

## APPLICATION OF ULTRASOUND TECHNOLOGY IN MEAT BRINING

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Ultrasound is a kind of energy which is generated by sound waves having frequencies higher than human ear can detect. In a medium exposed to sound waves bubbles are formed and these bubbles implode when they reach a level that can't absorb any more energy so large amount of energy is released into the medium. This phenomenon is called cavitation and it is the most important issue for explanation of mechanism of ultrasound. In food industry low intensity-high frequency-low power ultrasound is used to determine quality parameters like toughness, ripeness and sugar content while high intensity-low frequency-high power ultrasound is used to modify the chemical and physical structure of food materials. Ultrasound is generally employed for filtration, defoaming, degassing, depolymerization, cooking, cutting, freezing, drying, tenderization, brining etc. in food processing. Brining is important for meat technology because it not only prolongs shelf life but also improve textural and sensory properties of meat. Ultrasound assisted brining reduces treatment time, improves salt diffusion, prevents formation of crust on meat surface, increase water holding capacity of meat therefore it is considered a promising method for meat industry. In this review, works applied brining process on meat were investigated and effects of this process on meat properties were discussed.

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