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DATUM DATE UMHLA: 30 November 2000

Departement van Gesondheid en Maatskaplike Dienste
Department of Health and Social Services
iSebe lezeMpilo neeNkonzo zeNtlalo

Circular No: H136 /2000

TO ALL: REGIONAL DIRECTORS
INSTITUTIONAL HEADS

PAEDIATRIC CASE MANAGEMENT GUIDELINES:
Growth Monitoring
Malnutrition
Vitamin A Supplementation

1. World Health Organisation: Management of Childhood Illnesses Guidelines

The World Health Organisation and UNICEF have developed management guidelines called Integrated Management of Childhood Illnesses (IMCI) for the management of priority childhood conditions in developing countries. As the prevalence of paediatric conditions and the management thereof differs from country to country, these IMCI guidelines should be adapted by each country to make it feasible to implement them in their health care systems.

2. Western Cape Province: Paediatric Case Management Guidelines

At a provincial workshop in June 1996 the above mentioned was discussed. Following this workshop a multi-disciplinary Provincial Reference Group was established to develop Paediatric Case Management Guidelines (PCMG), based on the IMCI Guidelines, for the following identified priority paediatric conditions in this province:

- Diarrhoeal Disease
- Acute Respiratory Infections (including Asthma)
- Malnutrition
- Child Abuse
- Tuberculosis

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Based on morbidity and mortality rates and on request of the health care workers in this province the following conditions were added to the malnutrition guidelines:

- Growth monitoring
- Vitamin A Supplementation

To facilitate training and in support of the regional Human Resource Development and Training sections, the Provincial Reference group has set up a Training Sub-group who develops training packages for each of the guidelines.

Funding has been obtained from the Integrated Nutrition Programme (INP) to produce the above mentioned guidelines as well as the accompanying training packages which have been made available to the regions and training institutions.

Attached please find the above mentioned guidelines for implementation in the regions. These will also be distributed to all the training institutions and will be used in outreach training and support programmes to all regions.

To implement these guidelines the following drugs may be necessary and should be made available at all community health care centres:

- 10% dextrose water
- Vitamin A Supplements
- Multivitamin syrup
- Iron syrup
- Food supplements
- Mebendazole (Vermox)
- Albendazole (Zentel)

The following equipment is necessary to implement these guidelines:

- Road to Health Card.
- Appropriate scale for weighing.

We trust that these standardized guidelines and training packages will benefit the health care workers and children of the Western Cape Province.

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DIRECTOR: PROGRAMME DEVELOPMENT

Stf1paediatriccasemalnutrition/TN1.12

Integrated Case Management Guidelines

Growth Monitoring

PAWC
(MCWH, Nutrition: Provincial Reference Group)
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Definition and importance of growth monitoring and promotion

Growth monitoring includes the regular measurement of weight (and sometimes length) which will lead to the detection of changes in the child's physical development. Growth monitoring forms the basis of comprehensive child health care; it is an important tool in the early detection of health and nutrition problems. It is imperative to assess growth by inspecting and completing the growth chart at every visit to a health facility (clinic, community health centre or hospital). This is because a significant number of malnourished children may look normal.

Growth promotion emphasises open communication with the mother/ caregiver to find practical and effective ways of meeting the nutritional needs of children during sickness and health. It recognises that the mother/ caregiver should be actively involved in the programme activity.

Plan for growth monitoring and promotion

- Start at birth and continue until child is 5 years old.
- Use growth chart on Road-to-Health Card (RTHC).
- Ideally growth monitoring should be monthly until the age of 2 years and then
  3 monthly until 5 years.

Minimum growth monitoring times:

- 5 times in first year
- 4 times in second year
- thereafter 3 times yearly
- However, weigh and plot weight whenever the child presents at a health facility, even if this is for a minor ailment or injury.

Children who are low birth weight (<2.5kg), underweight or growth faltering should be monitored weekly until catch-up growth occurs.

