

Effect of HHP on microbiota and shelf-life of vitamin enriched Hungarian sausages

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Raw fermented meat products may be connected with food born diseases because of the lack of pasteurization with heat or chemical preservatives. Providing microbiological safe, fermented products with original sensorial quality is a need of modern consumers. In our experiment Hungarian type raw sausages are investigated after HHP (high hydrostatic pressure) treatments.

Raw fermented sausages were produced in an industrial environment, after a special, vitamin-enriched formula for producing functional food product. Different samples were prepared adding vitamin A, D and E. After production procedure samples were treated in a Hiperbaric 135 equipment, at 500 MPa, for 2 min.

Sensorial attributes (as specially colour and texture) were analyzed and SMS texture analyzer and electronic nose were used for objective examination

TBA was inspected for measuring rancidity during rippering.

Our results showed that TBA of HHP treated samples was lower than expected, as long colour of samples was highly influenced by the pressure, as well by the different vitamins. Texture became harder and differed highly to control samples.

Microbiota of samples decreased highly after HHP treatment.

Our results show that HHP treatment of raw fermented meat products may cause slightly changes in texture, but the use of the technology needs to a microbiological safe and functional meat product.

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