

Introduction to the R4V Nutrition sector

What is Nutrition?

Nutrition refers to the intake, absorption, and utilization of nutrients in relation to our body's needs. Good nutrition is the bedrock of **survival and development, in particular in the youngest ones.**

For example, well-nourished children are better able to grow, learn, play and participate in their communities. They are also more **resilient** in the face of crisis.

To know more on the determinants of adequate nutrition, please refer to [UNICEF's Conceptual Framework on the Determinants of Maternal and Child Nutrition, 2020.](#)

What is malnutrition?

Malnutrition refers to deficiencies or excesses in nutrient intake, imbalance of essential nutrients or impaired nutrient utilization. Malnutrition exists in different forms. The double burden of malnutrition consists of both **undernutrition and overweight**, as well as diet-related noncommunicable diseases. Undernutrition manifests in four broad forms: wasting, stunting, underweight, and micronutrient deficiencies. Overweight can manifest as overweight or obesity, its severe forms.

Malnutrition is assessed by measuring height and weight, and/or middle-upper arm circumference (MUAC) and screening for clinical manifestations and biochemical markers. Indicators based on body measures like weight, height and age are compared to international standards and are most commonly used to assess the nutritional status of a population.

Table 1 on next page summarized the different forms of malnutrition, their definition and potential consequences.

Table 1: Definition and consequences of different forms of malnutrition

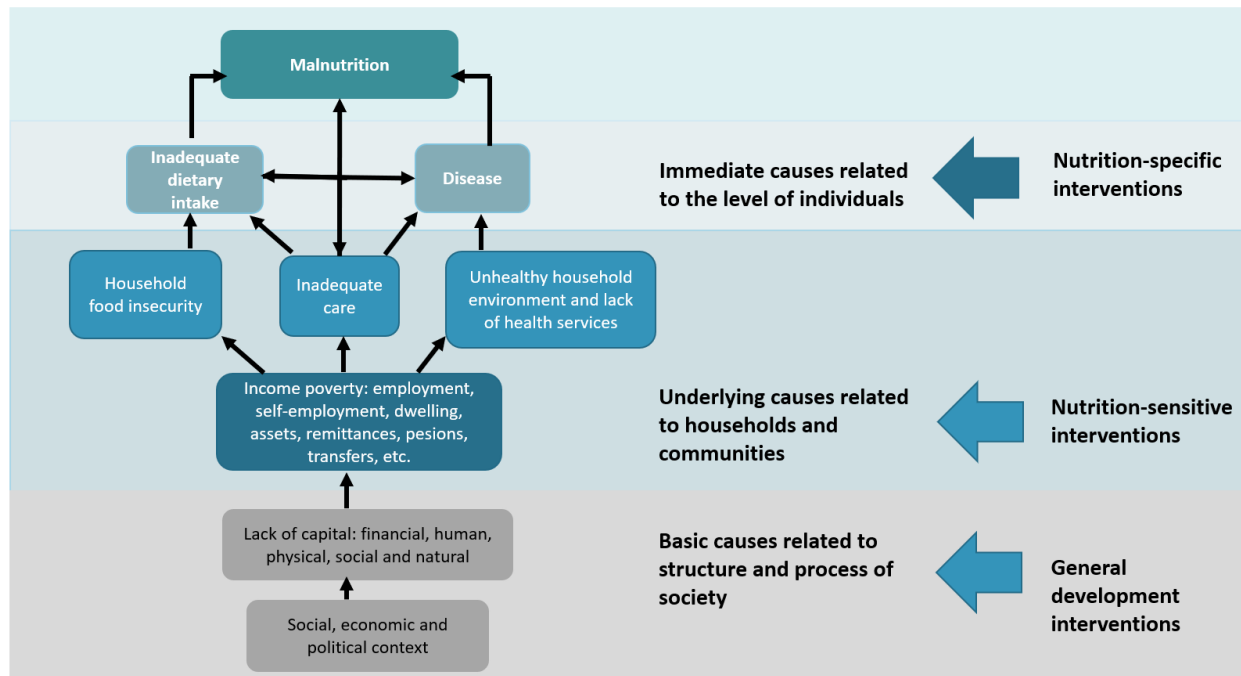
Forms of malnutrition	Definition	Consequences
Micronutrient deficiencies	Micronutrient deficiencies are conditions caused by inadequacies in intake of one or more vitamins and minerals essential for the prevention of malnutrition in all its forms and the reduction of the prevalence of disease especially during pregnancy and early childhood.	<p>In children:</p> <ul style="list-style-type: none"> • Poor growth • Impaired physical and mental development. • Poor immunity and tissue development • Poor health and risk of death due to infectious diseases <p>e.g. iron-deficiency anaemia, Vitamin A deficiency</p> <p>In pregnant women, risks are:</p> <ul style="list-style-type: none"> • Maternal mortality and morbidity • Neural tube defects in newborns • Prematurity, low birth weight and impaired cognitive development in newborns
Low birth weight	<ul style="list-style-type: none"> • Low birth weight has been defined by WHO as weight at birth of < 2500 grams (5.5 pounds). • It is caused by intrauterine growth restriction, prematurity or both. • A newborn’s weight at birth is an important marker of maternal and fetal health and nutrition. 	<ul style="list-style-type: none"> • Low birth weight infants are about 20 times more likely to die than heavier infants. • Those who survive are more likely to suffer from stunted growth and lower IQ. • The consequences of low birthweight continue into adulthood, increasing the risk of adult-onset chronic conditions such as obesity and diabetes.
Acute malnutrition (wasting)	<ul style="list-style-type: none"> • Being too thin for one’s height • Acute malnutrition is a life-threatening condition attributable to poor nutrient intake and/or disease • It is characterized by a rapid deterioration in nutritional status over a short period of time, i.e. it is the result of recent rapid weight loss or the failure to gain weight. 	<p>Children suffering from wasting:</p> <ul style="list-style-type: none"> • have weakened immunity, increasing their risk of death due to greater frequency and severity of common infections (diarrhea and pneumonia), particularly when severe. • A child who is moderately or severely wasted has an increased risk of death, • Severe wasting is the most visible and lethal form of undernutrition. Weakened immune systems increase the risk of death among children under 5 by up to 11 times compared to well-nourished children.