What to do at first visit to a health facility

- ☐ Make the mother feel welcome and register the child.
- ☐ Check that all details on the RTHC have been filled in.
- ☐ Weigh the child to the nearest 0.1 kg (see, box 1, and page 6).
- ☐ Make the child's calendar at the bottom of the chart (see box 2, page 6).
- ☐ If the child's date of birth is not known estimate the age (see box 3, page 7).
- ☐ Plot the weight (see box 4).
- ☐ Examine the child.
- ☐ Record any reason for special care (see box 5, page 8).

What to do at every visit to a health facility

- ☐ Ask about:
  - Illness;
  - Frequency of feeds and the use of energy-rich foods;
  - any concerns.
- ☐ Weigh child and plot weight (see box 4).
- ☐ Note the shape of the growth curve, which should be parallel to the centiles.
- ☐ Explain the growth curve to the mother.
- ☐ Encourage the mother if the child is gaining weight; motivate if no weight gain.
- ☐ Make sure immunizations are given.
- ☐ Advise mother about child spacing.
- ☐ Write in the month column:
  - type of feeding
  - when solids or complementary feeds were started
  - illness and its management.
- ☐ Tell mother when to return and write this on the RTHC.

How to interpret the child's growth curve

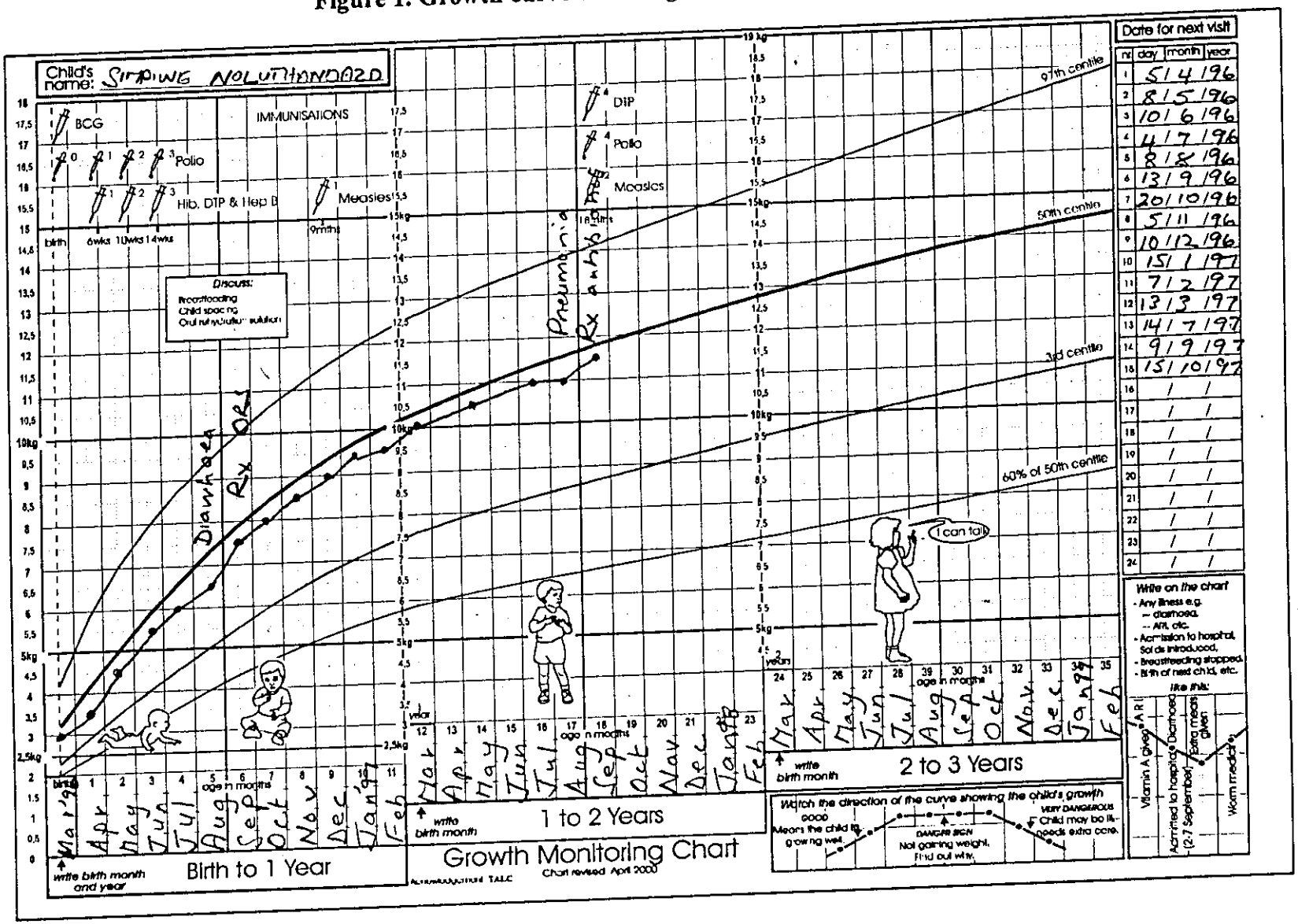
- ☐ If the growth curve is rising and is the same shape as the reference curve (normal growth), (see fig.1).
- ☐ If the growth curve is slowing down, flat or falling over 2-3 consecutive monthly visits (growth faltering).
- ☐ If the growth curve is rising faster than the reference curve (catch-up growth or overfeeding).
- ☐ Check if the child's weight is outside the normal range i.e. if it is below the third centile or above the 97th centile.
- ☐ If the weight is below the 3rd centile check if it is:
  - Between the 3rd centile and 60% expected weight for age without oedema (underweight), or
  - Between 60% expected weight and the 3rd centile with oedema (kwashiorkor), or
  - Below 60% expected weight for age without oedema (marasmus);
  - Remember the weight of some children with kwashiorkor could be above the 3rd centile.

