



# Compound feed to obtaining eggs with a high content of omega 3 polyunsaturated fatty acids and carotenoids

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✓ The invention claims a new feed enriched with polyunsaturated fatty acids and carotenoids for laying hens, aiming to naturally produce eggs with improved nutritional value by increasing the concentrations of omega-3 fatty acids and carotenoids compared to conventional eggs.



✓ The advantages of the claimed invention lie in an efficient feed that, through nutritional means, improves the nutritional properties of the consumable egg by increasing the concentrations of omega-3 polyunsaturated fatty acids and carotenoids in the yolk compared to conventional eggs. This is achieved by utilizing plant resources with exceptional nutritional qualities derived from the food industry.

✓ The compound feed for obtaining eggs with a high content of omega-3 polyunsaturated fatty acids and carotenoids is characterized by: 90.4% dry matter; 17.99% crude protein; 7.04% crude fat; 7.97% cellulose; 2700 kcal/kg metabolizable energy; 11.44 g linolenic acid (omega-3)/100 g total fatty acids; 4.34 the value of the omega-6/omega-3 polyunsaturated fatty acids ratio; 1.468 mg/kg lutein; 0.836 mg/kg zeaxanthin; 19.69 mg/kg lycopene; 25.62 mg/kg total carotenoids.



✓ The invention led to obtaining eggs with higher levels of omega-3 polyunsaturated fatty acids especially EPA and DHA, and carotenoids, which were deposited from the compound feeds of laying hens diets, which contained flaxseed meal and tomato pomace.

