

Nutrition, Eating & Drinking

GUIDELINES FOR

Children with disabilities

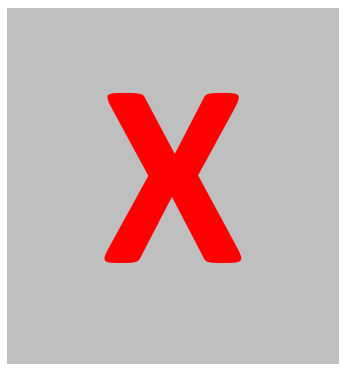
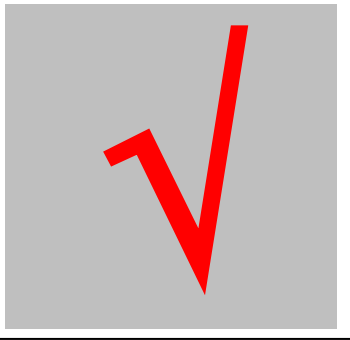


By

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MAITS

MULTI-AGENCY INTERNATIONAL
TRAINING AND SUPPORT



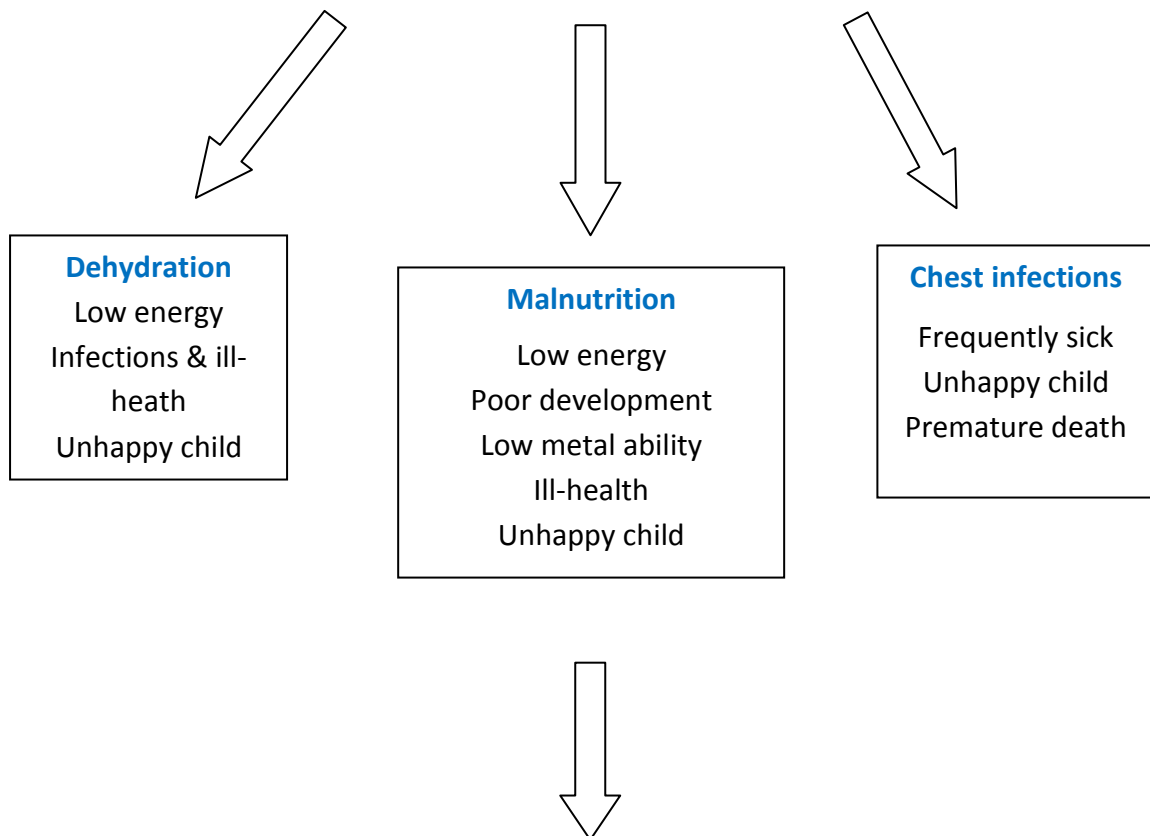
SUMMARY OF GUIDELINES

- **As with ALL children, follow good hygiene practices for food preparation and feeding**
- **Give smaller meals more often (eg. 3 main meals and 2-3 snacks)**
(meals should not last for more than 30 minutes or else the child will get too tired and not be able to chew or swallow)
- **Make sure the diet is balanced, and extra high in nutrients (for health) and calories (for strength)**
- **Make sure the food is of a smooth texture and with no bits in it**
- **Give the child 1 litre (5 cups) of water per day**
- **Use the correct utensils (small plastic cup & small plastic spoon)**
- **Position: support the child in upright position with the chin slightly down (use a special seat if possible)**
- **Communicate with the child in a positive manner**
- **Feed sensitively: small mouthfuls, slowly, watching & pausing.
NEVER FORCE**

Following these guidelines will reduce the child's risk of serious ill-health and help him/her to be strong, more able and happier.

Typical problems & consequences

Chewing	Food spillage / child gets tired / limited range of foods / can't eat enough
Swallowing	Food goes wrong way onto lungs > see signs of pain in facial expression / coughing / choking
Communication	Can't indicate when hungry, thirsty, full, want more etc.
Self-feeding	Can't feed self at all / food spills on way to the mouth / too much put in the mouth at once / eats too quickly > problems swallowing
Vomiting/ regurgitation (‘reflux’)	Pain during eating > refusal to eat > eats less
‘Fussy’ eater	Eats less
Problems with digestion	constipation > pain & loss of appetite > refusal to eat > eats less



Additional burden of care, costs and distress for parents

Identifying children who need help

- Underweight
- Frequent illness / chest infections
- Frequent vomiting/regurgitation
- Unhappy mealtimes

