Webinar series for Latin America and the Caribbean

Nutrition in emergencies in the context of COVID-19 and migration

10th March	Prevention of malnutrition in pregnant and breastfeeding women
17th March	Prevention of malnutrition in children under five – Infant and young child feeding and supplementation
24th March	Nutrition care for children under five with acute malnutrition

Spanish (9 to 10:30 am Panama time)

English (11 to 12:30 Panama time)

Credit: UNICEF/Santiago Arcos, 2019

Facilitators

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Global Nutrition Cluster Technical Alliance

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Prevention of malnutrition in pregnant and breastfeeding women

Webinar series for Latin Amercia and the Caribbean

Nutrition in emergencies in the context of COVID-19 and migration

March 10th 2021

Pre-webinar evaluation

Agenda

1. Introduction
2. Nutrition during pregnancy and lactation
3. Consequences of malnutrition during pregnancy
4. Vulnerabilities in emergencies
5. Maternal nutrition interventions

Haitian mother breastfeeding her baby in a migrant shelter, Las Peñitas, Darien, Panamá, February 2020

Myths – Nutrition Sector

Myth #1: Nutrition = Food Distribution

Food Security

Food items distributed to the general population

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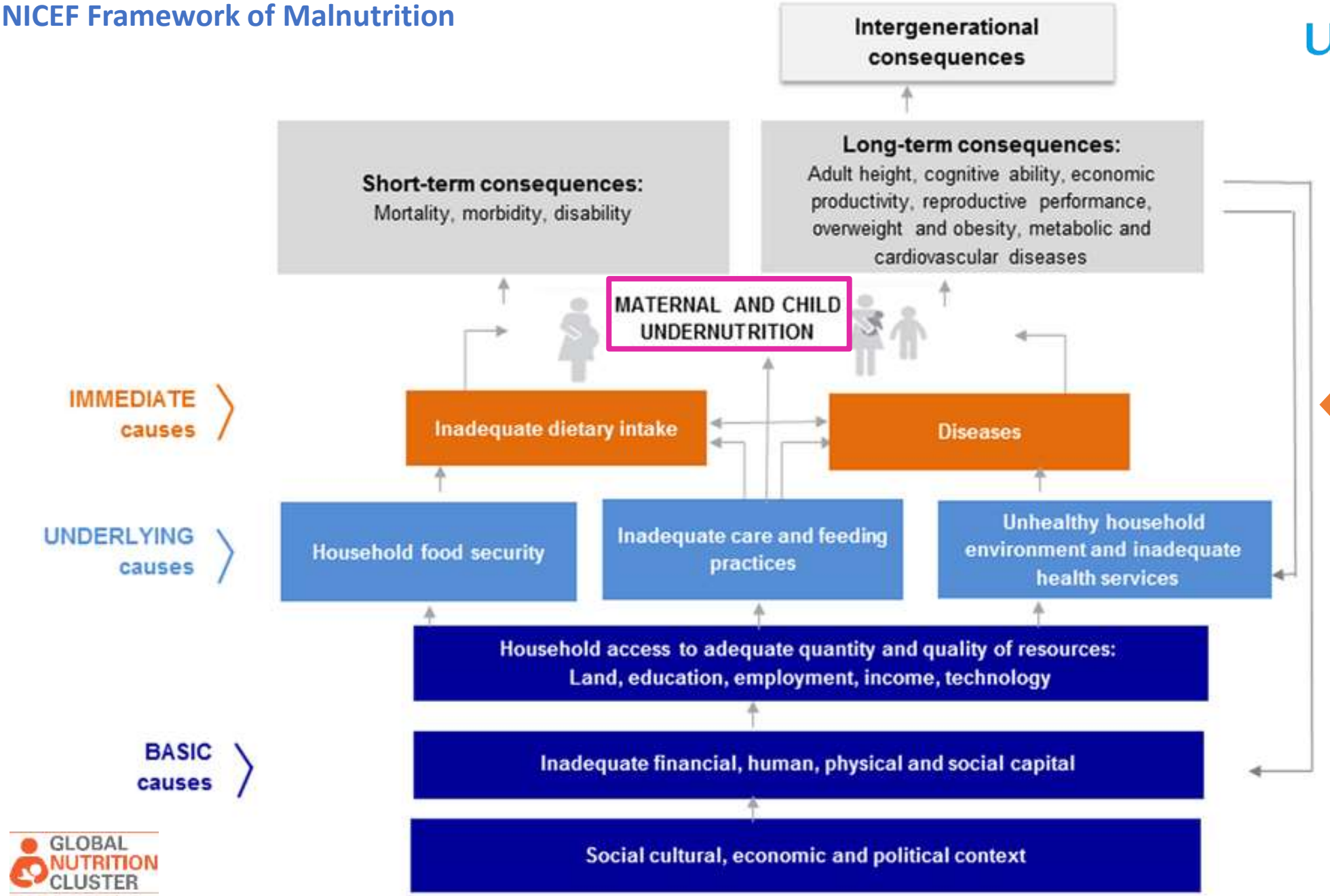
Nutrition

Specific nutritional needs covered according to age and condition

UNICEF Framework of Malnutrition



Nutrition specific interventions

Women, adolescents and adults
- Nutrition counselling (before, during and after pregnancy)
- Maternal energy-protein supplements
- Micronutrient supplements
- Disease prevention or treatment (deworming, diarrea treatment)

