Undernutrition is a multi-sectoral problem with multi-sectoral solutions. By applying integrated approaches, the impact, coherence and efficiency of the action can be improved. The international humanitarian organization Action Against Hunger has published a new guidebook for improving nutrition through the integration of water, sanitation, and hygiene (WASH) and nutrition interventions. The “WASH’ Nutrition Practical Guidebook” demonstrates the importance of both supplementing nutrition programmes with WASH activities and adapting WASH interventions to include nutritional considerations i.e. making them more nutrition-sensitive and impactful on nutrition. It has been developed to provide practitioners with usable information and tools so that they can design and implement effective WASH and nutrition programmes. Apart from encouraging the design of new integrated projects, the guidebook provides support for reinforcing existing integrated interventions.

**WASH nutrition practical guidebook**

Achieving large-scale impact on nutrition demands a multi-sectoral approach and addressing both direct and indirect causes of poor nutritional status. Water, sanitation, and hygiene (WASH) have been identified as essential nutrition-sensitive interventions, crucial for preventing infectious diseases and ensuring healthy environments (The Lancet, 2013). Access to safe and reliable WASH services plays an important role in ensuring nutrition security, given that the status of WASH impacts the availability, access, stability and utilization of food resources (The World Bank, 2013).

By applying integrated approaches, WASH and nutrition programmes can maximize their impact, increase cost-effectiveness, sustainability, and create greater benefits for the beneficiaries. This is especially important in the light of 2030 Agenda for Sustainable Development, which highlights the need for a joint multi-sector action, collaboration and engagement. Integrating WASH interventions into nutrition actions, strategies and budgets will be fundamental for reaching health and nutrition goals (Action Against Hunger, 2017).

On these grounds, the international humanitarian organization Action Against Hunger has published a new guidebook for improving nutrition through the integration of water, sanitation, and hygiene and nutrition interventions. The “WASH’ Nutrition Practical Guidebook” demonstrates the importance of both supplementing nutrition programmes with WASH activities and adapting WASH interventions to include nutritional considerations i.e. making them more nutrition-sensitive and impactful on nutrition. It complements already existing publications on the subject such as WHO/UNICEF/USAID guide published in 2015, “Improving Nutrition Outcomes with Better Water, Sanitation and Hygiene” and provides more detailed, practical examples and tools on how, when and where to integrate WASH and nutrition efforts.

It has been developed to improve capacities of the practitioners working in humanitarian and development contexts and help them better respond to the growing need for integrated approaches towards addressing undernutrition.

The “WASH’Nutrition Practical Guidebook” comprises six chapters, delving into key concepts relevant to WASH and nutrition, as well as existing evidence on the links between nutrition and WASH, practical guidance on implementing integrated programs, setting up monitoring and evaluation systems to measure
progress and impact, and tools for advocacy and capacity building for projects and project staff. Special emphases are given to aligning WASH and nutrition interventions in emergencies and incorporating nutrition-specific objectives into WASH humanitarian responses.

Aligning WASH and nutrition programming
“WASH’ Nutrition” refers to any type of intervention aiming at complementing the prevention (before the occurrence of undernutrition) and the treatment of undernutrition (in its moderate and severe form) through the strengthening of access to water, sanitation and hygiene services (Action Against Hunger, 2017). Aligning implies (re)defining the strategic orientations of WASH and nutrition programmes and identifying programmatic opportunities for integration based on the context-specific needs and priorities, identified areas of common interest (e.g. 1,000-day window of opportunity); national laws, policies and strategies on WASH and nutrition etc. Better alignment allows WASH and nutrition programmes to maximize their impact, increase cost-effectiveness and sustainability, and create greater benefits for the beneficiaries. There are many ways in which WASH and nutrition programmes could integrate. The level of integration should be decided on the basis of sector capacities and context-specific conditions. Even when strong synergies are not possible, due to, for example, funding constraints or activity timetables preventing different sectors from operating as a single programme, there are still options for aligning interventions as long as there is a good coordination, communication and collaboration between sectors. Figure 1 illustrates different levels and types of integration that may be appropriate in different circumstances.