Ways to manage the problem

General

- Monitor growth (weight-for-height) > seek help from nutritionist
- Monitor health (especially chest health) > seek help from doctor
- Observe children feeding and watch for difficulties > help during meals
- Observe for signs of reflux > seek medical help

Each mealtime - consider

- Diet: Nutrient content & consistency AND fluids
- Communication
- Hygiene
- Positioning
- Utensils
- Feeding method

Diet & food texture



All children need a **balanced diet** for development, growth and health. A balanced diet should be prepared from locally available food groups such cereals/ tubers and plantains, legumes, meat and meat products, fruits and vegetables as well as oils and nuts. These foods provide the child with energy, protein, vitamins and minerals which are essential for growth, health and child development.

For those children with **neuromuscular disabilities**, they find it difficult to eat enough food at each mealtime, so they are often undernourished. They need **smaller meals** which contain **extra nutrients and calories**. They need snacks between meals.

Table 1: Example of food groups providing high energy, proteins and vitamins and minerals

Energy foods	Protein foods	Vitamin and mineral foods
<ul style="list-style-type: none"> ▪ Porridge (likunei phala/nsima/ugali), sweet potatoes, pumpkin, Irish potatoes, rice, cooked bananas (matoke) ▪ Vegetable cooking oils, margarine ▪ Nuts and sugary food products (<i>nuts can be problematic for children with disabilities</i>) 	<ul style="list-style-type: none"> ▪ Fish and meat products ▪ Eggs ▪ Legumes (beans, soya beans, lentils, Bambara) ▪ Seeds (pumpkin seeds, sesame seeds and groundnuts, ▪ Milk and yoghurt 	<ul style="list-style-type: none"> ▪ Green vegetables eg. Small chopped and cooked Amaranth leaves (in Swahili 'mchicha', in Kikuyu 'terere'), pumpkin leaves, ▪ Other vegetables eg. eggplants, carrots ▪ Fruits such as avocado, ripe papaya, ripe banana

Table 2: Example recipes and supplements to enrich the nutrient value and increase the caloric content of meals for children with neurological disabilities

