be getting enough iron. To work at their optimum capacity, brain cells require a good supply of oxygen, which is carried around the body by red blood cells. The cells will carry oxygen more efficiently if they have plenty of iron. Iron is essential for a child's intellectual development and, in older children and adults, a lack of iron can cause problems such as poor concentration, moodiness, lack of energy and lethargy.

● **What to eat** Meat, particularly red meat and offal such as liver (though liver is not recommended for pregnant women), provides the best source of iron.

● **What if I'm vegetarian?** Try egg yolks, red kidney beans, lentils, dried apricots, figs, fortified breakfast cereals, broccoli, baked beans and wholegrain bread.

● **How do I get the best from my food?** Vitamin C enhances the absorption of iron from food, so have vitamin C-rich fruits, vegetables or fruit juice with meals.

● **How much is too much?** Although there is little risk of getting too much iron from food, overdosing can occur with iron supplements, so always stick to the manufacturer's recommendations.



✓ Stay hydrated

Dr Paul Stillman, a GP and member of the Expert Hydration Group, says: 'Focus has been given to children's nutritional intake, but hydration is being overlooked.' Whatever your age, dehydration can affect your brain power, but children are much more susceptible – dehydration leads to an inability to concentrate and a greater chance of headaches. In a study carried out at the University of Bristol, adults who drank a glass of water just before a brain-taxing task performed 10 per cent better than those who didn't.

● **How much?** Adults and older children should be drinking about 1.2 litres (6-8 glasses) of fluid a day.



✓ Make time for breakfast

Studies by the University of Wales found that people who ate breakfast tended to work faster, made fewer mistakes in logic tests and had better memory recall compared to people who skipped breakfast. The brain needs glucose to work efficiently, but after fasting overnight blood glucose levels are low. Have a breakfast containing complex carbohydrate, such as toast or breakfast cereal, to boost blood sugar levels and prevent them from dipping later in the morning.

● **What's best?** To keep blood sugar levels stable throughout the morning, choose a low-GI wholegrain cereal, such as porridge or muesli.