Children under five years old
- Breastfeeding and complementary feeding counselling
- Micronutrient supplements
- Energy-protein supplements
- Increasing diet diversity
- Disease prevention or treatment (deworming, diarrea treatment)
- Identification and treatment of acute malnutrition

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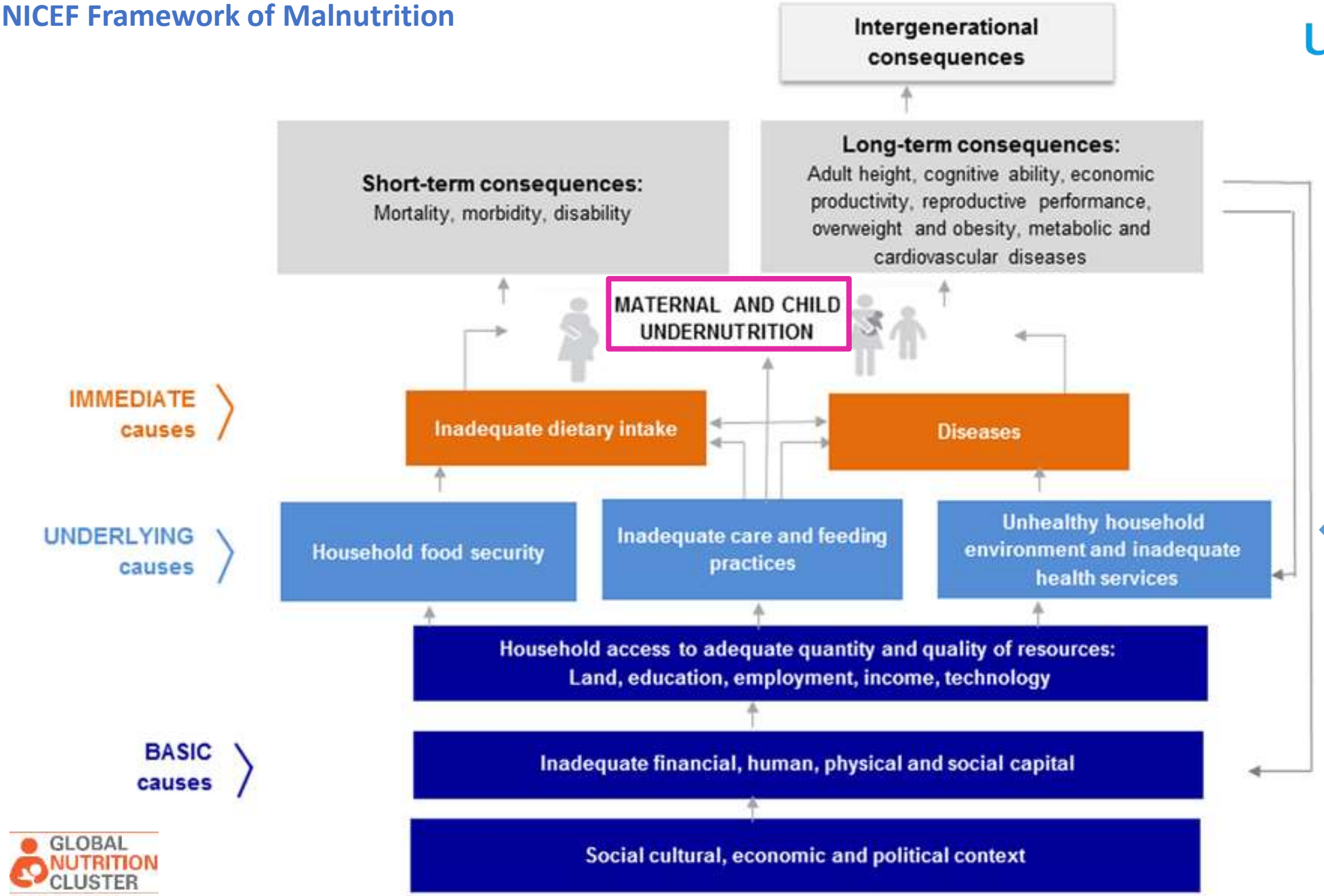
Source: Adaptaded from UNICEF (1990)

UNICEF Framework of Malnutrition



Nutrition sensitive interventions

- Agriculture and food security (incl. food distributions)
- Social protection
- Early child development
- Maternal mental health
- Womens' empowerment
- Child protection
- Education
- WASH
- Health services and Family Planning