Name of dish	Ingredients to add	How to prepare the ingredients
<p>Porridge (likunei phala)</p>	<p>Take ratio of 1:4</p> <ul style="list-style-type: none"> -Maize/sorghum/millet -Groundnuts or soya beans <p>NB: choose one type of cereal and one type of legume at a time, avoid mixing more than two cereals and legumes</p>	<p>How to prepare maize/millet/sorghum</p> <ul style="list-style-type: none"> -Remove all the grains with holes, dried pods, wash maize or millet or sorghum and sieve to get rid of the water and foreign matter. -Dry grains into the sun <p>How to prepare soya beans</p> <ul style="list-style-type: none"> -Remove stones, dried pods and other debris -Wash the beans and soak them for a day to remove anti-nutritive factors and then sieve -Put sieved beans into already boiled water and let to boil for about 20 minutes then let the beans to cool -Dehull beans and put it into the sun to dry and then roast the dry beans to aid digestibility and increase in aroma and taste. <p>Mix roasted soya with dried maize and them mill them into flour to obtain smooth and consistent particles.</p> <p>How to prepare groundnuts</p> <ul style="list-style-type: none"> -Remove grains with holes and with fungus, stones, dried pod and other debris. -Roast the groundnuts using dry heat for about 20 minutes so as to allow easy de-hulling and removing of anti-nutritive factors. -Grind groundnuts into the flour and store it into clean container covered with lids. <p>Take grinded groundnuts and mix with maize or millet or sorghum flour and prepare porridge.</p>
<p>Cooked beans</p>	<ul style="list-style-type: none"> -Soya like beans -Amaranth leaves -Vegetable Oil 	<ul style="list-style-type: none"> -Remove all foreign matters and unwanted materials -Wash beans and soak for one hour -Remove soaked beans and boil them until they are cooked and become soft. -Sort to remove all unwanted materials and wash amaranth leaves with running water -Chop the leaves into small pieces and add them into cooked beans and add oil then let it get cooked for 5 minutes
<p>Soft rice porridge (bokoboko laini)</p>	<ul style="list-style-type: none"> -Rice -Groundnut flour or small dried fish flour -Salt 	<ul style="list-style-type: none"> -Sort and clean the rice -Boil the rice until it becomes very soft -Grind cooked rice to make porridge -Add oil and pinch of salt for taste -Add 2-3 tablespoons of small dried fish flour or 2-3 tablespoons of groundnut flour and let it to boil for 5 minutes.

Mashed banana or potatoes or mashed pumpkin	-Green banana or potatoes or pumpkin -Carrots -Oil -Groundnut flour or small dried fish flour -Salt	-Peel bananas or sweet potatoes or pumpkin, chop into small pieces and boil them -Peel and grate carrots into very small thin pieces then add into boiled banana or potatoes or pumpkin -Add oil or groundnut flour or small dried fish flour and pinch of salt and let it cooked for 10 minutes
Foods to add to recipes to 'fortify'		
Flour made from small dried fish	Rich in protein and minerals	-Take small dried fish (dagaa) -Sort and remove all the foreign materials -Wash dried fish to remove all dusts and stones -Place cleaned small fish and let it dry again -Roast dried small fish and then grind them to get flour -Store small fish flour into a clean and dry container with lids -Add small fish flour into salty cooked food for the child.
Baobao juice		Add baobao powder or juice to your porridge

For children with **autism** or who are **hyperactive**, it may help to minimise the number of additives they eat (eg. artificial colours, flavours, preservatives, and/or sweeteners). The most favoured diet of some parents is to reduce wheat and sugar. Maize and other cereals can be used to replace wheat, and honey can be used to replace sugar.

In terms of **food consistency/texture**, it is important to give children with **neuromuscular disabilities** food which is of a **smooth** consistency and does not have 'bits' in it. This can be achieved by avoiding foods such as normally cooked rice (replace with nsima/ugali or mashed potato). Also avoid chewy or crispy items such as biscuits, potato chips and nuts. Mash food where necessary.

To help a child improve their chewing skills, gradually increase the density of the consistency/texture eg. Start with porridge, move onto soft stiff porridge/mashed matoke, then move onto giving small pieces of soft fruit (papaya/avocado/ripe banana) and chopped boiled vegetables (boiled pumpkin, boiled sweet potato, boiled carrots). Remember that more runny food has fewer nutrients so it is good for a child to learn to chew if possible, as he/she will be able to eat more solid food.