What to do if the child is growing well

- ☐ If the baby is under 6 months and breastfed, encourage mother to exclusively breastfeed for first 6 months and to continue breastfeeding until baby is 2 years old and beyond (see page 6).
- ☐ If baby is 6 months old, advise mother/ caregiver what solids/ complementary feeds should be given (see page 6).
- ☐ Advise mother/ caregiver on how to enrich solids/ complementary feeds (see page 6).
- ☐ Explain to her the importance of giving food rich in vitamin A.
- ☐ Discuss child spacing.
- ☐ Make sure all immunizations are given at every visit.
- ☐ Advise her about oral rehydration and continued feeding if baby develops diarrhoea.
- ☐ Tell her when to return for weighing.

IF THE CHILD IS GROWTH FALTERING, UNDERWEIGHT OR SEVERELY MALNOURISHED REFER TO THE GUIDELINE ON MALNUTRITION

Figure 1. Growth curve of child growing at a healthy rate



nr	day	month	year
1	5	1	96
2	8	1	96
3	10	1	96
4	4	1	96
5	8	1	96
6	13	1	96
7	20	10	96
8	5	11	96
9	10	12	96
10	15	1	97
11	7	2	97
12	13	3	97
13	14	7	97
14	9	9	97
15	15	10	97
16	/	/	
17	/	/	
18	/	/	
19	/	/	
20	/	/	
21	/	/	
22	/	/	
23	/	/	
24	/	/	

Feeding recommendations during illness and health

BIRTH TO 4 MONTHS

- Breastfeed on demand about 8 times in 24 hours.
- Do not give other foods or fluids.

4 TO 6 MONTHS

- Continue to breastfeed at least 8 times in 24 hours.
- Add complementary feeds listed under 6-12 months only if the child:
  - is hungry after breastfeeding, or
  - is not gaining weight adequately, or
  - shows interest in semisolid foods.
- Give complementary feeds 1 or 2 times per day after breastfeeding.