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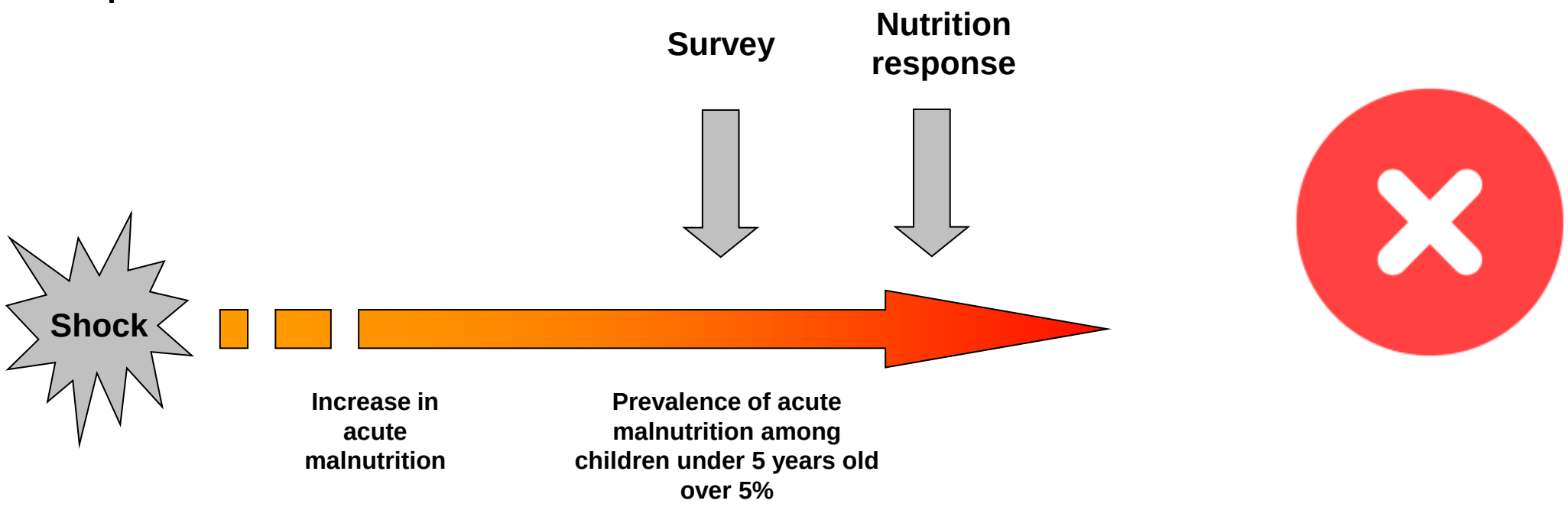
Source: Adaptaded from UNICEF (1990)

Myths – Nutrition Sector

- **Myth #2:** Data on the impact of an emergency on the nutritional status of the affected population is needed to implement nutrition response activities



Myths – Nutrition Sector

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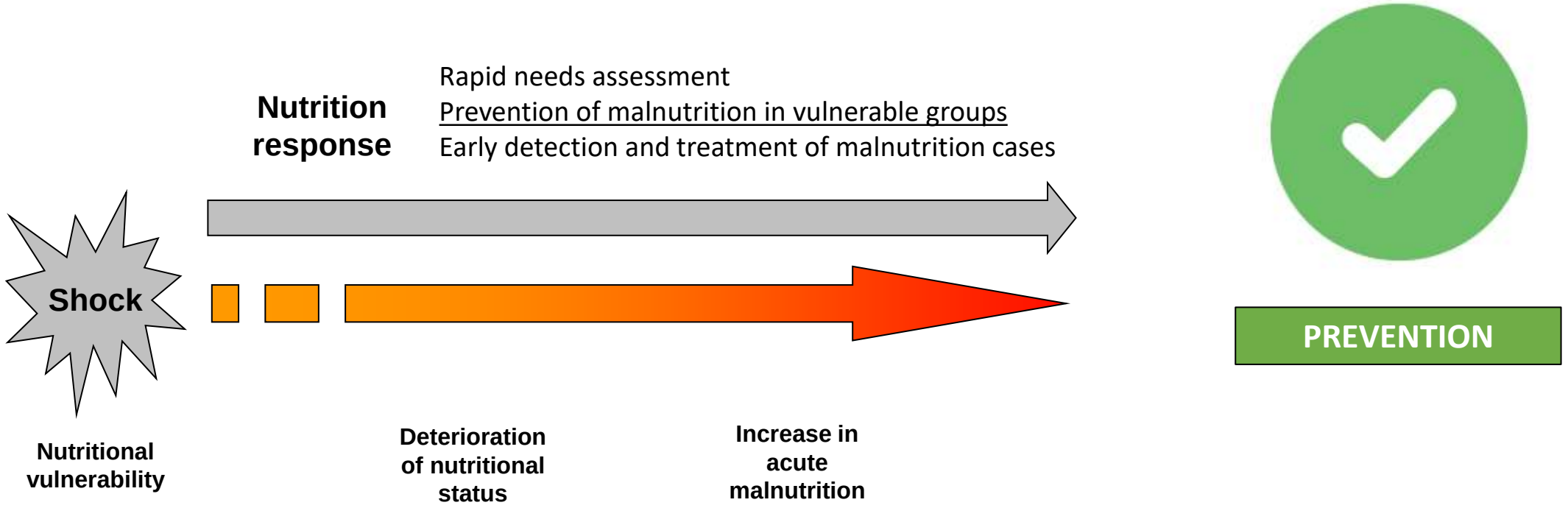

