

## **Guidelines for Management of severe acute malnutrition(SAM) Children with COVID-19**

1. All children below the age of 5 years who are admitted in COVID ward must be screened for Severe Acute Malnutrition (SAM).
2. The child's body weight, length/height and MUAC must be checked with anthropometric equipment exclusively meant for COVID isolation area.  
They should be cleaned and sanitised in-between measurements with alcohol based rubs.
3. **The criteria for Severe Acute Malnutrition are as follows:**

**IN children > 6 months to 5 years of age:**

- ✓ Weight-for-height less than -3 SD and/or
- ✓ Mid arm circumference (MUAC) < 11.5 cm and/or
- ✓ Pitting Oedema of both feet (without a known cause) and /or
- ✓ visible severe wasting

**IN Infants 1m to <6 months of age:** Any infant more than 45cm in length who has following features are treated as severe acute malnutrition:

- Weight-for-height less than -3 SD and/or
- Oedema of both feet and /or
- Visible severe wasting.

4. If the child meets Severe Acute Malnutrition criteria, they should be managed as per Standard Facility based Severe Acute Malnutrition guidelines in addition to COVID 19 Management protocol.

(<https://nhm.gov.in/index1.php?lang=1&level=3&sublinkid=1182&lid=364>)

5. **They should be given the following mineral and micronutrients for 14 days:**

- **Multivitamin supplement** (should contain vitamin A, C, D, E and B12) :  
Twice RDA (Recommended Daily Allowance).
- **Folic acid:** 5 mg on day 1, then 1 mg/day
- **Elemental Zinc:** 2 mg/kg/day
- **Copper:** 0.3 mg/kg/day (if separate preparation not available use commercial preparation containing copper).

- **Iron:** Start daily iron supplementation after two days of the child being on Catch up diet. Give elemental iron in the dose of 3 mg/kg/day in two divided doses, preferably between meals.
- **Vitamin A:** Give Vitamin A in a single dose to all SAM children unless there is evidence that child has received vitamin A dose in last 1 month.

Recommended oral dose of Vitamin A according to child's age:

Age	Vitamin A dose
<6 months	50,000 IU
6-12 months or if weighs <8kg	100,000 IU
>12 months	200,000 IU

- Give same dose on Day 1, 2 and 14 if there is clinical evidence

of vitamin A deficiency. Children more than twelve months but having weight less than 8 kg should be given 100,000 IU orally irrespective of age.

- **Mineral Supplements:**

Give supplemental potassium at 3–4 meq/kg/day for at least 2 weeks. Potassium can be given as syrup potassium chloride; the most common preparation available has 20meq/15ml. It should be diluted with water.

On day 1, give 50% magnesium sulphate IM once (0.3 mL/kg) up to a maximum of 2 ml. Thereafter give injection magnesium sulphate (50%); 0.2–0.3 ml/kg orally as magnesium supplements mixed with feeds. Give magnesium supplements for 2 weeks.

Give food without added salt to avoid sodium overload.

6. Give antibiotics and other supportive therapy as per COVID 19 management guidelines.

7. They should be given therapeutic food as follows:

	Age: less than 6 months	Age :6 months to 5 year
<b>Asymptomatic and URTI</b>	<b>If prospects of breast feed</b> present then breast milk. If no weight gain after 3-4 days on breast milk, Diluted F100 can be started along with breast milk.	3 feeds of Home based diet and 3 feeds of F100 to be given, (150-220kcal/kg/day and 4g protein per kg/day, as per existing FSAM guidelines.
	<b>If no prospects of breast milk</b> , then Diluted F100 or Formula feeds can be started.	

<b>Mild Pneumonia and Severe Pneumonia</b>	<b>If prospects of breast feed present</b> then breast milk. If very sick, expressed breast milk can be given through palady/NGT. If no weight gain after 3-4 days on breast milk, Diluted F100 can be started along with breast milk.	Give F-75 diet through NG tube. Shift on oral feeds and gradually transit on F-100 once stable. Once stable gradually start home based diet as per existing FSAM guidelines
	<b>If no prospects of breast milk,</b> Start with F75 and progress to Diluted F100 as per existing FSAM guidelines.	
<b>Note:</b> Therapeutic foods can be provided from the nearest NRC.		

8. Take measures to ensure compliance to COVID guidelines regarding use of masks/PPE while preparing and distributing feeds.
9. If the mother of the SAM child is COVID positive, the WHO- COVID 19 guidelines On breast feeding practices & contact should be followed.  
(<https://www.who.int/news-room/q-a-detail/q-a-on-covid-19-pregnancy-childbirth-and-breastfeeding>)
10. Individual counselling and play therapy to be advised by nearest NRC diet counsellor if possible by video counselling session.
11. At discharge from COVID ward the nearest NRC to be informed regarding the child details. The counsellor in the respective NRC to do telephonically followed up as child will be in Home Quarantine for 14 days after discharge. When the child completes the full treatment as per COVID guidelines, he/she can be followed up as per existing guidelines by nearest NRC.

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