



## **PENGARUH JENIS DAN LEVEL GULA TERHADAP KUALITAS FISIK DAN SENSORIS DENDENG DAGING SAPI**

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### **INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh macam dan level gula terhadap kualitas fisik dan sensoris dendeng daging sapi. Bahan-bahan yang digunakan dalam pembuatan dendeng adalah daging sapi, gula, garam, ketumbar bubuk, bawang putih, lengkuas, dan sendawa. Jenis gula yang digunakan dalam penelitian ini adalah gula tebu dan gula kelapa dengan level 15, 25, dan 35%. Proses pembuatan dendeng adalah penggilingan daging sapi, pencampuran daging dengan bumbu-bumbu *curing* dan pengeringan dendeng. Parameter yang diuji adalah kualitas fisik dan kualitas sensoris dendeng. Pengujian kualitas fisik meliputi pengujian nilai pH, aktivitas air, susut masak, analisis tekstur, dan warna. Pengujian kualitas sensoris meliputi warna, rasa, aroma, tekstur, dan daya terima. Data uji kualitas fisik dianalisis statistik menggunakan Analisis Variansi Pola Faktorial 2×3 dan dilanjutkan dengan *Duncan's New Multiple Range Test*. Data uji kualitas sensoris dianalisis menggunakan uji statistik non parametrik metode *Friedman Test*. Perbedaan jenis gula berpengaruh nyata ( $P < 0,05$ ) pada nilai pH, kualitas sensoris aroma, tekstur dan daya terima dendeng, serta tidak berpengaruh nyata ( $P > 0,05$ ) terhadap nilai aktivitas air, susut masak, tekstur, warna, kualitas sensoris warna, dan rasa dendeng. Perbedaan level gula berpengaruh nyata ( $P < 0,05$ ) terhadap nilai pH, aktivitas air, susut masak, *springiness*, *redness*, dan kualitas sensoris, serta tidak berpengaruh nyata ( $P > 0,05$ ) terhadap nilai *hardness*, *cohesiveness*, *gumminess*, *chewiness*, *resilience*, *lightness*, dan *yellowness* dendeng. Kesimpulan dari penelitian ini adalah gula tebu dapat meningkatkan nilai pH, *hardness*, *cohesiveness*, *gumminess*, *chewiness*, *resilience*, *redness*, dan *yellowness* dendeng. Peningkatan level gula dapat meningkatkan nilai susut masak setelah dioven, *hardness*, *gumminess*, *chewiness*, *resilience*, *redness*, *yellowness*, dan kualitas sensoris dendeng. Penggunaan gula kelapa dengan level 25% memiliki nilai sensoris terbaik menurut panelis.

**Kata kunci:** Dendeng, Daging sapi, Gula tebu, Gula kelapa, Kualitas fisik, Kualitas sensoris.



## **EFFECT OF SUGAR TYPE AND LEVEL ON PHYSICAL AND SENSORY QUALITY OF BEEF JERKY**

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### **ABSTRACT**

This study aims to determine the effect of type and level of sugar on the physical and sensory quality of beef jerky. The ingredients used in making beef jerky are beef, sugar, salt, coriander powder, garlic, galangal, and saltpeter. The types of sugar used in this study were cane sugar and coconut sugar with levels of 15, 25, and 35%. The process of making jerky is grinding beef, mixing meat with curing spices and drying jerky. The parameters tested were physical quality and sensory quality of jerky. Physical quality testing includes testing pH value, water activity, cooking loss, texture analysis, and color. Sensory quality testing included color, taste, aroma, texture, and acceptability. Physical quality test data were analyzed statistically using Analysis of Variance 2x3 Factorial Pattern and continued with Duncan's New Multiple Range Test. Sensory quality test data were analyzed using non-parametric statistical test of Friedman Test method. Different types of sugar had a significant effect ( $P < 0.05$ ) on the pH value, sensory quality of aroma, texture and jerky acceptability, and had no significant effect ( $P > 0.05$ ) on the value of water activity, cooking loss, texture, color, sensory quality of color and taste of jerky. Different levels of sugar had a significant effect ( $P < 0.05$ ) on pH, water activity, cooking loss, springiness, redness, and sensory quality, and no significant effect ( $P > 0.05$ ) on hardness, cohesiveness, gumminess, chewiness, resilience, lightness, and yellowness of jerky. The conclusion of this study is that cane sugar can increase the pH value, hardness, cohesiveness, gumminess, chewiness, resilience, redness, and yellowness of jerky. Increasing the sugar level can increase the cooking loss value after baking, hardness, gumminess, chewiness, resilience, redness, yellowness, and sensory quality of jerky. The use of coconut sugar with 25% level has the best sensory value according to panelists.

**Keywords:** Jerky, Beef, Cane sugar, Coconut sugar, Physical quality, Sensory quality.