6 TO 12 MONTHS

- Breastfeed as often as the child wants.
- Give adequate servings of:
  - Porridge with added oil, margarine or peanut butter
  - Vegetables with oil or margarine
  - Fruit
  - Fish and meat
  - Mashed family food.
- **The child should eat at least five times per day.**

1 TO 2 YEARS

- Breastfeed as often as the child wants.
- Give adequate servings of:
  - Porridge with added oil, margarine or peanut butter
  - Vegetables with oil or margarine
  - Fruit
  - Fish and meat
  - Full cream milk
  - Mashed family food.
- **The child should eat at least five times per day.**

2 YEARS AND OLDER

- Give family foods at least 3 times per day.
- Twice a day give nutritious food between meals such as:
  - Bread and peanut butter
  - Fresh fruit
  - Full cream milk.

FEEDING RECOMMENDATIONS FOR THE CHILD WITH PERSISTENT DIARRHOEA

- If breastfeeding, give more frequent and longer feeds day and night.
- If taking other milk replace with increased breastfeeding, fermented milk (amasi or yoghurt) or nutrient rich semi-solid food.
- For other foods follow feeding recommendations for child's age.

Appendices

Box 1. How to weigh a child

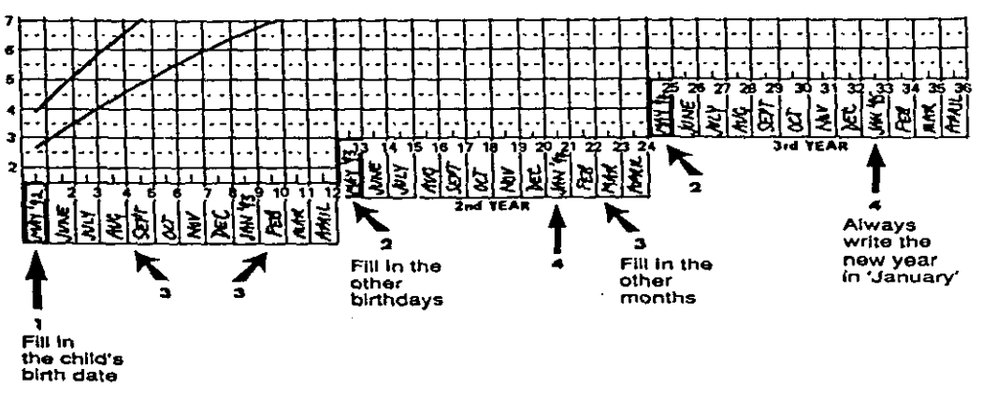
- Use an appropriate scale for weighing (spring, beam balance or an electronic scale). Bathroom scales are not accurate.
- Zero the scale before weighing.
- Weigh a known weight weekly to assess the accuracy of the scale.
- Remove child's clothes (including nappy) and shoes before weighing.
- Enlist the co-operation of the mother by getting her to undress the child and put him/her on to the scale.
- Make sure that the child does not touch any person or surrounding objects while being weighed.
- Weigh the child to the nearest 0.1kg. And plot the weight on the growth chart.
- If the child's weight changes in a way that you do not expect:
  - weigh him again
  - zero the scale and check it
  - Make sure that the weight has been plotted correctly.

Box 2. How to make a calendar

The calendar saves time working out the age at each visit and to prevent mistakes if age is worked out differently at different visits (see Figure 3).

- Enter month and year of birth in first thick-lined box.
- Enter birth month in all the other thick-lined boxes, increasing the year each time.
- Then enter all months following birth month (1 column 1 month).
- Use first 2-3 letters for the month.
- Enter the year after each month of January.

Figure 2. Making a calendar of the growth chart.



Box 3. Estimating child's age

Estimating the birth month:
If child less than 3 months, mother will remember month of birth

If child is older:
Look at ***development*** and estimate age based on the following:
6-8 weeks: baby smiles
3 months: head control
6 months: sits with support
9 months: sits without support
12 months: pulls to stand
15-18 months: walks
Look at ***teeth***
Estimated age (months) is number of teeth plus 6.
If there are 20-22 teeth the child is at least 2 years old.

