

## Nutritional value of MASO31 formula and complementary feeding who recommendations in Tanganyika, DRC

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**Background:** Complementary feeding is among the main causes of malnutrition worldwide and was shown to be an effective child survival strategy ranked among the top life-saving interventions for children under 5 years. WHO and UNICEF underline the use of available food locally produced for children less than 2 years as a significant strategy to ensure the optimal Complementary feeding. Nevertheless, there is limited knowledge on adequacy of additional foods locally produced, like MASO31, in DRC.

**Objectives:** This study aimed to evaluate the nutritional value of MASO31 content according to the complementary feeding WHO recommendations.

**Method:** Two samples of Maize-Soya blend (MASO 31) formula were taken away of two different preparations, from Tanganyika Province, for biochemical analysis. Energy, and nutrients (protein, Fe, Ca, P, Zn,) were analyzed in the Research and Agro alimentary Analysis Center (CRAA) of Lubumbashi in June 2014. Conversion factors, KJELDHAL, Soxhlet, non azoted extractive and spectrometry of plasma inductive coupling (PIC) emission were the biochemical methods used. Comparative analysis of MASO 31 content was done using the Complementary feeding WHO Recommendations like gold standard.

**Results:** MASO31 content was over complementary feeding WHO Recommendations in daily energy need and in term of minimum meal frequency. But calcium and phosphorus needed some improvements.

**Conclusion:** MASO31 formula may be recommended in complementary feeding in DRC but calcium and phosphorus may be enriched. Controlled Randomized Trials is needed to test the short- and long- term effects of this recipe on the nutritional status of children 6-23 months old.

### Speaker Biography

Ngoy Bulaya Emmanuel, a Nutritionist in Public Health (2005). He obtained his MPH in Epidemiology, Preventive Medicine and Disease Control at the School of Public Health, Lubumbashi University (2007). He obtained his MPH in Nutritional Epidemiology at the School of Public Health, Kinshasa University (2017). He was elected and became the provincial president of the DRC nutritionist's association in the entire Katanga Province from (2009 - 2012). In September 2009, University of Lubumbashi, at the School of Public Health, appointed him as Assistant Professor in Nutrition Unit while the DRC Health Ministry designated him as Provincial Coordinator of National Nutrition Program (2009 – 2015). He worked at the School of Agronomic Studies as Secretary of the Manager Committee (2003 - 2006).

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