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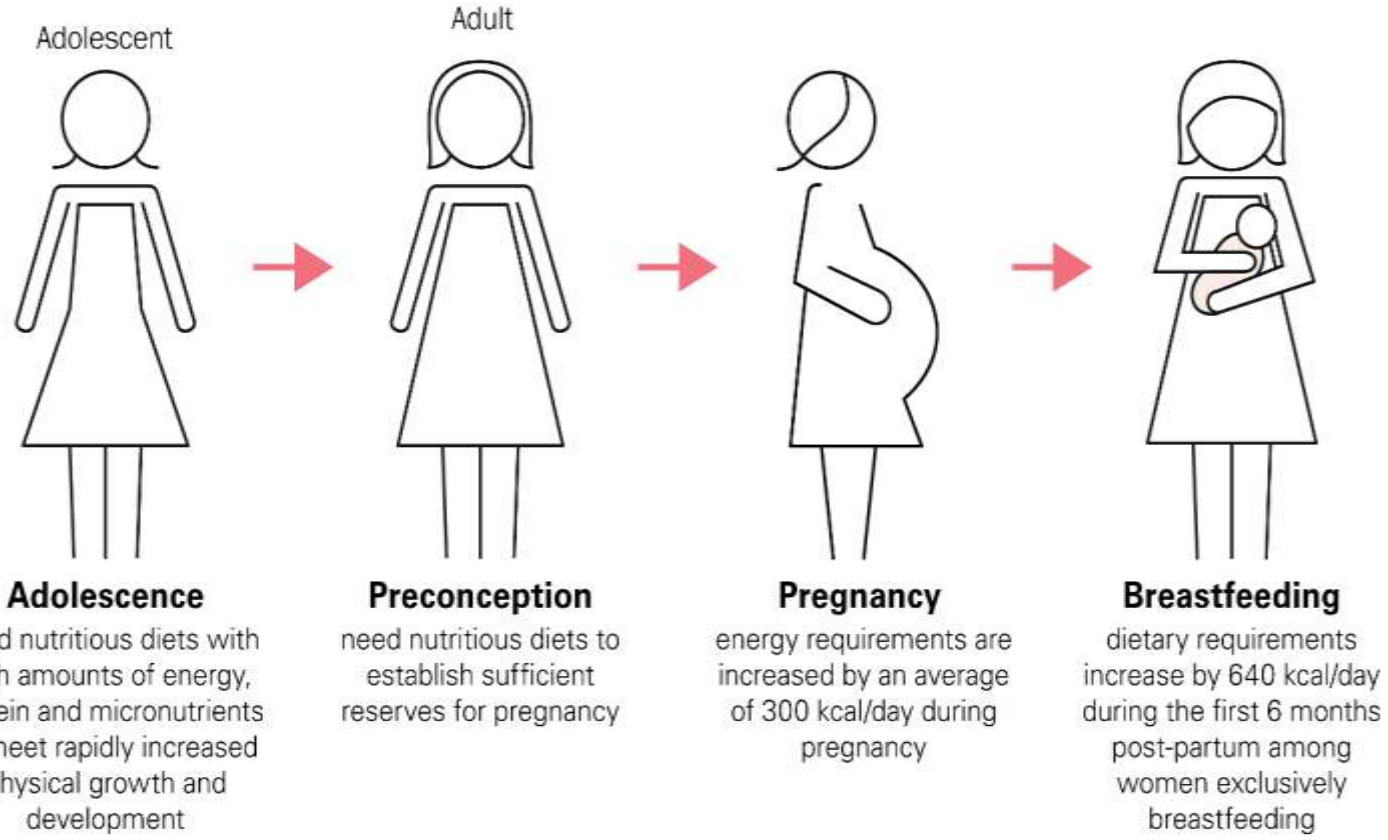
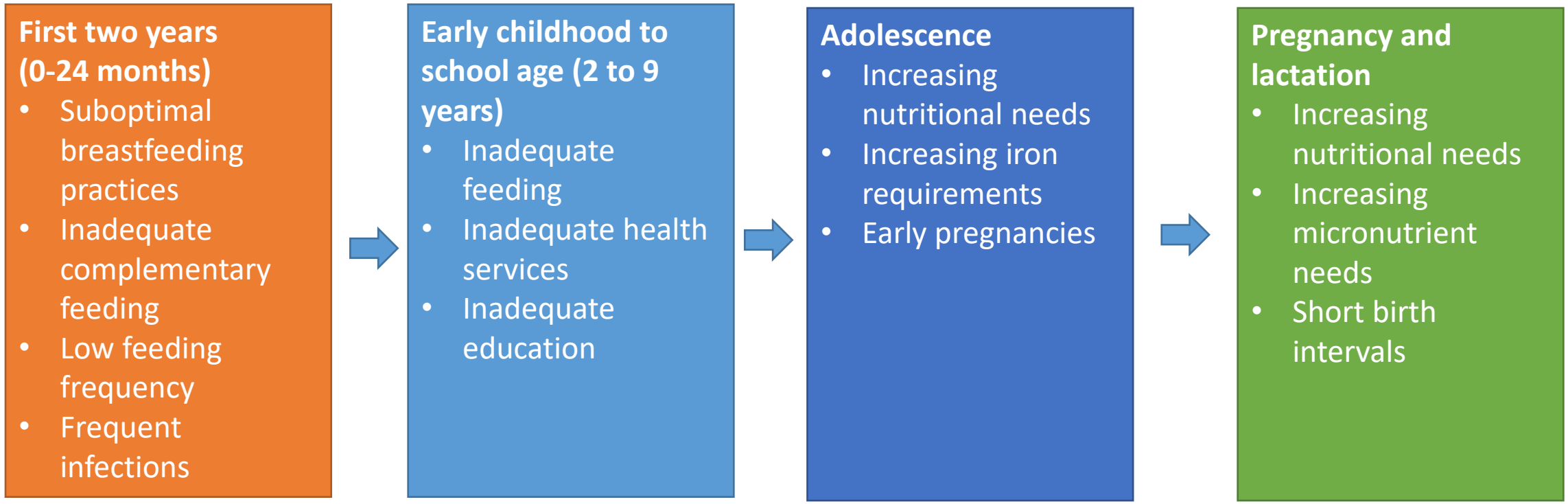
Women have distinct nutritional requirements over the life course; pregnancy and breastfeeding are two stages when vulnerability is the greatest due to increased nutritional needs.



