

Pasta production: Another under-exploited way of increasing cassava utilization

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Abstract. One of the contributory factors to low cassava utilization, despite its promising potential, has been attributed to limited utilization options. Whereas one area has been cited as poor utilization in the fresh state in the form of *kibabu*, other potential options have not been exploited fully in Tanzania. This study was conducted to establish possible levels of blending wheat flour with cassava flour, soybean flour or cassava starch, singly or in combination, to produce acceptable pasta and assess its acceptability. Wheat flour was used at a level not lower than 50% in the formulations. Also in each of the formulations, soy and cassava flour or cassava starch were used at 5, 10, 15, 20, 25, 45, and 50%. Results showed that it was possible to produce pasta from simple household Italian pasta making machine with all formulations except those with 45% or more of soy flour. All formulations with less than 80% wheat flour easily broke into small pieces, the extent of which depended on their composition, even prior to cooking. To produce cassava-based pasta, it was easier to work with the flour than pure cassava starch. The samples with 50:45:5 wheat:cassava starch:soy became porridgelike after cooking. Sensory evaluation results showed that pure wheat pasta was significantly ($p < 0.05$) more accepted than the remaining formulations in terms of colour, smell, taste, texture and general acceptability. The sample with 20% cassava inclusion was the next most preferred. Formulations with more than 20% cassava flour and 10% soy flour were the least accepted in all sensory attributes investigated. It was therefore concluded that, for production of acceptable pasta products, the proportion of wheat flour in the formulation should not be below 80%. Further research is required to establish other factors, which could enhance acceptability of cassava- and soy-based pasta.