

COMPARISON OF TEXTURE AND COLOR OF BEEF AND PORK WITH VARIOUS PROCESSING METHODS

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Abstract

Background - Food fraud in the market, such as substituting beef with pork, raises significant concerns, particularly for Muslim consumers who prioritize halal products. Meat is available in raw and processed forms, including boiled, fried, and grilled options. Therefore, it is essential to research the characteristics of processed beef and pork.

Purpose - This study aims to evaluate how cooking methods such as boiling, frying, and grilling can affect beef and pork's texture and color characteristics and explore potential significant differences that can support halal authentication.

Methodology - Beef and pork samples were cooked using three different methods: braising, frying, and grilling. Texture analysis was performed with Texture Profile Analysis (TPA) to measure hardness, stickiness, and coherence. Meanwhile, color characteristics (L^* , a^* , b^* , C , h) were analyzed using a chromameter.

Findings - The results showed significant differences between beef and pork in various cooking methods. Braised pork had a more rigid and stickier texture than beef. In the frying and grilling methods, pork showed higher yellowness (b^*), while beef had higher brightness (L^*) in all cooking methods.

Originality - This research has never been published anywhere

Keywords: pork, beef, halal, texture, color
