CHANGES IN CONSUMER ACCEPTANCE AND PHYSICOCHEMICAL QUALITY OF LOW FAT PIGEON PEA (CAJANUS CAJAN) PATTIES WITH THE ADDITION OF XANTHAN GUM

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ABSTRACT

The objectives of the research were to investigate the effects of adding xanthan gum on the physicochemical and sensory quality of low fat pigeon pea (Cajanus cajan) patties. A pretested questionnaire conducted on patty-seizing consumers determined consumers' preferences and guided the formulation of pigeon pea patties. The soaked legumes were steam pressurized at 121°C for 10 min. Spices/herbs were added to the mixture which was baked at 150°C for 20 min. Only 50% of the respondents were influenced by nutritional content of patties. Pigeon pea patties had 13.8-14.6 g protein/100 g and 3.5-3.9 g fat/100 g. Addition of xanthan gum resulted (P < 0.05) in more red and softer textured products. The suitable addition of either 1.5% or 2.5% xanthan gum did not vary sensory quality (P < 0.05) as both products were liked slightly to neither like nor disliked in overall acceptability. When asked about purchase intent for these patties, 48.5% of consumers indicated they would probably buy them, while 16.3% would definitely buy.

INTRODUCTION

Pigeon pea (Cajanus cajan (L.) Millsp.) is ranked 5th in importance among edible legumes of the world (Dahan et al. 1999). It is an important pulse crop in India (Srivastava et al. 1999). In the West Indies, pigeon pea is also known

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