

Effect of the Incorporation of Tomato Fiber in Feed on Proximate Composition and Fatty Acid Profiles of Different Tissues of the Iberian

Pig.

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The effect of incorporation of tomato fibre (2,5%) to concentrate feed on proximate composition of *m. Longissimus dorsi* and fatty acid profiles of intramuscular fat and adipose tissue was evaluated. 180 Iberian x Duroc pigs (~98 kg live weight) were randomly allotted in two batches. Pigs were raised in a semiextensive system and fed *ad libitum* until reached ~150kg live weight. After slaughter, 20 carcasses of each group were randomly selected and samples of *m. Longissimus dorsi* and adipose tissue were dissected.

The incorporation of tomato fiber to concentrate feed did not modify ($p>0.05$) proximate composition (moisture, protein, fat and ash) of *m. Longissimus dorsi*. Tomato fiber incorporation to concentrate feed slightly altered fatty acid profiles of adipose tissue. Adipose tissue of Iberian pigs fed on tomato fiber-enriched diet had significantly higher ($p<0.05$) percentages of C18:3 n-6, C22:0, C20:3 n-3 and C24:0. In contrast, tomato fiber-enriched diet significantly altered the fatty acid profiles of intramuscular fat of *m. Longissimus dorsi*. Fatty acid profiles of intramuscular fat from pigs fed on tomato fiber-enriched diet had significantly lower ($p<0.05$) percentages of C16:0, C20:4 n-6 and C24:0 and significantly higher ($p<0.05$) percentages of C18:0, C18:3 n-6 and C20:1 n-9.

Therefore, the incorporation of tomato fiber to pig concentrate could be adequate to utilize this by-product as no important changes in meat quality were found.

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