Forms of malnutrition	Definition	Consequences
Stunting	<ul style="list-style-type: none"> • Being too short - length/height-for one's age. • Stunting is the result of chronic or recurrent undernutrition in-utero and early childhood, usually associated with poverty, poor maternal health and nutrition, frequent illness and/or inappropriate feeding and care in early life. • Stunting is also called chronic malnutrition. 	<p>Children suffering from stunting:</p> <ul style="list-style-type: none"> • can suffer severe irreversible physical and cognitive damage that accompanies stunted growth. • may never reach their full possible height nor their full cognitive potential. • earn less as adults as a result of less schooling and learning difficulties when in school • are more likely to be at risk of overweight and obesity than children of normal height. <p>In pregnant women, risks are:</p> <ul style="list-style-type: none"> • Perinatal complications • Prematurity and low birth weight • Chronic diseases for child in later life
Underweight	<ul style="list-style-type: none"> • Being too thin for one's age • A child who is underweight may be stunted, wasted or both. 	<ul style="list-style-type: none"> • The mortality risk is increased in children who are even mildly underweight, and the risk is even greater in severely underweight children.
Overweight	<ul style="list-style-type: none"> • Having too much body weight for one's height. • Overweight is the result of an interaction between individual factors that regulate physiological processes, food preferences, and physical activity patterns over the life course, and an obesogenic environment that promotes a high energy intake and sedentary behaviour. • Severe overweight is referred to as obesity. 	<p>Children and adolescents with overweight, especially obesity are likely to suffer from both short-term and long-term health consequences, the most significant being:</p> <ul style="list-style-type: none"> • Short-term: cardiovascular problems (mainly heart disease and stroke), infections and poor self-esteem • Long-term: obesity, diabetes, musculoskeletal disorders, especially osteoarthritis, cancers of the endometrium, breast and colon and other metabolic disorders. <p>In pregnant women, risks are:</p> <ul style="list-style-type: none"> • Gestational diabetes and pre-eclampsia • Obstetric complications • Overweight and chronic disease for child in later life

What are the determinants of malnutrition and how to address them?

Malnutrition is caused by a multiplicity of factors called immediate, underlying and basic causes.

Figure 1: UNICEF Conceptual Framework of Malnutrition (adapted from UNICEF 1990)



Immediate causes include inadequate dietary intake and disease (including infectious diseases such as diarrhea and pneumonia), whose interaction creates a potentially lethal cycle of worsening illness and deteriorating nutritional status. Immediate causes of malnutrition are addressed through nutrition-specific interventions.

