Archives of Food and Nutritional Science

Volume - 1, Issue - 2

Research Article Published Date: 2017-11-28

Development and quality evaluation of Jam from Watermelon (Citrullus Lanatus) and Pawpaw (Carica Papaya) juice

The seasonal nature of most fruits available in the market coupled with inadequate storage and processing facilities has limited their consumption by majority of the people in the country. Jams made from fruits are good bread spread rather than any other food products because they serve as adequate balance diet and it contains antioxidant such as vitamin C and A which play an important role in preventing cancer, cardiovascular problem and improvement of evesight. Pawpaw and watermelon fruits have been reported to be nutritive and high in antioxidant properties that can scavenge free radicals, thereby improving the antioxidant status of the body. It is therefore deemed fit to produce jam from these perishable commodities in other to make them available all through the year and as well as adding to varieties of food products. The aqueous extracts of watermelon with pawpaw juice were processed into jam and the physicochemical properties of the jam samples were analysed. The resulting jam samples showed moisture content ranging between 30.60-35.30%, protein 0.40-0.80%, fat 0.20-0.40%, ash 1.20-1.70%, crude fibre 0.10-0.30%, carbohydrate 62.10-67.16%, ?-carotene 610-1350µg/100g and ascorbic acid 9.60-15.40mg/100g. The jam samples were found to be very nutritive and high in antimicrobial and antioxidant properties that can scavenge free radicals, thereby can improve the antioxidant status of the body. Sensory evaluation tests showed that the samples were acceptable and compared favourably with the commercial imported brand while sample AA had the highest preference in all the sensory attributes evaluated by the panellists. Microbiological examination also showed that the jam samples had total plate count ranging from 4.10x101 to 2.00 x101 cfu/g, yeast and mould count ranged from 2.10x101 to 1.00 x101cfu/g with no observable coliform count.

Research Article Published Date: 2017-11-13

Chemical composition and organoleptic properties of Cocoyam starch-wheat flour blend noodles

Noodles are strips or strands cut from a sheet of dough made from flour, water and either common salt or a mixture of alkaline salt. Noodles consumption represents about 40% of the total wheat flour which are mainly consumed by school children. The use of composite flour has been encouraged since it reduces the importation of wheat. Utilization of locally available, inexpensive materials like cocoyam that can substitute a part of wheat flour without adversely affecting the acceptability of the product will be a product development. This study therefore studied the chemical composition and organoleptic properties of instant noodles from the blend of wheat and cocoyam starch. Cocoyam starch was substituted into wheat flour at 20, 40, 60 & 80%. Analysis revealed higher carbohydrate (63.50-70.05)%, moisture (4.54-5.07)% and vitamin A (10.01-30.47) mg/100g, B1 (11.43-32.15) mg/100g but lower protein (4.56-8.79)%, phosphorus (0.34-0.52)%, calcium (1.83-0.98)%, iron (0.15-0.32) % and ash (1.19-3.20)%. The composite noodles revealed higher carbohydrate and mineral but lower protein than the commercial noodles. The sensory analysis revealed that 20% cocoyam compared favourably with the commercial noodles in terms of all the sensory attributes evaluated. This shows the possibility of producing noodles from cocoyam tubers which serves as novel food. This will further help to promote and improve utilization of cocoyam tuber.

Research Article Published Date: - 2017-11-09

Assessment of Complementary Feeding Practice of infants and young children aged 6-23 months in Gode Town, Somali Regional State of Ethiopia

Malnutrition is the largest risk factor caused by inadequate nutrition that leads to childhood morbidity and mortality, as well as inadequate growth and development. Infants are at increased risk of malnutrition by six months, when breast milk alone is no longer sufficient to meet their nutritional requirements. However the factors associated with nutritional status of infants after 6 months of age have received little attention in pastoralist communities of Ethiopia. The aim of this study was to assess the complementary foods of infants and young children (6-23 months) in Gode town of Kebele 01. The prevalences of wasting, stunting and underweight among infants and young children were 6.1%, 56.1%, 10.0% reespectively. Undernutrition is a public health problem among infants and young children in Gode town of Kebele 01. Breastfeeding was slightly positive associated with lower chances of wasting at r=0.61, p= 0.01 and underweight at r=0.331, p=0.01. While diarrheal disease was associated with higher chances of wasting and underweight. Initiation of complementary food was slightly positive association with wasting at r=0.179, p=0.05.