

CALL FOR PAPERS

Food and feed additives improve quality of fresh meat. Synthetic additives have been widely used in the diet of ruminants or as technological strategies in fresh meat in order to increase shelf life. One of the major causes of quality deterioration in fresh meat is due to the oxidation of the lipidic and protein fraction, which can affect color stability. Color is one of the most important quality attributes for consumers when purchasing meat. Lipid oxidation results in off-flavor development, rancid odor, drip losses, loss of nutritional value, discoloration, and decrease in shelf life. Meanwhile, protein oxidation results in multiple physical-chemical changes including a decrease in protein solubility and in bioavailability of amino acid protein and changes amino acid composition, which can implicate a loss of proteolytic activity and protein digestibility.

The modification of proteins on the muscle may change meat quality, including texture traits, color, flavor, and water-holding capacity. In recent years, the demand for natural additives has increased due to health benefits. Thus, most of the recent investigations have been focused on the identification of bioactive compounds from leaves, roots, seeds, and resins, to improve meat quality. Natural additives can be applied to animal diets or be used as a technological strategy to improve meat quality. Several compounds extracted from natural sources, such as plants, have been demonstrated to present bioactive functions against a wide range of microorganisms (bacteria, protozoa, and fungi) and food-borne pathogens (meat products) and they can be used to manipulate several parameters in fresh meat. This special issue seeks new researches about bioactive compounds or blends of bioactive compounds from natural extracts or functional oils that potentially can benefit meat quality.

We invite investigators to contribute original research articles of fresh meat from ruminants fed with bioactive compounds in the diet or as technological strategies directly applied on the product to increase the shelf life of meat. Moreover, we are accepting reviews, analytical methods to isolate and characterize bioactive compounds, and meta-analysis articles that seek to address the mechanisms of action from natural extracts and functional oils in fresh meat. Effect of bioactive compounds, natural extracts, or functional oils in ruminant diet or applied as technological strategies to improve meat quality is to be discussed.

Potential topics include but are not limited to the following:

- ▶ Analytical methods to isolate and characterize bioactive compounds in fresh meat
- ▶ Natural additives to improve chemical components, fatty acid composition, shear-force, and water-holding capacity in fresh meat
- ▶ Natural additives as technological strategies in color stability and lipid and protein oxidation to increase the shelf life of meat
- ▶ Consumer acceptability, perception, and sensory evaluation of meat from ruminant fed with natural additives

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/jfq/bcfp/>.

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First Round of Reviews

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