Box 4. How to plot child's weight on chart

- ☐ Find column for the month that child is seen.
- ☐ Move up the column until weight line is met for the number of kilograms.
- ☐ Make a dot
- ☐ Plot the birth weight on the bold dotted line in the middle of the first column.
- ☐ Always put the dot in the centre of the column on the dotted line nearest the child's age.
- ☐ Join dot to dot of previous weight.
- ☐ If weight is something and a half kilograms, put dot on half-kilogram line.
- ☐ If weight between whole and half-kilogram line, put dot between whole and half kilogram lines.
- ☐ If child not sick and weighed more than once in month, use only one weight.
- ☐ If child sick and weighed more than once in month, record the second weight.
- ☐ If child did not come in previous few months, leave columns empty and draw line across empty columns.

Box 5. Reasons for special care.

In the child:

- ☐ Low birth weight (less than 2.5 kg);
- ☐ Twin or multiple pregnancy;
- ☐ Born less than 24 months after previous child;
- ☐ Disability;
- ☐ Chronic illness (e.g. HIV, TB);
- ☐ Weight less than the 3rd centile;
- ☐ Fetal alcohol syndrome.

In the family:

- Mother with many children in family;
- Other children in family malnourished or died;
- Single mother;
- Child cared for by relative;
- Poor family;
- Mother mentally or physically ill;
- Mother is an adolescent (teenager);
- Substance abuse.

Acknowledgements

Useful references:

1. F Savage King, A Burgess. Nutrition for developing countries. 2nd Ed. Oxford University Press 1993.

2. D Morley M Woodland. See how they grow: Monitoring Child Growth for Appropriate Health Care in Developing Countries, ELBS, 1979.

Contributors

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Integrated Case Management Guidelines

Malnutrition

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ASSESSMENT

ASSESSMENT OF THE CHILD WITH SEVERE ILLNESS (INCLUDING SEVERE MALNUTRITION)

- FIRST ASSESS THE CHILD FOR **GENERAL DANGER SIGNS.**
- THESE CHILDREN NEED **URGENT ATTENTION AND REFERRAL (see page 5).**

Assess for General Danger Signs	
ALL CHILDREN • Convulsions • Vomits everything • Stridor in a calm child • Chest in-drawing • Severe malnutrition (see below) • Lethargic or unconscious • Unable to drink or breastfeed • Severe dehydration or shock	**YOUNGER THAN 3 MONTHS** • Any of the clinical features listed under ***ALL CHILDREN*** • Fever (temp. > 37.5° C axillary) • Low body temperature (< 35.5° C) • Bulging fontanelle • Grunting • Fast breathing (more than 60 per minute)

ASSESSMENT FOR SEVERE MALNUTRITION

- Weigh the child and plot the weight on the RTHC.
- Check for oedema of both feet.
- Classify the child as having severe malnutrition (see page 4) if:
  - The weight is below 60% expected weight for age (Marasmus).
  - The weight is between the 3rd centile and 60% expected weight-for-age with oedema (Kwashiorkor).
  - The weight is below 60% expected weight-for -age with oedema (Marasmic-Kwashiorkor).
  - Note that in some children with kwashiorkor the weight may be above the 3rd centile.

ASSESSMENT OF THE CHILD WITH GROWTH FALTERING OR UNDERWEIGHT

In children with underweight or growth faltering (see page 4), a more detailed assessment should be done as outlined below. These children need continuous attention, regular follow-up and must be registered on the Protein Energy Malnutrition (PEM) Scheme.

Ask

- If the child is breast-fed, how many times a day and for how long.
- If there are breast-feeding problems.
- If a breast milk substitute is given find out what is given; how it is prepared; how much is given; how often it is given and if there is attention to hygiene.
- If the child is taking solids, ask what type of food is eaten and how often feeds are given. Are solids energy-enriched with e.g. oil, margarine or peanut butter?
- Who cares for and feeds the child.
- If the child has a chronic cough, poor appetite, weight loss or contact with someone with TB.
- If the child has had recent illnesses such as diarrhoea, acute respiratory infection, and other infections or passed worms.
- If there is a regular family income; if the mother is single / married; if there are other siblings; if there are problems such as substance abuse e.g. alcoholism.