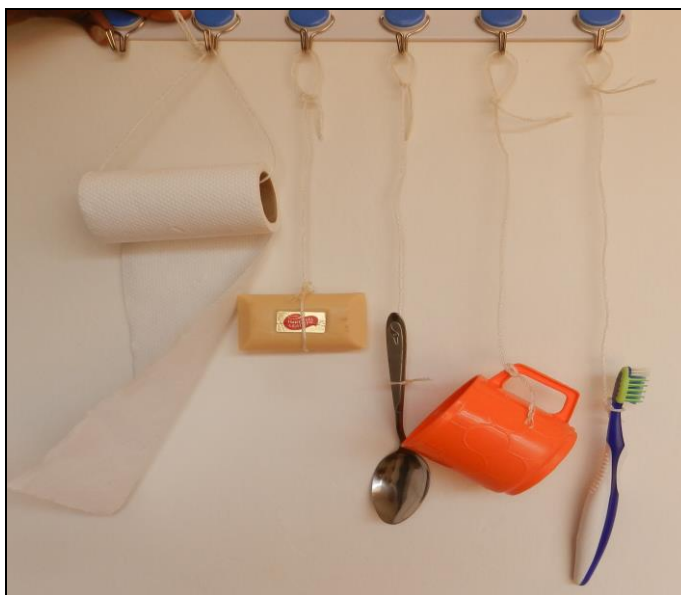
Fluids should be drunk in **small amounts throughout** the day. This helps to prevent dehydration and constipation. Fill a **1-litre** bottle for each child and make sure it is finished by the end of the day. You can also give baobao juice which is very nutritious and of a good consistency, as it is slightly thicker than water so is easier to control when swallowed.

Communication

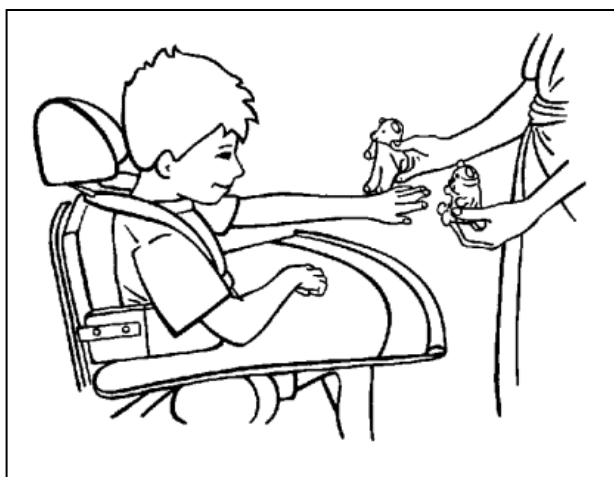
Use all forms of communication with children who have problems understanding or speaking.

Use objects, gestures, pictures, symbols, signs, depending on what the child can manage.

Start with objects. You can hang these from a series of hooks to show the sequence of activities. Point to the object at the same time as telling the child what is happening next and gesturing the activity. You can also encourage the child to touch or point to the object to show you what they want.



Offering choices is also a very good way to encourage communication. Hold out 2 objects and see which one the child looks at. Give them that one. Gradually encourage them to touch the object they want...then point to it. You can then move onto pictures etc.



Hygiene

1. Hand-washing (feeder and child)

Use uncontaminated water from a flowing source (eg. normal tap, tippy tap, leaky tin) with soap or ash.
Air dry hands clean – avoid sharing towels.



2. Face-washing

Wash child's face before eating as well as after, to avoid dirt going into the mouth when spilled food is scooped back in.

3. Teeth-cleaning

Clean the teeth of children who have swallowing difficulties and are prone to chest infections, before meals to avoid microbes from the mouth going onto the lungs during eating or drinking.
Clean all children's teeth twice a day.

4. Utensils

After washing, always rinse in uncontaminated water.
Place on drying rack in the sun to dry.

