NUTRITIONAL AND SENSORY PROPERTIES OF WHOLE OGI FORTIFIED WITH PIGEON PEA FLOURS

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In Nigeria, Ogi is a fermented maize product which is usually consumed as weaning food and breakfast cereal. However, it is poor in protein, mineral and fibre quality which could result in protein malnutrition. Pigeon pea (*Cajanus cajan*) is an underutilized legume which when utilized in fortifying Ogi could improve its nutrient density. The objective of this study is to assess the nutritional and sensory properties of whole processed Ogi fortified with pigeon pea flours. Pigeon pea was processed into blanched flour and fermented flour. Fermented sifted maize powder (Ogi), fermented unsifted maize flour (whole Ogi) were separately fortified with either the blanched or the fermented pigeon pea flour at different concentrations of 10%, 20%, 30%, 40% and 50%. Fermented sifted maize powder (Ogi) was used as control. The proximate composition, in-vitro starch content, protein digestibility and sensory properties of the products were assessed by standard procedures. Result shows that protein content of the sifted or unsifted maize flour mixed with either fermented or blanched pigeon pea flour increased with increased concentration of the pigeon pea flour within the range of 10.1-14.2% respectively. Higher digestibility is shown in unsifted maize fortified with fermented pigeon pea flour. Products of fortification of blanched pigeon pea flour with either whole Ogi or shifted Ogi were the most acceptable at p<0.05. In conclusion, inclusion of pigeon flour as blanched or fermented flour at 10-30% improved protein content of whole Ogi without affecting the sensory qualities.