



Nutrition and Health in Australia's aid program

Operational guidance note.

Key messages

- › Malnutrition (under- and over-nutrition) undermines economic and human development in our region.
- › Good nutrition depends on availability of good food, good health, good care, gender equality and good governance.
- › Child under-nutrition in the first 1,000 days of life is largely irreversible, and therefore carries long term health, social and economic consequences so Australia's nutrition support should focus on this period.

Purpose and policy setting of this operational guidance

This operational guidance note introduces key nutrition and health concepts to help DFAT staff address both under- and over-nutrition and consider appropriate health sector responses. It should be read in conjunction with the operational guidance "Nutrition in Australia's aid program" which outlines good practice principles for DFAT nutrition responses in any sector. This guidance is informed by:

- *Australian Aid: promoting prosperity, reducing poverty, enhancing stability.*
- *DFAT's Health for Development Strategy 2015-2020.*
- The Office of Development Effectiveness 2014 review, *A window of opportunity: Australian aid and child undernutrition.*

Understanding the types and causes of malnutrition, and selecting the right responses

There are three main types malnutrition: 1. micronutrient under-nutrition; 2. protein-energy under-nutrition, and, 3. over-nutrition (overweight and obesity). Many countries have persistent child under-nutrition and rising over-nutrition. This is because child under-nutrition impairs metabolic development, increasing vulnerability to obesity in adulthood. This is the 'double burden' of malnutrition when both under and over-nutrition co-exist together, as shown in Figure 1 here.

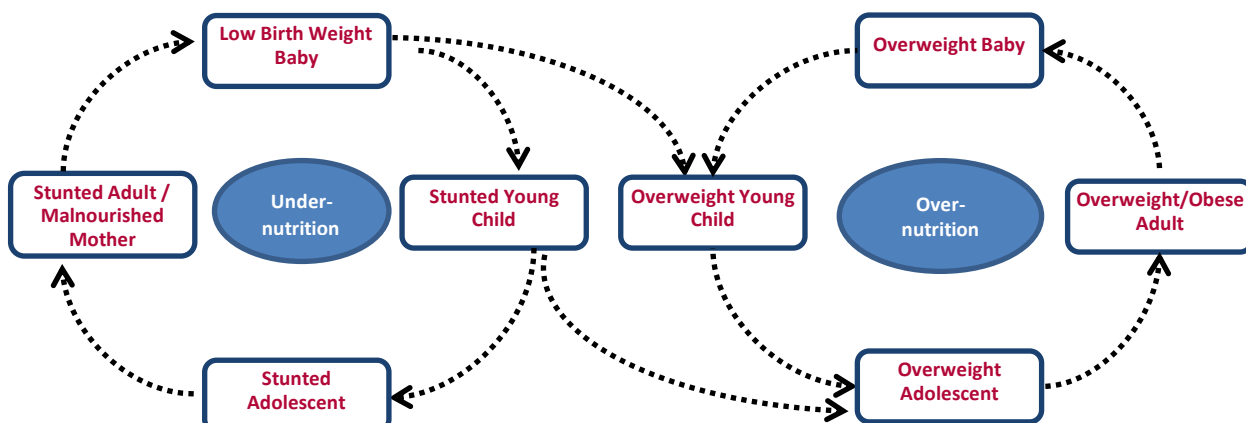


Figure 1 Source: Adapted from "Ending Malnutrition by 2020: An Agenda for Change in the Millennium" UN ACC/SCN, 2000

Malnutrition is caused by multiple factors operating at three levels as outlined in the table below. Every malnutrition situation must be analysed to local level, to understand the exact chain of causation and the institutional and organisational factors. This analysis should identify which sectors and interventions will deliver the best results and investment value. For example, there is little value in providing micronutrient supplements if children's diets are nutritious but poor hygiene is causing high rates of diarrhoeal disease. Often a combination of nutrition specific, nutrition sensitive and nutrition governance interventions (explained further below) are needed.

Causes level	Operating level	Causes description	Intervention type
Immediate	Individual	Inadequate food intake, infectious diseases, inadequate care (feeding, hygiene, healthcare) of infant/young child.	Nutrition Specific
Underlying	Household	Poor access to clean water, sanitation, food hygiene. Inadequate household access to quality food. Low status of women and girls. Low agricultural productivity.	Nutrition Sensitive
Basic	Society	Poverty, poor education, inadequate unaffordable food supply and poor governance.	Nutrition Governance

Nutrition specific, nutrition sensitive and nutrition governance interventions explained:

1. Nutrition specific interventions (addressing immediate causes) target the first 1000 day window (see Box 1 and Figure 2 below) concentrating on women of reproductive age, pregnancy, newborns and young children. These interventions include: maternal and child micronutrient and food supplements, appropriate breast feeding and infant feeding, and prompt treatment of acute illness and acute malnutrition.
2. Nutrition sensitive interventions (addressing underlying causes) are incorporated into sector and cross-sector programs including WASH, education, agriculture, rural development, social protection, gender equality and humanitarian responses.
3. Nutrition governance interventions (addressing basic causes) create an enabling environment for better nutrition, such as policies and regulations for economic opportunity, equitable access, gender equality, social protection and strengthened governance.