Women are vulnerable to malnutrition throughout the life cycle for both biological and social reasons



Nutrition during pregnancy and lactation

Increasing nutritional needs

→ Physiology: menstruation, pregnancy and lactation
→ Fetal growth and development
→ Defenses to protect the woman's health
→ Adolescence: increase even more (pregnancy occurs when the adolescent is still growing)

Women are particularly vulnerable to malnutrition

During pregnancy, a woman needs:

- **300** additional kcal on average per day
- **7.1 g** additional protein per day

During lactation, a woman needs:

- **640 additional kcal** per day (first 6 months if she is exclusively breastfeeding)
- **18.9 g** additional protein per day

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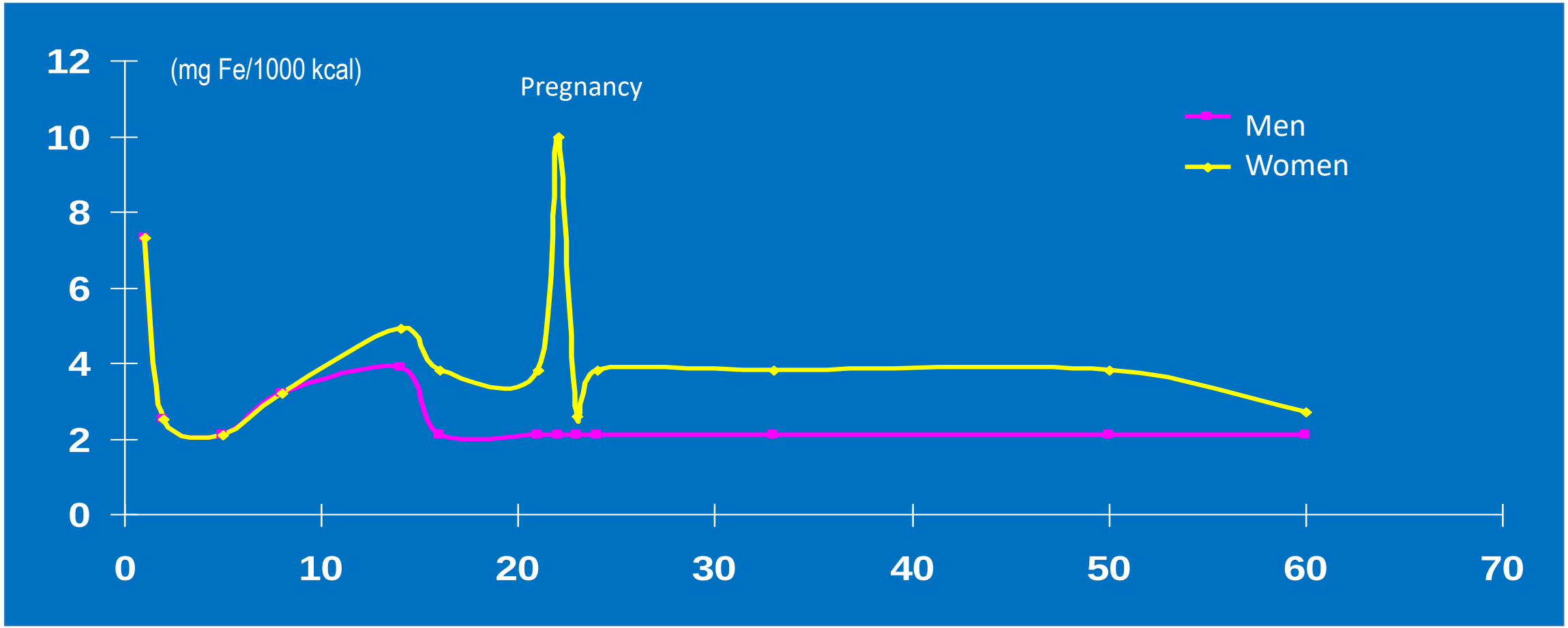
During pregnancy, iron needs increase due to forming new tissues in the mother, the placenta and the fetus, and due to the blood loss during childbirth



Stoltzfus, 1997

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Gradual weight gain is recommended during pregnancy