From the operational point of view, WASH and nutrition sectors work in synergy when:

- There is joint situation analysis and planning;
- There are unified and integrated programme components aiming at preventing/reducing undernutrition: one or more indicators incorporated into the project objectives of another sector and/or there is a common specific objective for both sectors;
- There is a joint, synchronized delivery of interventions in the same geographical area, targeting the same beneficiaries (individuals, households, communities);
- There is regular and significant communication between WASH and nutrition actors, a well-coordinated management and reporting structure;
- There is joint monitoring and evaluation of implemented activities.

![Figure 1. Increasing levels of multisectoral integration](Source: Action Against Hunger (2014) “Nutrition Security Policy”)

Integrating WASH and nutrition at different levels and contexts
WASH and Nutrition interventions can be integrated at many levels, starting from the individual and household level with the focus on (malnourished) children and pregnant women, for example, all the way up
to the national level, where WASH and nutrition policies and strategies are aligned in order to guaranty better health and non-health outcomes for the population.

**At individual and household level**

An unhealthy environment, including poor access to water, sanitation and hygiene, is an underlying cause of undernutrition (Dangour et al., 2013). Contamination of the household environment by human and/or animal feces, which can often be found in low-income contexts, is a major source of pathologies such as diarrhea, worms infections and environmental enteric dysfunction - primary cause of child undernutrition, and the main pathway through which poor WASH causes stunting (Humphrey, 2015). Households are where young children and their mothers/caretakers spend a lot of time. Infants and young children crawl, play and are fed in the domestic environment. All these present an opportunity for exposure and ingestion of pathogens early in life, in the critical window of growth and development, if the household environment is not kept clean. Besides domestic hygiene conditions, caregiver hygiene behaviours together with infant and young child feeding practices are known to be associated with poor linear growth (Ngure et al., 2014). Therefore, household WASH interventions that address caregiver hygiene behaviours and prevent children from consuming contaminated food and water are essential for ensuring good nutritional outcomes. The “WASH’ Nutrition Practical Guidebook” discusses following WASH behaviours that are needed to block fecal-oral transmission and prevent disease:

- Correct hand washing with soap (or ash if soap is not available) at key times;
- Sanitation and safe disposal of child feces;
- Treating, storing and drinking water safely (for infants after 6 months of exclusive breastfeeding);
- Practicing safe food hygiene;
- Ensuring a safe clean environment (e.g. clean play space).

**At community level**

Providing access to water and sanitation facilities and promoting good hygiene practices in the communities presents an integral part of the integrated approach to preventing and treating undernutrition. Both WASH and nutrition programmes typically focus on the most vulnerable populations – communities without sanitation facilities or access to safe water, regions with high undernutrition prevalence, very poor areas with persistent communicable diseases and so forth. The “WASH’ Nutrition Practical Guidebook” provides suggestions on how WASH and nutrition programmes can better interlink their efforts when reaching out to the same communities and identifies opportunities for systematic integration of WASH and nutrition projects at the community level.

Many common community-oriented WASH activities could be designed to be nutrition sensitive. For example, WASH committees, set up to ensure that the water source is well managed, can also cover the maintenance of WASH facilities in health and feeding centres. Having a health worker appointed as a member of a WASH committee can help better align WASH with nutrition efforts. Nutrition and food security activities such as promoting vegetable gardens or livestock husbandry to diversify the diet require a lot of water. Providing information to the communities on how to construct low-cost WASH facilities using their own resources e.g. hand washing stands like tippy taps, latrines, dish racks, low-cost rain water harvesting systems (where applicable) or use of grey water for growing vegetables is another example in this area. The same applies to preventing contamination of water sources/treating water at source during rainy seasons and diarrhea peaks. In addition to making community WASH interventions nutrition-sensitive, there are numerous opportunities for delivering key WASH and nutrition activities together, in an integrated manner, when targeting the same communities. This can help save resources, identify areas of overlap (e.g. discussing food hygiene practices when promoting healthy and nutritious foods) and reinforce them through joint communication channels.

