Identification of quality parameters in manufacturing edible beef skin

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Introduction: Removal of hair from animal hides is a major issue in the manufacturing of edible beef skin (Kanda K. Ponmo). Manufacturing edible beef skin using gas burners is a time taking procedure and has potential damage to the workers by constantly exposing them to extreme heat and smoke.

Purpose: The purpose of this study is to perform the possible ways to dehair the hides by using Chemical de-hair, Trimmer, Townsend Skinner equipment, and Hair-on followed by scorching them with steel plates to make edible beef skin and to analyze the quality parameters such as Color, Moisture, and texture. A hedonic expert sensory panel evaluation was made to find consumer acceptance.

Methods: We have tested methods to process edible hides, including chemical and mechanical processing on representative beef hide squares. Instead of gas burner, steel plate scorching was performed to cook the hides. Different temperature cycles were examined in the scorching experimentation. The color of the sample were measured using a hand held Hunter’s L*, a*, b* Calorimeter. The moisture was measured using a gravity oven, and the Hardness (peak force) of samples was analyzed using a Texturometer. A hedonic expert sensory panel (acceptance test) on a scale of 1 to 9 was performed to examine color and texture properties of the edible beef hide.

Results: Current results will be revealed in Presentation.

Keywords: Edible Beef skin, Scorching, Steel plate heating, Quality.