Weight gain recommendations during pregnancy

	Total weight gain		Rates of weight gain (2nd and 3rd trimester)	
Pre-pregnancy nutritional status (BMI)	**Range in kg**	Range in lbs	**Mean (range) in kg/week**	Mean (range) in lbs/week
Underweight (<18.5 kg/m²)	**12.5–18**	28–40	**0.51 (0.44–0.58)**	1 (1–1.3)
Normal weight (18.5-24.9 kg/m²)	**11.5–16**	25–35	**0.42 (0.35–0.50)**	1 (0.8–1)
Overweight (25.0-29.9 kg/m²)	**7–11.5**	15–25	**0.28 (0.23–0.33)**	0.6 (0.5–0.7)
Obese (≥30 kg/m²)	**5–9**	11–20	**0.22 (0.17–0.27)**	0.5 (0.4–0.6)

Source: Institute of Medicine, *Institute of Medicine (US) Committee on Nutritional Status During Pregnancy and Lactation. Nutrition During Lactation*, in *Meeting Maternal Nutrient Needs During Lactation*, N.A.P. (US), Editor. 1991: Washington (DC).

Consequences of maternal malnutrition

Deficiency	Associated risks for women and their children
Iron-deficiency Anemia	Maternal mortality Babies with low birth weight Prematurity and neonatal mortality Reduced transfer of iron to foetus
Folate	Low birth weight and neural tube defects
Vitamin A	Night blindness, maternal mortality, and antepartum hemorrhage Low birth weight and infant mortality
Calcium deficiency	Pre-eclampsia (high blood presure)
Iodine deficiency	Maternal and foetal hypothyroidism Neurological development of the foetus impaired
Low BMI and suboptimal weight gain	• Risk factors for the delivery of infants too small for gestational age • Foetal growth restriction (cause of 25% of all newborn deaths) and therefore being born small for gestational age (SGA)—for both term and preterm infants

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Increased vulnerability during emergencies

- Limited access to food
- Limited access to health services (ante and postnatal controls)
- Limited access to water
- Suboptimal hygiene and sanitary conditions
- Increased diarrhea and infectious diseases (malabsorption and nutrient loss)
- Gender based violence (increasing adolescent pregnancies)
- Maternal stress (increases cortisol levels and affects fetal growth)

Increasing nutritional vulnerability and risk of malnutrition

Maternal nutrition interventions

- Multiple micronutrient supplementation
- Deworming prophylaxis
- Weight monitoring/ MUAC measurement
- Nutrition support through balanced energy protein supplementation
- Nutrition counselling

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Maternal nutrition interventions

- Multiple micronutrient supplementation
- Deworming prophylaxis
- Weight monitoring/ MUAC measurement
- Nutrition support through balanced energy-protein supplementation
- Nutrition counselling

COVID-19 context

Infection, prevention and control measures

- Hand hygiene
- Personal protective equipment
- Respiratory hygiene and cough etiquette
- Cleaning and disinfection of devices and environmental surfaces
- Supply storage and handling

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- Use a medical mask (i.e., at least a surgical/medical mask)
- Wear eye protection (goggles) or facial protection (face shield)
- Wear a clean, long-sleeve gown
- Use gloves

Maternal nutrition interventions

- **Multiple micronutrient supplementation**
- Deworming prophylaxis
- Weight monitoring/ MUAC measurement
- Nutrition support through balanced energy protein supplementation
- Nutrition counselling

Daily multiple micronutrient supplementation

- Prevention of micronutrient deficiencies and its consequences on maternal and child health
- 1 tablet per day from the first day of care (up to 6 months of breastfeeding)
- Containing at least 30 mg of elemental iron and 400µg of folic acid

Stronger evidence to support multiple micronutrient supplementation (MMS) in pregnancy

- Systematic review of 33 Randomized Control Trials in low and middle income countries
- MMS should be prioritized over iron and folic acid supplements to improve birth and child health outcomes
  - Risk stillbirth reduced by 9% (95% CI: 2-14%; 22 studies)
  - Low birth weight (LBW) reduced by 15% (95% CI: 7-23%; 28 studies)
  - Small for gestational age (SGA) births reduced by 7% (95% CI: 2-12%; 19 studies)
  - Preterm births reduced by 4% (95% CI: 9% reduction-1% increase; 29 studies)

Source: The Lancet Series on Maternal and Child Undernutrition Progress, 2021

Maternal nutrition interventions

- Multiple micronutrient supplementation
- **Deworming prophylaxis**
- Weight monitoring/ MUAC measurement
- Nutrition support through balanced energy protein supplementation
- Nutrition counselling

Single-dose albendazole (400 mg) or mebendazole (500 mg) is recommended for pregnant women after the first trimester to reduce the burden of worms caused by soil-transmitted helminth infections.

Interventions to improve maternal nutrition

- Multiple micronutrient supplementation
- Deworming prophylaxis
- **Weight monitoring/** MUAC measurement
- Nutrition support through balanced energy protein supplementation
- Nutrition counselling

- Weight in Kg
- Height in cm

Classification of nutrition status according to Body Mass Index	
Classification BMI(kg/m2)	IMC (kg/m2)
Underweight	<18,5
Adequate	18.5 -24,9
Overweight	≥25,00 – 29,9
Obesity	≥30,00

Maternal nutrition interventions

- Multiple micronutrient supplementation
- Deworming prophylaxis
- Weight monitoring/ **MUAC measurement**
- Nutrition support through balanced energy protein supplementation
- Nutrition counselling

There are no international standards on the definition of acute malnutrition for malnourished pregnant or lactating women

Some of the most used cut-offs are:

Mid-upper arm circumference (MUAC) at-risk cut-off is usually < 21 cm or < 23 cm.