Nutrition-specific interventions are those which address the immediate causes of malnutrition. These are typically delivered through health services with trained health professionals.

Examples:

- Breastfeeding and complementary feeding counselling
- Micronutrient supplementation
- Energy-protein supplementation
- Deworming (disease prevention)
- Identification and treatment of acute malnutrition

Nutrition-specific interventions are delivered by the Nutrition sector during emergencies

The immediate causes of undernutrition take origin in the **underlying causes** which are household food insecurity (limited physical and economic access to affordable, diverse, nutrient-rich food), inadequate care (including appropriate maternal and child-care practices) and unhealthy household environments and lack of health services (limited or no access to health services, safe water and adequate sanitation, and poor hygiene practices). These factors directly influence nutrient intake and the presence of disease. Underlying causes of malnutrition are addressed through nutrition-sensitive interventions.

Nutrition-sensitive interventions are interventions which primary objective is not nutrition, but that influence the underlying determinants of nutrition. These are delivered by the WASH, Health, Food Security (agriculture, livestock), Social Protection and other sectors.

Examples:

- *Healthcare:* Improving access to services to ensure that people are healthy and improve health care seeking behavior.
- *WASH:* Improving access to water and handwashing to reduce infection and disease.
- *Food Security:* Making nutritious food more accessible and available to everyone and supporting small farms as a source of income.
- *Social Protection:* Provision of food vouchers are provided to pregnant and nursing mothers to buy fresh foods at local shops, helping to diversify their diets and improve their nutritional intake during and after pregnancy.

Nutrition sectors usually works in collaboration with other sectors that a role in the prevention and treatment of malnutrition in all its forms, through joint assessments, programming, planning, implementation and monitoring, etc.

Basic causes are related to the structure and process of society, that are addressed through general development interventions.

How does migration affect nutrition?

More than six million refugees and migrants from Venezuela have left their country of origin, with more than five million being hosted in the region. During migration, Venezuelans have seen a disruption of basic services and therefore face:

- Limited access to food
- Limited access to health services
- Poor hygiene and sanitation conditions
- Limited access to water
- Loss of income
- Disruption of health, nutrition and feeding good practices

In other words, **underlying causes of malnutrition are exacerbated during emergencies, leading to compromised dietary intake and increased risk of infectious diseases, leading to malnutrition.** Emergencies, including migration, affect large numbers of people, more specifically the most vulnerable groups. Infants, young children, and pregnant and lactating women, and older people are particularly vulnerable to a deteriorating health and nutrition status during crisis times.

What does the response of the R4V Nutrition sector focus on?

Objectives

- 1) **Ensure access to quality nutrition services and/or interventions for population groups vulnerable to malnutrition** (see next section on Activities for more details).
- 2) **Generating evidence on the nutrition situation:** Characterize the nutrition situation of these vulnerable population groups in order for the R4V response community to have a better understanding of the severity of the impact of the current emergency, coupled with COVID-19 effects, on their nutritional status, and to have more accurate and representative data to guide programmatic decisions.
- 3) **Advocating for nutrition interventions as priority activities to save lives:** Strengthen advocacy efforts to mobilize additional support for the Nutrition Sector response, highlighting its importance, added value and lifesaving impact.

Activities

The R4V Nutrition conducts **Nutrition-specific interventions**.

The following table shows vulnerable groups targeted by the R4V Nutrition sector and the respective nutrition services/nutrition-specific interventions they need to prevent identify and treat malnutrition. Vulnerable groups were categorized in two priority groups for the response based on their vulnerability: the primary focus of the response being on children under five and pregnant and lactating women.

Table 1: Vulnerable groups targeted by the R4V Nutrition sector and the respective nutrition services needed¹

