

**MUTU GIZI DAN DAYA CERNA PATI SECARA *IN VITRO*
DARI BERBAGAI CARA PENGOLAHAN
JAGUNG (*Zea mays*, L.)**



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Mutu Gizi dan Daya Cerna Pati Secara *In Vitro* dari Berbagai Cara Pengolahan Jagung (*Zea mays*, L.)

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ABSTRAK

Tujuan penelitian ini untuk mengetahui mutu gizi dan daya cerna pati secara *in vitro* dari berbagai cara pengolahan jagung. Rancangan yang digunakan adalah eksploratif dan enam cara pengolahan yaitu kontrol, rebus, kukus, bakar, goreng dan *puffing*. Hasil penelitian menunjukkan bahwa kadar air terendah terdapat pada *pop corn* yaitu 0,93%, kadar abu terendah pada kontrol yaitu 0,52%, kadar lemak terendah pada kontrol yaitu 0,61%, kadar protein tertinggi pada kontrol yaitu 8,80%, kadar pati tertinggi pada *pop corn* yaitu 59,19%, kadar amilosa terendah pada jagung goreng yaitu 19,56%, kadar amilopektin tertinggi pada jagung goreng yaitu 80,44 %, kandungan FFA pada jagung goreng yaitu 0,33%, total karoten tertinggi pada kontrol yaitu 11,05 µg/g dan total karoten terendah pada *pop corn* yaitu 6,01 µg/g, daya cerna pati terendah pada kontrol yaitu 47,36% dan kandungan energi tertinggi pada *pop corn* yaitu 474,02 kkal/100g.

Kata kunci – daya cerna pati, jagung, mutu gizi, pengolahan.



Nutritional Quality and In Vitro Starch Digestibility from Various Ways of Corn Processing (*Zea mays*, L.)

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ABSTRACT

This research aims to study about nutritional quality and in vitro starch digestibility from various ways of corn processing. The design used in this study was explorative with six treatment is raw, boiled, steamed, roasted, fried, and puffing. The results showed that the lowest water content was found in pop corn (0.93%), the lowest ash content in raw corn (0.52%), the lowest fat content in raw corn (0.61%), the highest protein content in raw corn (8.80%), the highest starch content in pop corn (59.19%), the lowest amylose content in fried corn (19.56%) and the highest amylopectin in fried corn (80.44%), FFA content (0.33%) in fried corn, the highest carotene content (11.05 $\mu\text{g/g}$) was found in raw corn and the lowest carotene content (6.01 $\mu\text{g/g}$) was found in pop corn, the lowest starch digestibility (47.36%) was found in raw corn and the highest energy content (474.02 kcal/100g) was found in pop corn.

Keywords - corn, nutritional quality, processing, starch digestibility.

