

What the experts are saying about Zycia's exclusive nutrient - Choline



Choline and fetal development

"The importance of choline cannot be overstated as we continue to unravel the role it plays in human health and development." said Gerald Weissmann, M.D., Editor-in-Chief of The FASEB Journal

'Choline in the diet of the pregnant mother and the infant is directly related to permanent changes in brain function. Without enough choline during the critical time of brain growth and development, intelligence, memory, and possibly mood regulation will be damaged permanently. We may not be able to measure the exact impact on IQ or other brain functions, but we do know enough at this point to start preaching the choline message.' A review in the Journal of Pediatrics concluded

"There are rock-star nutrients in the pregnancy world that tend to receive all the attention. Folic acid, iron and calcium are covered extensively....Choline....remains largely unknown....But based on recent research, it deserves to be elevated to rock-star nutrient status." Health.usnews

"..it shows that a relatively simple nutrient can have significant effects in prenatal life, and that these effects likely continue to have a long-lasting influence on adult life," said Eva K Pressman, study author and director of the high-risk pregnancy program at the University of Rochester Medical Center

Choline brain development

A study published January 2013 in the American Journal of Psychiatry, concluded that maternal choline supplementation in the second and third trimester improved early markers of schizophrenia and other brain disorders even in the presence of gene mutations, which would otherwise be risk factors. *"The study breaks new ground both in its potentially therapeutic findings and in its strategy to target markers of schizophrenia long before the illness itself actually appears."*

Professor and chairman of the Department of Psychiatry, University of Colorado School of Medicine and Editor of *The American Journal of Psychiatry*, Robert Freedman, MD says *"Basic research indicates that choline supplementation during pregnancy facilitates cognitive functioning in offspring. Our finding that it ameliorates some of the pathophysiology associated with risk for schizophrenia now requires longer-term follow-up to assess whether it decreases risk for the later development of illness as well."*

Choline and neural tube defects

“As choline levels went up, (neural tube defect) risk went down” said Gary Shaw, DrPH, professor of neonatology and primary study author. The risk of neural tube defects was found to be 2.4 times higher in women with the lowest blood levels of choline compared to those whose blood levels were average, furthermore those with the highest blood choline levels were found to have the lowest risk.

Choline and Down syndrome dysfunction

“While older pregnant women are generally tested for a Down syndrome fetus, younger women are not, since their risk is low. However, development of all fetuses – Down syndrome or now – would benefit from choline supplements during pregnancy” said Barbara Strupp, Cornell professor of nutritional sciences and psychology and senior study author.

“Mounting evidence suggests that many women may not be consuming enough choline during pregnancy to promote optimal brain development and cognitive functioning of their babies – both normal and Down syndrome. Increasing choline intake during pregnancy is sound nutritional advice for all women and may offer an even more pronounced benefit for Down syndrome offspring,” said Professor Strupp.

Ted Boscia, Director of Communications, College of Human Ecology said *“More choline during pregnancy and nursing could provide lasting cognitive and emotional benefits to individuals with Down syndrome and protect against neurodegenerative conditions such as Alzheimer's disease”*.

Choline and maternal dietary intake

“Our preliminary dietary studies clearly show an insufficient choline intake compared to the recommended levels,” said Dr Curtis, an analytical chemist and project leader for ongoing choline research at the University of Alberta