Polyphenols in poultry farming

By adding olive polyphenolic compounds to the diet of chickens we expect results according to those that relate to all aerobic organisms. The powerful antioxidant properties of olive polyphenols, especially hydroxytyrosol, and the hepatoprotective properties of terpenic acids help strengthen the immune system, stabilize cell membranes and reduce inflammatory conditions, especially those in the intestinal tract.

The bioactivity of olive phenolic compounds instantly stimulates the strength of the flocks of chickens, improves the quality of chicken products and supports their health.

Specifically and independently of the chicken production direction, in terms of zootechnical parameters, polyphenol supplements are expected to:

- Improve the growth rate.
- Increase the resistance of chickens to temperature.
- Increase daily growth rate and reduce sudden deaths.
- Improve the digestibility and metabolism of nitrogenous substances.
- Peduce the need to use therapeutic drugs.
- Improve the cost-benefit ratio for food.

Laying hens

Given the effects of polyphenols on the protection of the endothelium and cell membranes and their intervention in the synthesis of fatty acids, the addition of polyphenols to the diet of laying hens results in:

- Normalization of the shape and size of the eggs.
- Acceleration of egg production.
- Improvement in the yolk color index.
- Peduction in cholesterol, with a linear decrease of the atherosclerotic index of the egg, proportional to the concentration of olive polyphenols in the diet of chickens.
- Increase in the presence of polyunsaturated fatty acids (PUFAs) and oleic and linolenic acid content in egg yolk.

Chickens

As for the chickens, in relation to the quality of the meat produced we expect:

- Improved organoleptic properties of meat, due to the increased synthesis of polyunsaturated acids (PUFA's).
- Increased detection of tyrosol and hydroxytyrosol sulfate metabolites in meat.
- Increased oxidative stability of meat and carcass life.
- Peduced appearance of PSE-meat due to the antioxidant status of the carcass and the increased strength of cell membranes.