

Antioxidants and Se: Functional feeds for farm animals?

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Hippocrates' observations on the relationship between health and food choices initiated discussions about the factors determining our health many centuries ago. The effect of nutrition on human health has received substantial attention and traditional medical teaching that diet and nutrients play only limited roles in human and health is being revised. In most developed countries nutritional practice has changed the focus from combating nutrient deficiencies to addressing nutrient requirements for maintaining good health throughout the life.

From many food ingredients commonly present in our diet the natural antioxidants are considered particularly important. Antioxidant protection is vital for either prevention or substantial reduction of the damage caused by free radicals and products of their metabolism. Our food provides a major part of natural antioxidants including vitamin E, carotenoids, flavonoids and selenium. It was shown that optimal doses and forms of natural antioxidants in farm animal and poultry diets have a double benefit: maintaining optimal animal health and high meat and egg quality for human consumption. For example, Se-enriched eggs delivering 50% Se RDA are produced in more than 25 countries worldwide finding their way from niche market to main stream. Indeed, Se-eggs, meat and milk could be place in category of functional food and help solving global Se deficiency and improve human health.