5. Table tops

Use a clean cloth to clean table tops before each meal.

Positioning

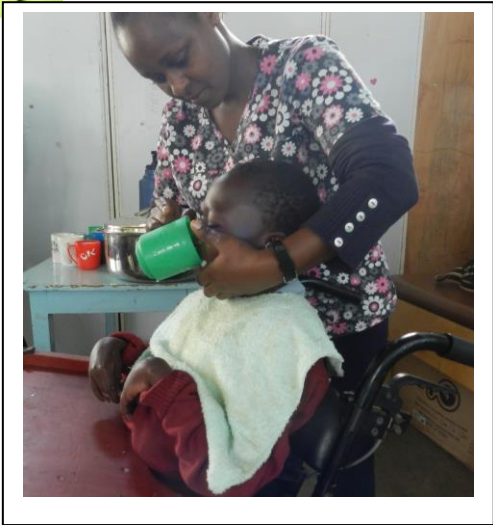
Children should always eat and drink in an upright sitting position with their head facing forwards and *never* tilted back. This helps chewing and swallowing and to prevent food and drink from going on to the lungs.



Children who have difficulties sitting upright by themselves should be supported – either using a chair and table of the correct height, supported by another person, or using a supportive ('special') seat.



Children who have poor head and jaw control can be supported by their feeder from the side or front.



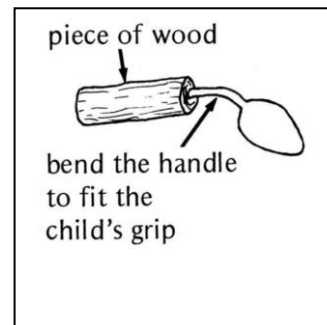
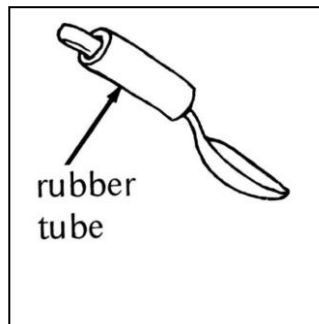
Utensils

Avoid large spoons – they encourage large mouthfuls that the child cannot swallow.

If a child has a 'bite reflex', make sure the spoon is made of melamine (strong plastic).

If the child is eating Chiponde, it may find it easiest to take it directly from the packet. The mother has to be very careful to only give small amounts per mouthful.

If a child is ready to try a spoon-feed itself, you can wrap rubber or wood around the spoon handle which makes it easier for children with disabilities to hold.



Avoid tall cups – they encourage the child to tip their head backwards which makes swallowing very difficult and 'dangerous'.

You can cut part of the cup away to make space for the nose, which helps to avoid head-tipping.

Cups with 2 handles can be helpful for encouraging independence. DON'T use the tops on spouted beakers, as they make it difficult for the child to control the flow of liquid into the mouth. They also store germs in the spout.



Feeding methods

- Always *talk* to the child and encourage them to eat.
- Give *small* mouthfuls – of food AND drink. Remind children who are feeding themselves to take smaller mouthfuls if needed. Give a verbal and gentle physical prompt.
- Feed at the right *speed*. Remind children who are feeding themselves to slow down if needed. Give a verbal and gentle physical prompt.
- *Watch* for signs of discomfort/distress...and *wait*. Give the child the *time* they need.
- Provide *jaw support* where necessary (see section on positioning)
- *Support them to learn to self-feed* (if they can) with their hand first, then a spoon (hand-over-hand) – use modified spoons to help.
- Be *patient* with *fussy eaters*. Allow them to explore food. Find out how they like their food to be presented (colour, texture, temperature, together or separate etc.)
- Provide *positive feedback* when the child *does well* (give praise, give a favourite toy). Discourage negative behaviour (by withdrawing something they like).
- NEVER force-feed a child – this is cruel and dangerous. The consequences of this can be:
 - The child will refuse to eat
 - Food and drink go onto the lungs causing chest infections
 - The child can choke, causing breathing to stop and possible death
- Meals should never take longer than 30 minutes, as the child will get tired. Remember that these children need small, nutritious meals, more often.