Look and examine

- Weigh the child and plot the weight on Road to Health Card.
- Consider the birth weight.
- Establish if the child is underweight (weight between 3rd centile and 60% expected weight for age) or growth faltering (growth curve flat or dropping off for 2 consecutive months).
- Examine for underlying illnesses or problems by checking for:
  - Fever (infection);
  - Pallor of the conjunctiva and palms (anaemia);
  - Dehydration (diarrhoea);
  - Fast breathing and lower chest-indrawing (acute lower respiratory infection);
  - Oral thrush, skin rash, lymphadenopathy, muscle wasting (HIV);
  - Signs of physical or mental disability or fetal alcohol syndrome (FAS).
- The following investigations are recommended:
  - Finger prick to assess haemoglobin (Hb);
  - Tuberculin skin test and X-ray chest if TB is suspected.

CLASSIFICATION AND TREATMENT PLAN

Clinical signs	Classify as	Treatment Plan
Any danger sign	Severe illness	Refer. See Plan A.
Kwashiorkor: Child below 3rd centile with oedema. Note that children can have kwashiorkor and also be above the 3rd centile. Marasmus: Child below 60% expected weight-for-age.	Severe malnutrition (Kwashiorkor or Marasmus)	Refer. See Plan A.
Weight between 3rd centile and 60% expected weight-for-age.	Underweight	See Plan B.
When growth curve is flat or dropping off for 2 consecutive months.	Growth faltering	See Plan B.

TREATMENT

PLAN A. MANAGEMENT OF THE CHILD WITH SEVERE MALNUTRITION OR SEVERE ILLNESS

- Initiate treatment and REFER to hospital.
- If child has lower acute respiratory infection, give oxygen and first dose of antibiotic (see ARI guideline).
- If child has diarrhoea or dehydration give oral rehydration solution (see diarrhoeal disease guideline).
- If blood sugar low on dextrostix (< 3 mmol/l), treat with oral 10% dextrose water (10ml/kg).
- Keep the child warm on the way to the hospital.
- Notify the child in terms of the Child Care Act.

PLAN B. MANAGEMENT OF THE CHILD WITH UNDERWEIGHT OR GROWTH FALTERING

COUNSEL THE MOTHER OR CAREGIVER

- Encourage and support the mother to exclusively breast-feed until the baby is 4-6 months old and to continue breast-feeding until 2 years of age and beyond.
- If the mother has difficulty in breast-feeding assess her technique and advise her about the correct position and latching.
- If by 4 months the baby is not growing well, advise the mother to continue breast-feeding and to introduce solids.
- If the mother uses a breast milk substitute, advise her about the reconstitution of the milk and hygiene; encourage her to use a cup instead of a bottle.
- If the mother is HIV positive and can reliably and safely provide breast milk substitutes, advise her about the benefits and disadvantages of either method of feeding for the first 6 months of the child's life.
- Advise mother/ caregiver to give all babies solids by 6 months (see recommendations for feeding in growth monitoring protocol).
- Advise mother/ caregiver to give solids in small quantities after breast-feeding. Once feeding is established, solids should be given at least 5 times a day.
- Advise mother/ caregiver to ensure that solids are energy-enriched with oil, margarine or peanut butter.
- If the child is not being actively fed, counsel the mother/ caregiver to:
  - Sit with the child and encourage feeding.
  - Give the child a separate plate/ bowl.

