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Effects of cooking methods on thiamin and riboflavin contents of chicken meat

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Broiler meat (light and dark) was cooked by roasting, braising, deep-frying and microwave methods and cooking yield, moisture, fat, thiamin and riboflavin contents of the meat, before and after cooking), were determined. Light and dark muscles differed significantly in moisture, fat, thiamin and riboflavin contents. Generally, moisture and fat contents of broiler meat were significantly decreased by cooking, but the fat content of the dark muscles showed no significant change when cooked by microwave. All cooked meats were significantly lower (/> < 0-05) in thiamin content than raw meat. Cooking had no significant effects on riboflavin content of dark meat on fresh weight or dry weight fat-free basis (FW and DWF), but in light meat, the riboflavin content decreased significantly (DWFF) when cooked by frying. While thiamin retention (DWFF) ranged from 28 to 64%>, riboflavin was fairly well retained (46-94%>) in cooked broiler meat. Differences were observed in the retentions of both vitamins of cooked meats suggesting that there were differences in the effects of the four cooking methods evaluated.