Box 1: Why the first 1,000 days?

The first 1000 days of a child's life between conception and two years of age is the best 'window of opportunity' for furthering human and economic development. The role of breast feeding during this period of is critical importance at this time. Under-nutrition during this period can result in irreversible stunting, impaired cognitive development and poor health which can persist throughout life, increasing the risk of developing non-communicable diseases. Stunting predicts poorer educational outcomes in childhood and adolescence and lower adult economic productivity and earnings. If early nutrition can be sufficiently improved, outcomes for individuals are much better. 'Catch-up' or accelerated growth after early under-nutrition can increase susceptibility to adult obesity and chronic diseases like diabetes. Nutrition investments targeting the first 1000 days are therefore the most effective investments.

Why health sector responses are important, alone and coupled with other responses

Most nutrition specific interventions target the first 1000 day window and are best delivered through the health sector. The Lancet 2013 nutrition series analysis¹ suggests ten evidence-based nutrition interventions implemented at 90% coverage could avert 15% of deaths in children under five years and 20% of existing stunting. The ten interventions are:

1. Salt iodisation
2. Multiple micronutrient supplementation in pregnancy (including iron-folate).
3. Calcium supplementation in pregnancy
4. Energy-protein supplementation in pregnancy
5. Vitamin A supplementation in childhood
6. Zinc supplementation in childhood
7. Breast feeding promotion
8. Education on complementary feeding of infants
9. Complementary food supplementation for infants
10. Severe acute malnutrition management.

Combining nutrition specific, sensitive and governance interventions can greatly accelerate progress on health outcomes and reduce premature death and irreversible stunting. For example, combining nutrition specific (health sector) interventions (as above) with WASH sector actions (nutrition sensitive) can reduce diarrheal infections and help break the child malnutrition-infection-malnutrition cycle.

Micronutrient supplementation is a nutrition specific (i.e. health sector) action to address micronutrient deficiencies in women and children. However, when micronutrient deficiencies are widespread in a country, a micronutrient enriched food response (nutrition sensitive) such as iodine added to table salt, or folate added to bread flour, may also be needed to benefit a whole population. This is a combined policy effort between the health, food and/or agriculture sectors with implementation by food industry partners to bring fortified food to the market place.

A nutrition governance approach can create an enabling environment for access to healthier food and lifestyles, to prevent and reduce over-nutrition and the related non-communicable diseases. This is a combined policy effort across multiple sectors (explained further below) to achieve better nutrition and health outcomes.

Policy actions to prevent and reduce over-nutrition can include the following:

- Investing in optimal nutrition in the first 1,000 days of life: because low birth weight babies and stunted children are more at risk of becoming overweight or obese adults

¹ Bhutta et al. Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? *Lancet* 2013; 382: 452-77.

- Behavioural changes: health promotion programs, social marketing, education e.g. nutrition friendly school meals
- Policy interventions: laws and regulations that reverse the environmental drivers i.e. reducing the cost of healthy foods and increasing the costs of unhealthy foods or banning unhealthy food marketing to children
- Food industry policy changes: moving products towards healthier compositions e.g. reducing the fat, sugar and salt content of processed foods; self-regulation of marketing to children
- Making regular physical activity and healthier dietary choices available, affordable and easily accessible to all - especially to the poorest individuals e.g. public sport and play grounds.
- Policies to promote physical activity e.g. transport policy and environment design to encourage safe physical activity and accessibility to sporting facilities, foot paths and parks
- National food and agricultural policies which support the protection of public health.

A note on trade policy: Policies in relation to certain types of food or drink can involve barriers to trade. Australia respects and supports the sovereign right of countries to improve the health and nutrition of their citizens, such as through a balanced diet and reducing the consumption of unhealthy food through domestic policy legislation and regulation. Australia's international trade obligations do not impinge on countries' ability to ensure proper nutrition for the health of their citizens.

For further help:

1. See the following further links/resources:

DFAT ODE (2014). <i>A window of opportunity: Australian aid and child undernutrition</i>
Haddad L, Cameron L and Barnett I (2014). <i>The Double Burden of Malnutrition in Asia and the Pacific: Trends, Consequences, Drivers, Policy and Priorities.</i>
World Bank, <i>Improving Nutrition Through Multisectoral Approaches</i>
World Bank (2014). <i>NCD Road Map report (for the Pacific Islands)</i>
Lancet (2013) <i>Maternal and Child Nutrition Series</i>
Lancet (2015) <i>Obesity Series</i>