PLAN B. MANAGEMENT OF THE CHILD WITH UNDERWEIGHT OR GROWTH FALTERING

TREAT THE CHILD

- Treat the child for any underlying illness such as diarrhoea, ARI and skin infections;
- Deworm the child, if not dewormed in the last 6 months*;
- Give vitamin A supplements,* if not given in previous 6 months (see guideline);
- Give multivitamin syrup*;
- Give iron syrup* if the child is anaemic (See Table 2.);
- Give food supplements according to the PEM Scheme;
- Immunise the child, if immunisations are incomplete.

*See Table 1 of appendix for recommended medication and drug dosages

Treatment of the child not feeding well during illness

- Counsel the mother/caregiver to breast-feed more frequently/ longer;
- Counsel the mother/ caregiver to give the child appetizing, soft, varied foods;
- Counsel the mother/ caregiver to clear blocked nose if it interferes with feeding;
- Following illness, advise the mother/ caregiver to give an extra feed daily until the child's weight returns to its original growth curve.

Support the mother

- **Ensure emotional and social support for mothers of malnourished children.**
- **Refer mothers of malnourished children to community development programmes.**

Catch-up growth

- During catch-up growth the growth curve should rise faster than the reference curve
- This fast growth is a sign that the child is recovering from malnutrition
- If the child is not showing catch-up growth, find out whether the child is:
  - getting extra food
  - still sick (consider TB or HIV)
  - is being abused or poorly cared for
- If no treatable cause found, refer the child to a medical doctor.

FOLLOW-UP

All malnourished children should be followed-up every second week or monthly (depending on the severity) until their weight is normal for age or until their growth curve shows normal progression and then 3 monthly for at least 18 months and preferably until school-going age. A child who has been malnourished is always a child at risk of a recurrence of malnutrition.

APPENDIX

Table 1. Recommended drug dosages

Drug	Dosage
Mebendazole (Vermox)	Children 1-2 years: 100mg orally twice daily for 3 days. Children > 2 years: 100 mg orally twice daily for 3 days or 500 mg as single dose
Albendazole (Zentel)	Children 1-2 years: 200mg orally as single dose orally. Children > 2 years: 400 mg orally as single dose.
Vitamin A	6-12 months 100 000 IU orally 12 months and older 200 000 IU orally If the child has measles repeat the dose the next day If there are eye signs of vitamin A deficiency repeat the dose the next day and after 4-6 weeks.
Multivitamin syrup	5 ml daily
Iron syrup	Use 5mg/kg of elemental iron in 3 divided doses three times daily for 1 month. If Hb does not improve after 1 month refer for further investigation. The following doses are equivalent to 5mg/kg of elemental iron per day: Ferrous sulphate (syrup) 25mg/kg/day Ferrous lactate (Ferrodrops®) 0.25ml/kg/day

Table 2. Haemoglobin values (lower limits of normal for age)

Age	Hb (g/dl)
Birth	13,5
6 weeks	9,5
3 mths	10,0
6mths-1,5yrs	10,5
1,5- 7 yrs	11,0
7- 12 yrs	11,5

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Integrated Case Management Guidelines

Vitamin A Supplementation

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Plan for improving the vitamin A status of children

- Promote, support and protect breastfeeding.
- Encourage the use of vitamin A rich foods for complementary feeding.

1. Carrots, sweet potatoes,pumpkin, butternut, green leafy vegetables, mangoes, paw paw.
2. Liver, kidney, butter/margarine, yellow cheese, eggs.) See annexure 1.

- Supplement vulnerable children in the age group 6 months –6 years with high dose vitamin A.

Children especially at risk of developing vitamin A deficiency and in need of high dose vitamin A supplementation

- Infants with a **low birth weight** (<2500g) have low body stores of vitamin A.
- Infants and children with **recurrent* infections** as infections increase the body's need for vitamin A.
- **Malnourished** children** as their diet is poor and they are vulnerable to infections.
- Children diagnosed with **measles, HIV/ AIDS** and **TB.**
- Children with eye signs of vitamin A deficiency.

* RECURRENT: more than one episode of diarrhoea or lower tract infection during the past 3 months.

** MALNUTRITION: Any child who is growth faltering or falling under the third centile or diagnosed as suffering from marasmus or kwashiorkor.

