

State-of-the-Art on the use of *Silybum marianum* to improve animal health and welfare

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The use of *Silybum marianum* L. (Gaertn.) (milk thistle) in livestock and pet animals has seen a substantial increase in the last few years due to its antioxidants and hepatoprotective properties. Silymarin favourably affects animal welfare, the maintenance of animal health and a healthy digestive system. In livestock, it supports liver function during the most stressful events of their productive life. Silymarin may also act against the effects of mycotoxin. Furthermore, it can improve meat quality and its oxidative stability.

In pets, the silymarin treatment is focused on treating acute and chronic liver diseases.

The treatment consists of the use of silymarin as extracts or whole seeds or cake after oil separation. Silymarin can be included in animal diet as a feed additive, feed ingredients or feed intended for particular nutritional purposes. The use of functional claims concerning optimization of nutrition and support or protection of physiological conditions are permitted.

This presentation will analyze the scientific papers reporting evidence on the use of silymarin in different animal species. A significant contribution toward the promotion of health (e.g., support of the liver function) and reduction of disease risk has been reported, conversely information on silymarin content are not always reported.