Maternal nutrition interventions

COVID-19 context

- Multiple micronutrient supplementation
- Deworming prophylaxis
- **Weight monitoring/ MUAC measurement**
- Nutrition support through balanced energy protein supplementation
- Nutrition counselling

- Digital scales are safe. The scale allows the mother to stand on the scale with shoes, with no need to touch.
- Taring function is automatically initiated, without pressing any operational button.

VS

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Contact between the mother and the health worker and contact with a surface (the MUAC tape). Only use if:

- MUAC tape can be disinfected after each use, or
- a single-use MUAC tape is available, and
- masks and gloves are available for health workers.

Maternal nutrition interventions

- Multiple micronutrient supplementation
- Deworming prophylaxis
- Weight monitoring/ MUAC measurement
- **Nutrition support through balanced energy protein supplementation**
- Nutrition counselling

- Daily ready-to-use paste, high-energy fortified food for the treatment of malnutrition in pregnant and lactating women.
- Straight from the sachet, no cooking or dilution.
- Contains approximately 560 calories per 100g.
- Promotes foetus growth in underweight pregnant women.

Maternal nutrition interventions

- Multiple micronutrient supplementation
- Deworming prophylaxis
- Weight monitoring/ MUAC measurement
- Nutrition support through balanced energy protein supplementation
- **Nutrition counselling**

Topics to be covered in nutrition counselling:

- Nutritious diets, considering locally available foods and affordability
- Counsel on micronutrient supplementation
- Monitor and counsel on appropriate weight gain
- Support underweight women with energy and protein intake and use of dietary energy and protein supplementation

Maternal nutrition interventions

- Multiple micronutrient supplementation
- Deworming prophylaxis
- Weight monitoring/ MUAC measurement
- Nutrition support through balanced energy protein supplementation
- **Nutrition counselling**

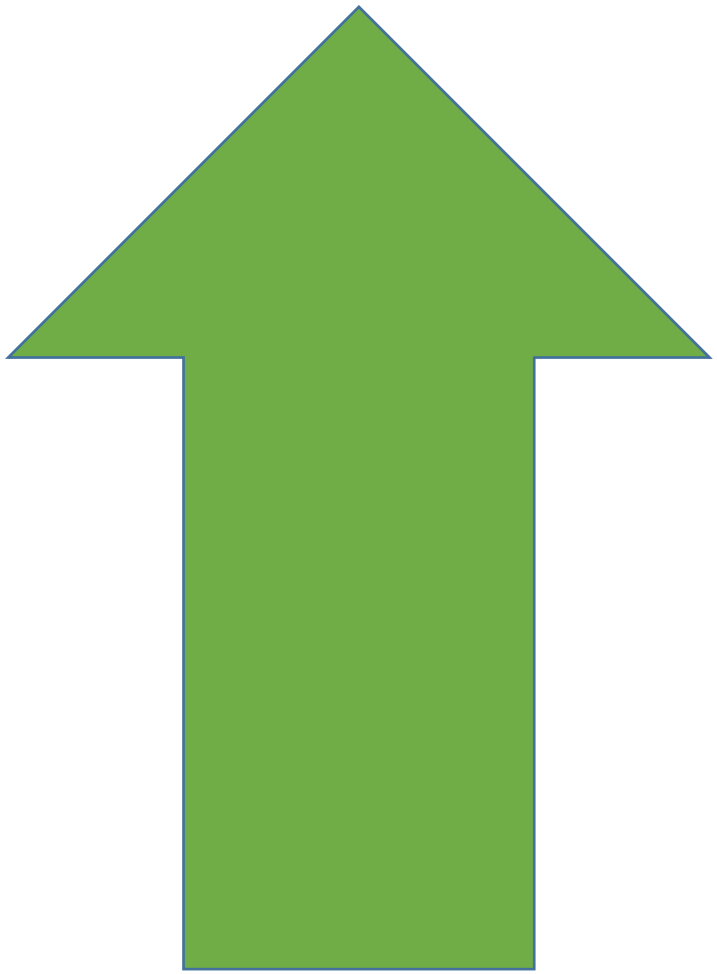
COVID-19 context:

- Prioritize antenatal care contacts for pregnant women in third trimester, adolescent girls, underweight.
- Schedule antenatal contacts to reduce overcrowding, and provide all relevant care in a single visit.
- Where antenatal or postnatal contacts reduced: provide 2-3 months of micronutrient supplementation.

