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High Protein Diet Boosts Kids' IQ

At least in cases of premature babies

Proteins are everywhere in your body. They have two functions: functional and structural. Functional proteins are called enzymes; they modulate everything in your body, directly or indirectly, through synthesis of hormones, neurotransmitters and other chemicals. But proteins also build any tissue, from skin, bones and muscles (that's why sportsmen must pump large amounts of proteins) to brain. In the end, a neuron is a protein rich cell and neurotransmitters (like dopamine or serotonin) are amino acid derived chemicals. And a new research published in the journal *Pediatric Research* reveals that premature babies who are given a high protein diet grow up to be more intelligent. This result is not to be neglected, as in western countries up to 10 % of the children are born prematurely. The team at the Great Ormond Street Hospital for Children and the UCL Institute of Child Health investigated a group of 76 children born several weeks before the term in the 1980s. These subjects were randomly assigned to high nutrient milk or a standard formula. Those premature kids who followed an enriched formula milk in their first weeks appeared to score significantly better in IQ tests than other premature babies. By the age of 15 years old, the children who had consumed a protein rich formula had an average verbal IQ score of 8 points over those fed on normal formula or breast milk. Currently, all premature babies are nurtured with a high-protein diet. "Our study is among the first to show that the structure of the human brain can be influenced by early nutrition," said lead researcher Dr. Elizabeth Isaacs. The team detected that kids fed on high protein formula had, on average, a larger caudate nucleus, a center connected to learning and memory. "The fact that early nutrition may program the development of specific brain structures is of fundamental biological importance," said Isaacs.