

### Nutrition & Brain Health Seminar Series

## **ILSI India Task Force on Nutrition and Brain Health (NABHI)**

# **Webinar on Nutrition and Cognition**

# **Background**

Cognitive function refers to the ability of the brain to perceive, remember, learn, plan, take decisions, carry out several tasks simultaneously and solve problems. Brain is dependent entirely on aerobic metabolism as it does not have much energy stores. Nutrients are needed for regular supply of energy and the building blocks that erect and maintain integrity of neural structure. Nutrients also influence neurotransmission, mitochondrial integrity, and genetic expression.

Cognition is one of the important functions of the brain. Nutrition has an important role for brain health from early conception to old age and malnutrition can have adverse effects on brain function in children and aged population. With ageing, in normal individuals, decline in cognitive functions is observed and adequate nutrition is advocated. Sufficient literature is not available to show the types of nutrients required in children and aged population for proper brain function including cognition.

Physical activity has been reported to increase the number and survival of neurons. It has been also reported to increase the volume of hippocampus, a region of the brain important for forming new memories. Even the aged brain is capable of these improvements with physical activity.

## **Objectives**

This webinar aims to address the following:

- Better understand the role of nutrients in cognitive function.
- Are different nutrients required to improve cognitive functions in children and aging population?
- Inflammation and immune system-role of nutrition on aging brain.
- Role of life style including physical activity on brain functions.

#### **About ILSI India**

**ILSI-India** is a non-profit scientific organization headquartered in Washington DC., USA. ILSI India provides scientific inputs and secretariat assistance to the South Asian Region, with headquarters in New Delhi. It works on public health issue relating to **Food Safety**, **Risk Science and Toxicology**, **Nutrition and Health**, **Sustainable Agriculture and Nutrition Security with scientists from Government**, **Industry and Academia. Visit our Website for more information:** <a href="http://www.ilsi-india.org">http://www.ilsi-india.org</a>.

### **About NABHI**

The Neurological and Neuropsychiatric Disorders are on rise in India and Depression is highly prevalent at all ages. The incidence of Alzheimer's disease is increasing. Decline of Cognitive Abilities with age occurs in healthy individuals and spreads through adult lifespan.

The NABHI Task Force is set up in 2019 with Prof. P K Seth, Chairman, ILSI India as the Chair. The Task Force includes independent researchers, medical professionals, concerned ministries, universities and industry.

NABHI is looking into the role of nutrition, physical activity and lifestyle as also Gut Microbiome in promoting brain health from pediatrics to geriatric. A status paper is under preparation on researches undertaken in India and to identify critical areas for research.