



Justine Athieno (Occupational Therapist & Human Nutritionist) will intervene as a trainer on the topic of nutrition during the next round of training.

# Nutrition FOCUS

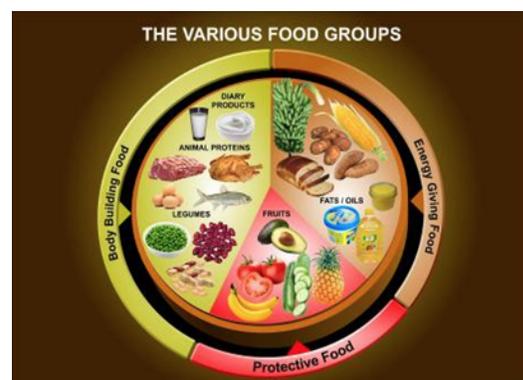
## MEETING THE NUTRITIONAL NEEDS OF CHILDREN WITH CEREBRAL PALSY USING LOCALLY AVAILABLE FOODS

Children with Cerebral Palsy (CP) find it difficult to get sufficient nutrients due to physical difficulties in chewing and swallowing. The more severe the cerebral palsy, the more difficult eating is for the child, and malnutrition is common. Caregivers need to master the art of providing food choices which are high in protein, calories, vitamins and minerals so that these children can ‘catch up’ and maintain adequate nutrition and health. They also need to master ‘food modification’, to ensure that the children are given food of a consistency that they can manage to chew and swallow. Carers should limit processed foods with low nutritional values as much as possible. In addition, as eating is hard work and tiring, it is also beneficial to give smaller meals more often.

### *NUTRITIOUS FOODS AND HOW THEY CAN BE PREPARED FROM LOCAL FOOD ITEMS*

Multi-mix (“Kitobero”) is a mixture of food items from all the major food groups which, if well-prepared, is a complete food. It is composed of one carbohydrate food that supplies energy; two protein foods that build and repair the body; and a vegetable that supplies vitamins and minerals which boost immunity, help in wound healing, brain and bone development. It also has fats that keep the body warm, protect body organs and give energy.

*Kitobero* can be prepared from, for example; Irish potatoes added to pre-cooked skinned beans and fresh fish (boneless); some salt and vegetable oil. These are carefully wrapped and steamed together for about 2 hours. A soft chopped vegetable like amaranthus (“*dodo*”) is added and the steaming continues for about 30 minutes. When ready, the mixture is mashed well together and served. Mashing makes the texture and consistency easy to chew and swallow. The beauty of a multi-mix it is that it can be prepared from a variety of food combinations, so long as they are in the right proportions and taste good together.



Porridge from whole grains like millet, maize, rice, and sorghum can be enriched by adding eggs, milk, and soy, to make a high-energy product that readily supplies the body with: carbohydrates, proteins, fibre, fats, and minerals as well.

Caregivers should always consider adding vegetable purees (thick liquid from crushed food items), and smoothies (drink from whole fruit) to children's diets, since most children with severe CP suffer from chronically "hidden hunger". Bite-sized pieces of soft food (eg. cooked potato, cooked pumpkin, avocado) or soft fruits (eg. papaya, mango, banana), can also be given as snacks to children

who are learning to chew. Vitamins, minerals and fibre from fruits and vegetables can help boost appetite and immunity, strengthen bones, and relieve constipation.

Peanut-based foods similar to the manufactured Plumpy'Nut should be avoided for children with severe CP due to the swallowing difficulties, as these can cause extreme damage to the lungs if aspirated (i.e. if some of it goes into the lungs during swallowing). Instead, a nutritious recipe can be made from cooking cow peas (skinned), pumpkin, potatoes and oil, cooked until soft and mixed together.

It is also crucial that children with CP drink enough water. Children with CP lose high amounts of water from saliva loss. Many children with CP also find drinking very difficult. It is recommended that a person with CP takes at least 2-3 sips of clear water per hour, depending on their age, along with other liquids after mealtimes, totalling at least 1 litre per day. Water helps with digestion, relieves constipation, flushes out toxins and maintains normal body function.

Finally, children must be fed in a way that helps them to chew and swallow – always sitting up and with their head straight, taking small mouthfuls one at a time.



*Let's make every bite count for a child with special needs.*

### Acknowledgment

Contribution from Dr. Mel Adams, specialist on CP and feeding difficulties.

### References

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