Maternal nutrition interventions

The success of supplements depends on:

- Continuous supplies
- Distribution system that is accessible to the target population
- Womens' compliance
- Community communication/engagement
- Human resources: committed and adequately trained



Interventions to improve maternal nutrition

Borders (shelters)

- Rapid assessment: # PLW
- Weight monitoring/MUAC (identif. of malnourished mothers)
- Energy protein supplementation for malnourished PLW
- Nutrition counselling
- Deworming
- Micronutrient supplementation
- Communication on available nutrition services, how and where to access them

Mobile clinics

For transit

To cover the transit period

- Micronutrient supplementation
- Energy protein supplementation for malnourished PLW (for the estimated number of days until reaching destination/the next border)

Host communities

- Communication on available nutrition services, how and where to access them
- Nutrition counselling
- Deworming
- Micronutrient supplementation
- Weight monitoring/MUAC (identif. of malnourished mothers)
- Energy protein supplementation for malnourished PLW

Health care facilities (antenatal and postnatal care)

COVID-19 context

Prioritize continuity of maternal Nutrition services

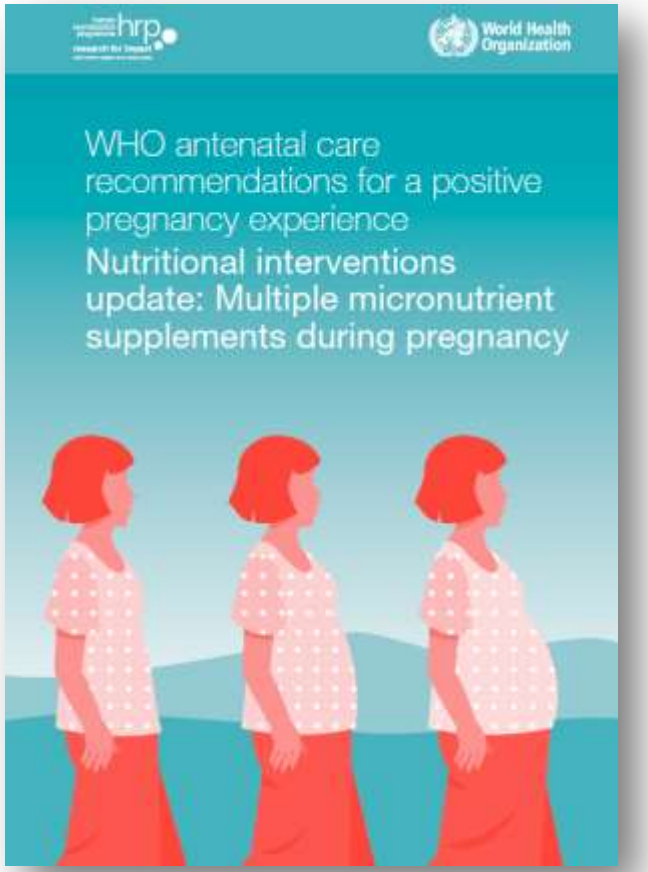
Maintain uninterrupted availability of essential Nutrition commodities

Maternal nutrition interventions

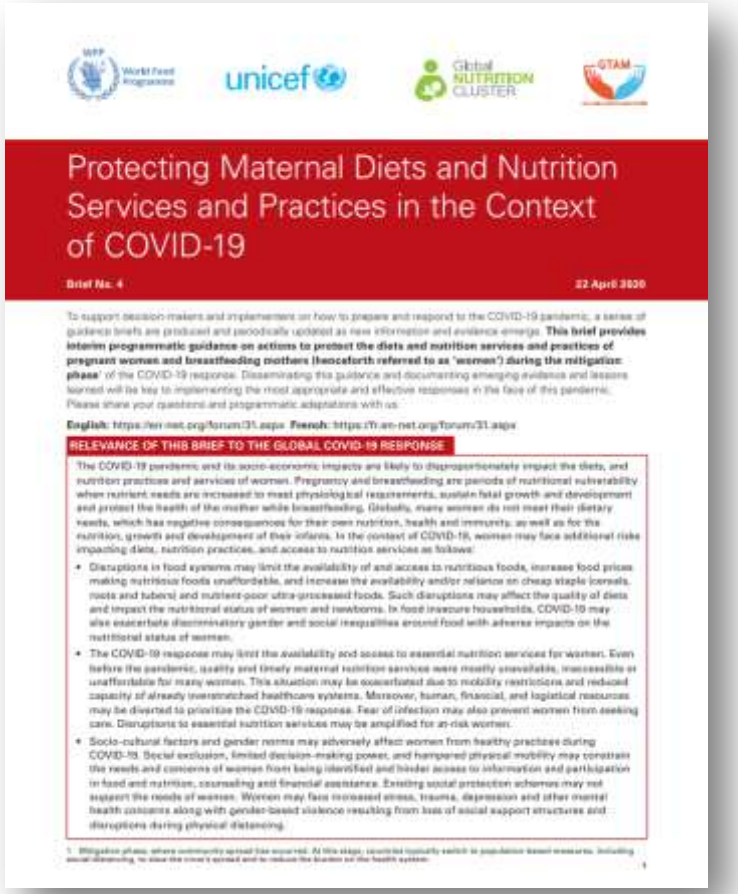
Examples of Nutrition-sensitive interventions (with other sectors)

Health	Advocacy for access to health services to refugee and migrants
Protection	Improving maternal psychosocial well-being Expand social protection programmes to cover maternal nutrition needs
WASH	Hygiene and sanitation to reduce parasitic infections and diarrhoeal diseases
Food security	Give priority to PLW in food distributions

For more information



WHO 2020



To support decision-makers and implementers on how to prepare and respond to the COVID-19 pandemic, 2020

Third Lancet Series on Maternal and Child Undernutrition, 2021

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Post-webinar evaluation

Questions and answers session