Feeding the brain with proper nutrition by a balanced diet

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Abstract:
The quality of food we eat affects our mind and body. Food choices are influenced by taste, habits, advertising, time, convenience and economics. Nutrition affects cognitive possibilities, including alertness and the production or release of neurotransmitters, the chemical messengers that carry information from one nerve cell to another. The brain is an organ with high metabolic and nutrient demands. On average, the brain consumes 20% of a person’s daily caloric intake, approximately 400 calories per day. It is important to know properties of foods especially regarding amino acid composition because amino acids are components of neurotransmitters, molecules needed for brain transmission and function. Foods are made up of more than one nutrient, and their interaction is going to affect the production and release of neurotransmitters. Neural impulses are mainly from sodium-potassium exchange, others such as complex carbohydrates, amino acids (tryptophan and tyrosine), fatty acids, particularly omega-3 fatty acids. Gut hormones that can enter the brain, or that are produced in the brain itself, influence cognitive ability. Production of monoamine neurotransmitters such as acetylcholine, adrenaline, serotonin, dopamine, endorphins, important in the pathophysiology of mental illness, depends on adequate building blocks of amino acids, and mineral dependent co-factors. A healthy diet and regular physical activity can protect from diseases, avoiding the risks incurred during aging. Cognitive performance and maintenance of mental health, especially among elderly may be improved with proper healthy balanced diet consisting of complex carbohydrates, polyunsaturated fatty acid, especially omega-3 fatty acids, proteins and specific nutrients, like flavonoids. In order to improve our mental abilities, concentration, memory and vigilance, lifestyle modification, proper nutrition with balanced diet is of great importance.

Biography:
Shameema Vattamkandathil is a clinical nutritionist. She is having hands on experience in food safety and food processing and undergone training at various leading food processing industries.

Recent Publications:
1. Impact of food and nutrition in lifestyle modification, Shameema Vattamkandathil
2. Hunger hormones & Brain – Escaso, Shameema Vattamkandathil
3. Feeding the Brain with Nutrition, Shameema Vattamkandathil