THE USE OF EXOGENOUS ENZYME IN MEAT TENDERNESS: CURRENT PATTERN - REVIEW

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Abstract

The texture of the meat reckons on many factors and is mutually dependent on the post-mortem period (natural aging - keeping the meat at refrigeration temperatures for a few days or weeks), a process that allows the meat to become tender under the action of proteolytic enzymes inside the cells. The emphasis of these enzymes involves glycolytic activity, a process that involves the metabolism of glycogen producing lactic acid and causing a decrease in muscle ph. Among the most important enzymes involved in the meat maturation process mentioned in the literature are the calpain-calpastatin system and the cathepsin-cystatin system. Meat aging by exogenous enzymes involves the use of plant-derived proteolytic enzymes. Over time, several proteolytic enzymes of plant origin have been used which have the potential to improve meat texture. Among the most commonly used are papaya (from papaya), bromelain (from pineapple), zingibin (from ginger), ficin (from figs/fruit), and actidine (from kiwifruit). The use of exogenous enzymes is of real importance for obtaining high-quality products that meet consumer standards for tenderness in meat products due to their technological properties.

Key words: *plant enzymes, tenderness, meat, papain, bromelain*