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The PSE (Pale, Soft and Exudative) meat utilization in the poultry products processing can result in reduction of yields and quality due to the denaturation of myofibril proteins, compromising meat functional properties and consequently leading to the technological problems. The objective of this study was to improve the PSE meat functional properties by incorporating hydrocolloids in the emulsion. For the emulsion preparation it was used a complete factorial design $2^3$ with the following variables and levels: soy protein (0%, 1%, 2%), pectin (0%, 1%, 2%) and carrageenan (0%, 0.25%, 0.5%). The nuggets were evaluated by measuring the emulsion stability, cooking loss and texture. The PSE broiler breasts were classified according by pH and L* and the emulsion were prepared using a food processor subsequently mixed manually with the final ingredients and put in form and frozen. After 24h, the nuggets were breaded and pre-fried for 1 min/120 °C. The addition of hydrocolloids in the nuggets increased PSE meat emulsion stability on average 35% due to the formation of protein-polysaccharide soluble complex, cooking loss was reduced in average 2.3% and texture was increased by approximately 1.5%. In conclusion, hydrocolloids and soy protein incorporation improved the functional properties and the final breaded quality prepared with PSE meat.

Key words: PSE broiler breast, breaded, pectin, soy protein, carrageenan.