

## **Preliminary Investigation into the Potentials of Mixed Blend of Acha (Digitaria exiles), Aya (Cyperus esculenta) and Defatted Water Melon Seed (Citrullis lanatus) Flour as a Weaning Formula**

**Authors :** O. G. Onuoha, O. G. Akagu

**Abstract :** The potentials of acha (*Digitaria exiles*), aya (*Cyperus esculentus*) and defatted water melon seed (*Citrullis lanatus*) as a weaning formula was investigated using the following blends for acha, aya and defatted water melon seed respectively in percentage proportion to obtain the weaning formulae; WS1(20:50:30); WS2(30:40:30); WS3(40:30:30); WS4(50:20:30). The result of the chemical analysis showed that; the sample WS1 had the highest value (15.6%) for protein while sample WS4 had the least value (14.1%). The fat content sample WS4 having the highest value (30.8%) while sample WS1 had the least value (27.3%). The ash content sample WS4 had the highest value (3.22%) while sample WS1 had the least value (2.63%). The carbohydrate content showed that sample WS1 having the highest value (50.5%) while sample WS4 had the least value (46.58%). While sample WS4 had the highest energy value (528.32 Kcal) and sample WS2 had the least value (515.06 Kcal). However, all the sample results fell within the dietary daily reference intake for infants between 0-3 years and required only local technology in its production.

**Keywords :** weaning formula, acha, aya, deffted water melon seed

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