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Development of a value-added pumpkin (*Cucurbita spp.*) and curry leaves (*Murraya koenigii*) instant soup mixture and its proximate analysis.

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A healthy diet for humans should include a variety of foods, prioritizing providing a variety of nutrients. Nowadays, soup is considered a good food supplement due to its ability to provide a variety of nutrients, hydration, and support for digestion. In the modern world, soup is now commercially available in the form of instant soup as an alternative to homemade soup. Pumpkins (*Cucurbita* spp.) are a nutritious food source, with essential vitamins, minerals, antioxidants, and carotenoids. In Sri Lanka, a significant portion of the pumpkin harvest is wasted, and therefore, we aimed to make an instant soup mix with pumpkin. Curry leaves (*Murraya koenigii*), black pepper (*Piper nigrum L.*), salt, and sweet potato (*Ipomoea batatas*) starch were used as other ingredients, creating a synergy that enhances both flavour and nutrition. The composition of the soup mix was selected via a sensory test, and the proximate analysis was done according to the AOAC standard methods. Moisture content was 15.52±0.90%, and the total ash content was 11.67±0.54%. The fat content of the soup mix was 0.97%. The protein content determined by the Kjeldahl method was 2.17±1.53%. The crude fibre content was 0.90% and the total carbohydrate content was 68.77%. These findings revealed promising results from the proximate analysis, highlighting the nutritional quality of the instant soup mix.

Keywords:
Pumpkin, Curry leaves, Sweet potato, Instant Soup Mix, Proximate analysis

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Determination of the antibiotic amoxicillin in milk

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Milk proteins are among the most essential constituents of milk in terms of biological and nutritional properties. The use of antibiotics in food-producing animals causes the subsequent deposition of these drug residues in milk. Therefore, the quality of milk can be impaired due to antibiotics, leading to serious health concerns worldwide and in Sri Lanka, including antibiotic resistance and other adverse effects. Since milk is a highly consumed product globally, it is essential to conduct thorough testing to detect and quantify these residues to guarantee their safety. Therefore, this study aimed to determine the residue level contamination of amoxicillin, a commonly utilized veterinary antibiotic, in selected raw and processed milk samples and assess their human health risks. The processed, pasteurized, and raw milk samples were collected from local markets and stored at -20 °C till further analysis. Amoxicillin was extracted by an acetonitrile-methanol-distilled water (40:20:20) solvent system, and further analysis was conducted by Thin Layer Chromatography (TLC), High-Performance Liquid Chromatography (HPLC), and Ultra High-Performance Liquid Chromatography (UHPLC). TLC results indicated no visible spots associated with amoxicillin in the milk sample. HPLC chromatogram indicated a peak at 3.610 mins with characteristic UV peaks at 276, 228, and 194 nm for the amoxicillin standard (AS). The pasteurized milk sample indicated a peak at 4.085 mins with a UV peak at 276