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Memory Improvement of Phosphatidylcholine Seperated from Ducks Egg Yolk

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To investigate the effect of dietary phosphatidycholine (PC) supplement on memory improvement, biochemical study on the brain, undertaken. the pregnancy rats were divided into the normal control, the choline deficiency and the PC supplemental group according to quantity of the PC in diet. According to choline deficiency and PC supplement after birth, the rats of the normal control group were subdivided into the control diet and the duck-PL or pig brain-PL supplied groups.

The PC supplemented diet was added 2% egg PC in formal diet. PC concentrations and cholinesterase (CE) activities were measured in the serum, the liver and the brain, respectively. The maze test was undertaken to evaluate memory improvement. PC concentration and CE activities in the brain, serum, liver were high in the PC supplemental groups and low in the choline deficient groups.

Average failure rate for the maze test was the lowest in the control S-Sgroup and the highest in the duck-PL. It is consequently suggested that PC supplement may be effective in memory improvement.