TREATMENT OF CHILDREN AT RISK OF VITAMIN A DEFICIENCY

- Children, between 6 months and 6 years, with malnutrition, acute recurrent lower respiratory tract infections, recurrent diarrhoea, measles, HIV/AIDS, TB, children with eye signs of vitamin A deficiency and low birth weight infants, ***who have not had a high dose vitamin A supplement during the previous six months,*** should be given Vitamin A according to the following schedule:

Age	Dosage
6-12 months	100 000 IU (one caps) orally stat
> 12 months	200 000 IU (two caps) orally stat

NOTE:

- In children with measles, HIV/AIDS and with eye signs of vitamin A deficiency above dosages should be given for two consecutive days.
- Low birth-weight children should receive three dosages of vitamin A in total, at 6, 12, and 18 months.
- Any child with suspected eye signs thought to be due to vitamin A deficiency should be referred to a medical practitioner for confirmation of the diagnoses and treatment according to above schedule for two consecutive days. This treatment should be repeated after 4-6 weeks.

Newly delivered women should be given 200 000 IU of Vitamin A within four weeks of delivery to ensure that the breastmilk is rich in vitamin A. The vitamin A can be given to the mother when the child is receiving his/her BCG vaccination.

Women of reproductive age should not be given high dose Vitamin A at any other time due to its teratogenic qualities. Any woman with eyesigns thought to be due to vitamin A deficiency should be referred to a medical practitioner for appropriate treatment.

RECORD ALL DOSAGES OF VITAMIN A GIVEN TO A CHILD CLEARLY ON THE CHILD'S ROAD TO HEALTH CARD.

Contributors

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Date	Clinical notes, diagnosis & treatment (and signature) (use key words, write legibly - 2 to 8 lines per visit)
	④

continue in column 5

Date	Clinical notes, diagnosis (use key words, write legibly - 2 to 8 lines per visit)
	⑤

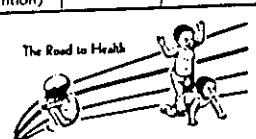
Supplementation: age in months	Schedule	Date: day / month / year			
PROPHYLAXIS					
Lactating mother within 8 weeks post partum	1 x 200 000 IU	/ /			
Infant 2-6mths not breastfed (at 3mths)	1 x 50 000 IU	/ /			
6-12mths: 1st at 6 or 9mths	1 x 100 000 IU	/ /			
6-12mths: 2nd at 12mths	1 x 100 000 IU	/ /			
15-60mths: Frequent access to health services: (tick (X) month)	1 x 100 000 IU every 3 months	15mths	18mths	21mths	24mths
		27mths	30mths	33mths	36mths
		39mths	42mths	45mths	48mths
		51mths	54mths	57mths	60mths
15-60mths: Less frequent access to health services: (tick (X) month)	1 x 200 000 IU every 6 months	18mths	24mths	30mths	36mths
		42mths	48mths	54mths	60mths

TREATMENT OF :

(NOT if prophylactic dose was given within previous month)

Dosage according to following age group: 2-6mths: 50 000IU
(See IMCI classification) 6-12mths: 100 000IU
12-60mths: 200 000IU

Acute respiratory infection	Immediate	1 x .....IU	/ /
Severe diarrhoea	Immediate	1 x .....IU	/ /
Measles	Immediate	1 x .....IU	/ /
	24h repeat	1 x .....IU	/ /
Xerophthalmia	Immediate	1 x .....IU	/ /
	24h repeat	1 x .....IU	/ /
Severe PEM (Protein-energy malnutrition)	Immediate	1 x .....IU	/ /



A PASSPORT FOR HEALTHY CHILDREN

Show mothers you value the use of the chart and they will take care of it

HOSPITAL ADMISSIONS

Hospital name	Admission number	Date of admission	Date of discharge	Discharge diagnosis
		/ /	/ /	
		/ /	/ /	
		/ /	/ /	
		/ /	/ /	