

**CONSUMER ACCEPTANCE OF CHATAIGNE PATTY(*Artocarpus Camansis*)  
USING TWO DIFFERENT BINDING AGENTS;  
XANTHAN GUM AND EGGS.**

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**Background:** Breadnut (*Artocarpus camansis*) is a seeded variety of breadfruit and is commonly known as chataigne in Trinidad and Tobago.

**Objective:** The main objectives of this study were to (1) assess the consumer acceptability of the breadnut/chataigne patty with variable binding agents: xanthan gum and eggs (2) in addition to comparing its compositional proximate and physicochemical properties.

**Design:** This study was a cross sectional study which compared chataigne patties with variable binding agents. Sensory evaluation consisted of 53 panellists who volunteered to take part in the study. The chataigne was cleaned, washed and then boiled for 10minutes at 215°F. After boiling, the chataigne was drained and added to the food processor for 3 minutes. Spices/herbs were added to the mixture and then each patty was pan seared at 130°F for 3 minutes on either side.

**Results:**Proximate analysis results for sample X for moisture, ash, crude protein, crude fat were  $4.01 \pm 0.81\%$ ,  $11.05 \pm 0.58\%$ ,  $14.63 \pm 0.92\%$ ,  $53.78 \pm 3.66\%$  respectively. The results ascertained for sample E were as follows,  $5.44 \pm 0.01\%$  moisture, 9.87% ash,  $28.48 \pm 0.38\%$  crude protein and  $55.97 \pm 1.94\%$  crude fat. Texture properties showed that sample E was firmer than sample X while sample X was stickier than sample E. The hue angle for sample X and E were  $92.40 \pm 1.99^\circ$  and  $94.24 \pm 3.75^\circ$  respectively which represented a yellow colour of the product. The chroma values were  $14.99 \pm 0.38$  for sample X and  $16.05 \pm 0.20$  for sample E showing there was more colour saturation in sample E. Sensory evaluation showed a high sample preference (86.8%) to sample E which contained eggs when compared to sample X containing xanthan gum (13.2%). A large proportion of 64.2% indicated they would choose this patty in preference of a meat patty.

**Conclusion:** In conclusion this project sought to produce a tasty, healthy burger patty using a meat substitute which would give similar attributes to a meat patty. The meat substitute chosen was a local vegetable chataigne/breadnut since it mimicked the properties of meat as discussed in the discussion. From the findings chataigne as a meat substitute is a sustainable alternative since it provides a high protein content (breadnut seeds are included also adding to protein content). Information was gathered from many journal articles which enlightened us on different aspects of making a high quality chataigne/breadnut patty.