DEFATTED RICE BRAN AS EXTENDER IN HAMBURGER: TECHNOLOGICAL AND SENSORY PROPERTIES

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Meat products consumer has been criticized because their high fat, sodium, and additives content and lack of dietary fiber. Recently works recommend reformulating meat products providing healthier claims. Several reports have been studied defatted rice bran due its potential use as a non-meat ingredient to replace fat and increase the nutritional value of meat products. In contrast to almost extenders commonly applied in meat products, such as, starch derivates, defatted rice bran is characterized by high protein (18%), dietary fiber (10%), and starch (29%). This study aimed to investigate the performance of defatted rice bran (extruded – ERB and natural –NRB) in bovine hamburgers when malt dextrin had been replaced in traditional formulations. The level of addition and malt dextrin replacement was 2% and the products were analyzed regarding textural properties (Warner Bratzler shear force), cooking loss (%); color (L*, a*, b*) and sensory properties evaluated by consumers using a 9 point hedonic scale for texture, taste, color, appearance and overall acceptability. The hamburgers added of ERB and BRB significantly had reduced the shear force. The parameters L*, a* and b* increased when malt dextrin had been replaced by defatted rice bran, but resulting in higher acceptance regarding this attribute. Addition of NRB defatted rice bran enhanced the cooking loss. Finally, the consumer did not observed differences regarding any sensorial properties (p<0.05). The data suggest that defatted rice bran can be used as meat extender in hamburgers replacing wit success malt dextrin.