Vulnerable group by age or condition	Nutrition services needed
Priority 1	
Pregnant and lactating women	<u>Nutrition counselling and micronutrient supplementation</u> to support their increased nutrient needs due to their condition and prevent anemia and/or other forms of malnutrition.
Children 0-6 months Children in this age group need to be fed exclusively with breastmilk or replacement milk when children cannot be breastfed.	<u>Counseling</u> targeting caregivers focusing on <u>breastfeeding</u> and support to children who cannot be breastfed
Children 6-59 months	<p>Children 6-24 months: <u>Counseling targeting caregivers of children under 2 on infant and young child feeding</u> to support breastfeeding and guide caregiver's food choices and feeding practices (feeding young children solids).</p> <p>Children 6-59 months: <u>Micronutrient supplementation</u> to fortify children's food with vitamins and minerals and prevent micronutrient deficiencies.</p> <p><u>Energy-protein supplementation</u> to prevent malnutrition in children in transit.</p> <p><u>Screening, identification, and treatment of acute malnutrition cases</u></p>
Priority 2	
Children 5-9 years (middle childhood)	<u>Nutrition counselling and micronutrient supplementation</u> to support their increased nutrient needs due to their condition and prevent anemia and/or other forms of malnutrition.
Children 10-19 years (adolescents)	<u>Nutrition counselling and micronutrient supplementation</u> to support their increased nutrient needs due to their condition and prevent anemia and/or other forms of malnutrition.

¹ Older people are also a vulnerable group, however, the R4V Nutrition sector that prioritizes boys and girls under 5 years of age, pregnant and lactating women, and adolescents in its response taking into account the response capacity available at the country level. This does not mean that older people cannot be included in the future but, for this to happen, it will be important to ensure that necessary capacities and funds are in place.

Target groups

The R4V Nutrition sector has a **differentiated approach** as it focuses its response on **population groups with a higher risk of malnutrition**, not on the general population.

Children in utero and under 5 years of age, especially those under 2 years of age, pregnant and lactating women, and adolescent girls have, due to their condition, inherently greater nutritional needs and are at greater risk of malnutrition, disease and death, especially the little ones. For these reasons, the Nutrition sector will seek to specifically address the nutritional needs of the vulnerable groups through nutrition-specific interventions.

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Table 2 shows summarizes the risks related to malnutrition faced by vulnerable groups.

Table 2: Risks related to malnutrition faced by vulnerable groups

Vulnerable groups	Risks related to malnutrition
Pregnant women* .	During pregnancy, women have additional nutrient requirements, which support changes in maternal tissues and metabolism and support fetal and infant growth and development. Compared with pre-pregnancy, energy requirements increase by an average of 300 kcal/day during pregnancy Undernutrition can lead to higher risk of: <ul style="list-style-type: none"> • premature birth • miscarriage • stillbirth • maternal death
Lactating women	Breastfeeding women have increased nutrient requirements of 640 kcal/day during the first six months post-partum among women exclusively breastfeeding. Care given to the infant can be affected by undernutrition, leading to their poor health and development.
Children from 0 to 59 months (2 to 5 years of age), especially children under 0-24 months* (0-2 years of age)	Children under 5 are vulnerable to infections. Undernutrition in this age groups in impairs a child's immunity, which can lead to recurrent infections, and impaired physical and cognitive development. Children 0 to 24 months (0-2 years of age) are even more vulnerable: <ul style="list-style-type: none"> • They have very specific nutritional needs and are born with an under-developed immune system. • Infections (such as diarrhea or pneumonia) can be fatal: in resource poor contexts non-breastfed children are more likely to die from pneumonia and diarrhea than breastfed children¹. • In humanitarian contexts, this population group can account for a large percentage of death. Published total mortality rates for children younger than one year in emergencies are as high as 53%.²
Middle childhood** Children aged 5 to 9 years	High nutritional needs due to growth and development, particularly when they experience growth spurts.
Adolescents** Children aged 10 to 19 years	<ul style="list-style-type: none"> • Very high nutrient requirements due to accelerated growth. • Adolescence is also key time for brain development. • Crises and emergencies exacerbate vulnerabilities to abuse, exploitation, sexual and gender-based violence, potentially leading to unwanted pregnancies. • Pregnancy in adolescence can lead to early cessation of growth and increased risk for newborn
Older people (women and men over 60 years)	Older people are predisposed to nutrient deficiency due to a decline in total and resting energy requirements (physical inactivity, loss of lean muscle mass and increased adiposity) that gradually reduces food intake while vitamin and mineral needs remain unchanged or increased

* The first 1000 days of life - between a woman's pregnancy and her child's second birthday - is a unique period of opportunity when the foundations for optimum health and development across the lifespan are established.

** The prevention of malnutrition in middle childhood and adolescence is a chance to seize the second window of opportunity for growth and development. Evidence suggests that investments in the nutrition of this age group can have a positive impact on current and future nutrition status, improve learning, help establish positive dietary practices that extend into adulthood, and help break the intergenerational cycle of malnutrition.

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