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## Influence of addition of 0.3% of tannins extract to diet of finishing-bulls on the fatty acid profile of meat

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Steak samples of Longissimus dorsi obtained from sixteen finishing bulls (*Bos taurus*×*Bos indicus*; 505±22.23 kg BW) were used to evaluate the effect of tannin extract fed-supplementation on the fatty acid profile of meat. Treatments were: Diet with 13.3% CP and 8.4 MJ NEm/kg DM (CTRL) and Diet similar to CTRL added with 0.3% (DM basis) of tannin extract (TE). The tannin extract was offered as commercial blend Bypro® which contains 70% of tannins. Bulls were harvested in a processing plant and after 24 hours of chilling (4° C) from the left side of each carcass; a section from ribs 10 to 14 was removed. Fatty acids from intramuscular fat were quantified by gas chromatography (capillary column SP-2560; Supelco®) identified by comparison of retention times with a standard (Supelco 37 Component FAME Mix and trans-11-Vaccenic Methyl Ester) and expressed as percentage of total fatty acids identified. Data were analyzed as a completely randomized design by ANOVA (P<0.05). Treatments have no effect on any of fatty acid profile variables measured (P>0.05) and the corresponding mean values were: Saturated fatty acids ratio 53.2 and 52.0%; monounsaturated fatty acids 39.2 and 42.3%; polyunsaturated fatty acids 3.65 and 3.73%; n-6 fatty acids 3.0 and 3.1% for CTRL group and TE respectively. The n-3 fatty acids ratio was 0.63% in both treatments. Results indicate that the addition of 0.3% of tannins extract in to diet of finishing-bulls does not alter the fatty acid profile in meat.

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## Selenium-enriched yeast supplementation effect on microbial spoilage during shelf life of sheep meat

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The aim of the current research was to evaluate the effect of selenium-enriched yeast supplementation on microbial spoilage of sheep meat during shelf life. The experiment was carried on during the finishing stage of 18 female sheep breed Pelibuey for 60 days. Animals were randomly assigned to one of three treatments: A control without Se supplementation (T1) supplemented with selenium enriched yeast (SY) (*Saccharomyces cerevisiae* Sel yeast 3000™ enriched yeast, LFA Lesaffre) total Se concentration 0.35 mg/kg (T2) or 0.60 mg/kg of Se (T3). At the end were slaughtered at a final average weight of 39.5±4.41 kg under the Official Mexican Standards NOM-033-ZOO-1995 and NOM-016-ZOO-1994. Samples from *Longissimus dorsi* muscle were taken. Microbiological spoilage (Aerobic Plate Count, Faecal Coliform Count and Psychrophiles) was evaluated during 0, 3, 6 and 9 days post mortem under refrigeration conditions (4°C). The results were evaluated by an ANOVA (P≤0.05). There were no significant differences (P>0.05) in Aerobic Plate Count, Faecal Coliform Count and Psychrophiles among treatments. However, Psychrophiles by time of storage was statistically different (P<0.05). In conclusion, Selenium doses had not effect at the beginning of shelf life on Psychrophiles growth, however on the last day had effect because it was lower for doses of 0.60 mg /kg.

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