The Importance of Early Life Nutrition for the Immune System, Brain Development, and Physical Growth during a Child’s Golden Age

Nutrilon Royal with new formula is tailored to the specific stages of growth and development and provides the fundamentals for development of the immune system, optimal brain development and physical growth

Singapore, December 12, 2013 – Early Life Nutrition (ELN) provides complete and balanced nutrition during the early days of a child’s life. Nutrition during the golden period of a child’s life has been proven to have a significant impact on their growth and development, longer-term health, thereby contribute to future success. Balanced nutritional intake during this period is therefore essential particularly for the development of a child’s immune system, brain and physical growth.

Nutrition needs of a toddler are up to six times higher than the average adult. However, their stomach is five times smaller. For that reason, a child’s spoon-sized meal requires a specific nutrient composition.

Eline van der Beek, Research Director of Nutricia Research stated: “The way we grow shapes our future health. Our body structure and organ function in every individual starts with our genes. However, external factors (influences from the environment) play a significant role in how these systems develop and thus ultimately may help to achieve an individual’s maximal potential. Research has shown that nutrition received during pregnancy and after birth, e.g. child’s golden age, will have a significant impact on their future health.”

A child’s growth and development are rapid, especially until the age of three; their bodies require a sufficient and balanced amount and appropriate quality of nutrients to accommodate the rapid changing needs. Hence, it is critical for them to receive balanced and appropriate nutrition tailored to their needs during this period of growth and functional development.

The right nutrition during the early life of a child can reduce the risks of developing non-communicable diseases. Nutrient quality in the early life affects the functional development of the immune system, the brain and physical growth.

“Healthy environment of expecting mothers and babies that are free from pollution, smoking environment, psychological stress and good nutrition pattern must be provided. Digestive system in the early childhood supported by prebiotics and probiotics (good microbiota) will work to support brain development, immune system and physical growth during a child’s childhood and adolescence years. It will also prevent the risk of non-communicable diseases such as cancer, hypertension, diabetes, respiratory disease and other chronic diseases being develop in the future,” stated DR. dr. Anang Endaryanto SpA(K) Children Health Department University of Airlangga – Dr. Soetomo Hospital, Division of Allergy Immunology.
Adding to that, **DR. dr. Ahmad Suryawan, SpA (K) Chairman of the Division of Child & Adolescent Growth, Development, Pediatrics Department, RSUD Dr. Soetomo/ Medical Faculty Airlangga University Surabaya** states: “When a child is born, the brain growth only reaches 25% of the adult brain. Within 2 years, the brain growth increases rapidly up to 80% and at the age of 6 years old, the brain reaches 95%. Practically, the first 6 years of age is important, especially the first 2 years of age for the child's brain growth. During these early days, nutrition will be the main determinant of long-term quality of a child's brain.”

Brain development needs to be accompanied by physical activity, which is marked by increasing weight, height, head measurement and muscle tone. The fastest growth and development of the brain is experienced during the first three years of life. Toddlers’ weight increases three fold, while their height increases approximately 50% compared to when they were born. These changes are coordinated by the state of growth in the brain and nervous system, in turn triggering the child’s soft and hard motoric development.

“Within Early Life Nutrition, we translate our scientific insights into the development of our products that are tailored to the specific needs of these fast growing toddlers,” **Eline** continues.

The Research Centre in Singapore is the heart of Nutricia Research in Asia and dedicated to understanding the role of nutrition in early life and its health impact. Nutricia Research, known as a pioneer in ELN and has collaboration with credible scientists and institutions across the globe, currently employs more than 400 people across 20 countries, boasting more than 200 scientists and experts; and as many as 80 PhD holders.

**Matthias Seidl, R&D and Site Director, Nutricia Research at Danone Nutricia Early Life Nutrition** explains: “Our research work in Nutricia Research focuses on the nutritional or health challenges in early life such as immune function, digestive health, optimal development and growth as well as cognitive performance. Adding to that notion, we have the top scientists and experts from their respective fields.”

Nutricia Research cooperates with a number of renowned universities in this region such as the University of Indonesia, National University of Singapore, etc. There are currently 13 ongoing clinical studies being conducted in 32 hospitals across 6 countries in Asia Pacific.

**Matthias** continues: “We believe that the research done in Nutricia Research is addressing the nutritional needs and challenges of communities in Asia Pacific to provide the appropriate nutrition in early life for health and well-being of our consumers.”

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