

eye The Sunday EXPRESS

# BRAIN FOOD

Your brain is the hungriest organ in the body. Are you feeding it right? ■ IRENA AKBAR

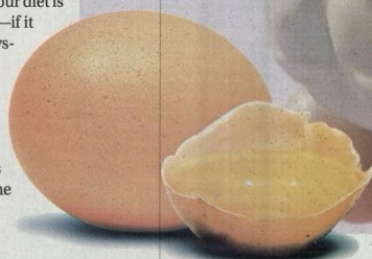
**W**hen most of us decide what to eat and how much to eat, the overriding concern is our body—whether taking way “this” from the diet would subtract inches from the waist or adding “that” would make our skin glow. But what you eat could also affect the health of one of the most critical organs of your system—the brain. Your diet is crucial to the running of your CPU—if it falters, needless to say, your entire system does.

Fernando Gomez-Pinillia, whom *The Economist* describes as a “fish-loving” professor of neurosurgery at the University of California, Los Angeles, reviewed over 160 studies about food effects on the brain, the conclusions of which were published in a recent issue of *Nature Reviews Neuroscience*. The professor believes a good diet can enhance our cognitive abilities and protect our brain from damage. So, what is the good brain diet?

**Carbohydrates:** The brain, says Dr Vikram Singh, a neurologist with Moolchand Medcity, New Delhi, is a hyper-functioning organ and requires immediate energy. “It uses up roughly half the calories we consume every day.” The energy consumed is in the form of glucose. “Glucose is a vehicle for alertness. Too little of it would manifest in unclear thinking,” says Dr P.P. Ashok, head of department of neurology, PD Hinduja Hospital, Mumbai. This is bad news for those who swear by low-carb diets as they may risk their mental health. “Such diets are bad for memory and cognitive function,” he says.

**Proteins:** They are the building blocks of neurons and neurotransmitters (chemicals that relay signals from a neuron to another cell). A high-protein diet helps in cell wall maintenance and positively affects the neurotransmitter, dopamine, which promotes alertness. Chicken and eggs are a rich source of proteins.

**Fats:** “A high-fat diet is bad for people suffering from depression, who ironically eat more



when depressed. It only exaggerates depression and mood swings,” says Dr Ashok. But cutting off fat totally from your diet could be fatal. “A high incidence of brain haemorrhage is due to low-fat diets which can cause the walls of blood vessels to become fragile and rupture,” he says.

Good fat in the body are the Omega-3 fatty acids. “These are wires that insulate the brain and if we take them too little or none at all, we cause short circuits in the brain,” says Dr Singh. “They are required for memory, alertness and cognitive function,” he says. Omega-3 is essential in the initial development of the brain and must be included in the diet of children and pregnant women. Rich food sources include fish, nuts and seeds.

**Water:** Every enzyme activity in the body including that in the brain requires water, says Dr Singh. “When someone is dehydrated, the first symptom they complain of is dizziness, blackout. That indicates the brain is being affected due to lack of water,” he says.

**Folic acid:** An important constituent of neurotransmitters, it can help those in the 50-70 age group by warding off the cognitive decline that comes with age, said a *Lancet* study. Food

sources include spinach, yeast and broccoli.

**Vitamin E:** Found in vegetable oils, nuts, wheat germ and green leafy veggies, it has been linked with retention of memory, according to Gomez-Pinillia.

**Zinc:** “The hippocampus (part of the brain that controls long-term memory) has the highest concentration of zinc, which is found in oysters, egg, lobster and shrimp. Its deficiency leads to loss in sense of taste and smell, hallucinations and depression. Zinc deficiency during pregnancy can cause brain defects in the child,” says Dr J.D. Mukherji, head of neurology, Max Healthcare, New Delhi.

**Vitamin B6:** “It’s involved in the production of neurotransmitters and lack of it can cause abnormal touch sensation and mania,” says Dr Mukherji. Good sources for B6 are eggs, potato, oatmeal, chicken and banana.

The most important part of any diet is moderation, and if you are confused about how much fat or protein you must take and when, learn to “balance” your diet. Dr Ashok says, “There’s no single rule for food for brain. The only rule is moderation. Don’t take too little or too much of anything for the sake of both mind and body.” ♦

