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### Effects of Immunomodulatory Peptide Y On Cognitive Functions in Animal Models

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Despite the great intensity of studies to explain mechanisms of the Alzheimer's disease, there's still lack of effective prevention and treatment. As many specimens had been unadmitted because of their adverse side effects, thus recent attempts to follow natural biological protective mechanisms might open a range of possibilities in developing novel drugs to slow down processes of dementia and cognitive impairment. Promising results were achieved in patients treated with herbal agents, such as Gingko biloba extract, as well as animal derived preparations, i.a. PRP/Colostrine (proline rich polipeptide) complex isolated from ovine and bovine colostrum with confirmed immunomodulating properties and pro-cognitive action on memory and learning functions.

The contribution of egg yolk (*vitellus*) ingredients to chicks development appeared similar to mammalian colostrum role in growth and immunity of newborns. Recently discovered polipeptide complex associated with IgY, named *Yolkine*, has been put to the series of experiments in order to determine the effects of egg yolk preparations on cognitive functions in young and old rats as a model of cognitive decline and process of brain aging.

To estimate *Yolkine* efficiency, different doses and routes of administration were applied, along with wide range of aging-sensitive behavioral tests, i.a. novel object recognition task and Morris water maze. The authors will present the results of the ongoing study and key findings.