- Child development

How nutrition supports the rapid wiring of young minds

BusinessMirror · 26 Feb 2026 · C8 · By Rory Visco Contributor

GROUNDBREAKING neurocognition research is sharpening the scientific focus on a once littleunderstood process in early childhood: myelination. As studies reveal how this critical brain mechanism shapes learning and memory, researchers are uncovering how targeted nutrition in the first five years of life may help support the rapid wiring of young minds.

In the global effort to give children the strongest possible start, science has long pointed to the first five years as a period of unparalleled brain growth. But recent advances in neurocognition are offering more precise insight into how that growth unfolds, and how nutrition may influence it.

The myelination breakthrough

AT the heart of emerging research is myelination, the process where nerve fibers are coated with myelin, a fatty protective sheath that enables faster and more efficient transmission of signals across the nervous system. Often compared to insulation around electrical wires, myelin helps neural circuits communicate smoothly, supporting skills linked to memory, language, attention, and problem-solving.

New findings from the Neurocognition Research initiative of Wyeth Nutrition indicate that nutrition may play a measurable role in supporting this process. The research team, based in Lausanne, Switzerland and composed of scientists from the company's Health Benefit Department within its Physical and Cognitive Health Group, has been studying how specific nutrient combinations influence early brain development.

In one study supported by the team, a pro-myelination nutrient blend was associated with a 26-percent increase in myelination up to two years of life after one year of consumption. The findings also suggest that certain nutrients may continue to support myelination beyond infancy, highlighting the importance of sustained nutritional support throughout early childhood.

From brain science to nutrient synergy

BEYOND myelination, neurocognition research is examining how specific nutrients contribute to brain structure and function. In collaboration with global experts, scientists have explored the roles of alphalipids and other brain-relevant nutrients such as MOS+, choline, lutein, and DHA.

These nutrients are linked to processes involved in memory formation, sustained attention, and information processing, all core cognitive skills that underpin early learning. Researchers are also focusing not just on individual nutrients, but on how combinations work synergistically to support neural pathways during periods of rapid brain plasticity.

"Every product we create is grounded in evidencebased science to support optimal growth and brain development. By working hand-in-hand with healthcare professionals and parents, Wyeth Nutrition remains committed to empowering future generations by providing the right nutrition at the right time for healthier minds and bodies," according to Arlene Tan-bantoto, General Manager of Wyeth Nutrition.

Why the first five years are critical

NEUROSCIENTISTS consistently describe the first five years of life as a window of extraordinary brain plasticity. During this time, children form millions of neural connections per second, building the foundation for language acquisition, emotional regulation, executive function, and even social skills.

Myelination accelerates during these early years to help strengthen and streamline neural networks. But experts emphasize that brain development is multifactorial. Genetics, responsive caregiving, environmental stimulation, health status, and nutrition all interact to shape cognitive outcomes.

Balanced nutrition ensures that the developing brain has access to essential building blocks during this critical growth phase. While no single nutrient determines cognitive success, mounting research suggests that targeted nutritional support may help optimize biological processes already underway.

From laboratory to everyday nutrition

INSIGHTS from neurocognition research have informed the development of advanced growing-up milk formulations, including Promil and Promil Gold, designed for children aged three to five. These products are formulated with nutrients associated in studies with markers of brain development, such as memory, focus, language, and problem-solving, when consumed as part of a balanced diet.

Experts stress that such products are intended to complement and not replace a varied diet and healthy lifestyle. Still, ongoing neurocognition studies continue to refine scientific understanding of how specific nutrients may contribute to cognitive milestones during early childhood.

As research deepens, the message from neuroscience is becoming clearer: early brain development is not only rapid but it is responsive. By focusing on processes such as myelination and the nutrients that support them, scientists are bringing greater precision to conversations about child development.*