A method of obtaining eggs with antioxidant properties

Bondarevsky M.P.
(Kuban State Agrarian University, Krasnodar, Russia)

The chicken egg is a natural source of various chemical compounds that make up the basis of life, has adaptability and systemic plasticity. In eggs, the content of macro- and microelements, vitamins, fatty acids and other micronutrients required in human nutrition can vary in a wide range.

The objective of this work is to develop a method that increases the efficiency of accumulation of selenium in eggs when exposed to a spectrum of electromagnetic frequencies (EFS) corresponding to selenium in a chelated (organic) form.

The daily requirement for selenium for men is 55 mcg, for women - 70 mcg per day. But in a significant part of the population of the Russian Federation, selenium deficiency is observed, which can lead to an increased risk of cardiovascular, gastroenterological, oncological diseases, and a decrease in anti-infectious resistance.

It is known that the microelements introduced into the feed are not well absorbed by the bird, and the level of their accumulation in the final product is low, therefore, to obtain food eggs enriched with micronutrients, these components are additionally introduced into the diet of laying hens. Not only selenium enters the eggs, it is followed by a whole “plume” of synergistic elements available from feed, which have a metabolic relationship with selenium. These are vitamins E, carotene, zinc, their combined action enhances the antioxidant properties of such eggs. However, when a hen is exposed to the SEP of selenium in the yolk, the content of this element significantly increases.

A study was carried out on laying hens of the Krasnodarskaya poultry farm. For the production of selenium-enriched eggs, laying hens received a Selplex preparation in the amount of 300 g per ton. According to the technical specifications, such a diet provides eggs with a selenium content in the yolk of at least 316 μg / kg.

An average sample of eggs from such hens was taken.

Further, on the same livestock, the bioresonance effect of SEP of selenium was applied. Two weeks after the start of exposure, the average egg sample was also tested for selenium content. The studies were carried out by the interdistrict veterinary laboratory.

It was found: before exposure to SES, the selenium content in the yolk is 362 μg / kg, after exposure - 627 μg / kg. The difference is 73.2%.

One kilogram contains 30 medium-sized egg yolks (60–62 g). We calculated that 1 yolk of a selenium-enriched egg contains 12 mcg of selenium. One yolk of the same egg, but obtained with a bioresonance effect, contains 21 μg of selenium.

Thus, in order to satisfy the daily requirement for selenium, women need to consume 4.6 yolks per day, while only 2.6 yolks are sufficient for antioxidant yolks; for men, respectively - 5.8 and 3.3.

"- M .:" IMEDIS ", 2010, vol. 1 - C.189-190