**At health centre level**

Access to WASH is critical for delivering quality health and nutrition services. Health facilities in low- and middle-income countries often lack basic requirements for good hygiene including safe reliable water supplies and adequate sanitation. Many countries lack policies and standards as well as sufficient human and financial resources for assuring an adequate WASH environment in health care settings (WHO/UNICEF, 2015). In spite of this, there are many inexpensive interventions that could be implemented in order to decrease the risk of infection and ensure better health and nutrition outcomes. For example, establishing a
hand washing station with soap and water will enable service providers to wash their hands before examination and before handling food or drugs. If piped water is not available in the facility, hospitals can facilitate hand washing and hygiene by setting up rainwater catchment systems and tippy taps that can be replicated at home. Health and nutrition centres present a unique opportunity to reach mothers/caretakers and their children on a regular basis and deliver integrated interventions. Many routine health services such as nutrition counselling, antenatal care and growth monitoring require repeated visits to health facilities. These visits can be used to reach mothers/caretakers with WASH and nutrition messages, promote desired behaviours and support the prevention of undernutrition. For example, community health workers, health care volunteers and other trained health personnel can conduct hand washing with soap and water treatment demonstrations while mothers/caretakers are waiting for medical appointments or when medicines are being distributed. Health care providers can discuss topics such as fecal contamination, safe food preparation and improving WASH conditions at home with mothers/caretakers during routine check-ups, sick child visits, immunization days, etc.

At national level
Looking at the national level, it should be noted that different countries are at different stages when it comes to the integration of WASH components into national nutrition policies and action plans. While in some countries the integrated approach to WASH and nutrition is yet to be initiated, in others national policies and development partners’ strategies already acknowledge the importance of adequate WASH conditions for achieving good nutritional status, and call for WASH interventions to be scaled up along with nutrition actions (Action Against Hunger, 2017). Therefore, depending on the opportunities and challenges of each context, different approaches are to be taken to develop or strengthen WASH and nutrition integration at national policy level. Along with the policy set up, developing measurable and interlinked indicators for WASH and nutrition can help improve strategies, technical guidelines, and management practices of integrated services. Figure 2 presents a holistic system approach which pays attention to how individual system components (policies and strategies, delivery platforms, monitoring and evaluation mechanisms) interact and affect one another. Simultaneously supporting WASH and nutrition integration in multiple components of the system yields greater impact on a country’s health outcomes.

![Figure 2. Holistic approach to WASH and Nutrition integration](image-url)

In order to improve the chances of survival and, consequently, nutrition and health outcomes of affected populations, sectors have to align their responses during humanitarian emergencies. Different strategies
can be used to strengthen the integration of WASH and Nutrition interventions in emergencies, starting from ensuring that SHPERE minimum standards on WASH are met, to integrating key nutrition messages in hygiene promotion strategies, ensuring WASH minimum package for health and nutrition centres etc. The “WASH’ Nutrition Practical Guidebook” stresses the need for supporting infant and young child feeding in emergencies, emergency WASH for children as well as the necessity for overcoming the humanitarian – development divide when addressing undernutrition.

**Key challenges for sector integration**

Even though the evidence is sufficient to justify and support the integration of nutrition and WASH interventions, establishing coherent and coordinated responses that transcend traditional sector boundaries is still a challenge. Funding available is often intended for a single purpose, such as WASH or nutrition, but not both. These types of restrictions do not allow nutrition programmes to incorporate WASH activities and vice versa. Many times there is a lack of comprehensive integration strategy and communication between WASH and nutrition sectors is either irregular or insufficient. Also, each sector is still learning about its own most strategic interventions, which makes it difficult to prioritize integrated interventions, and decide with limited time and resources which activities have the most impact.

**Notes**

The 1,000 days between a woman’s pregnancy and her child’s 2nd birthday.

Chronic infection of small intestine caused by extended exposure to fecal pathogens.

Low height for age ratio.

Sets of common principles and universal minimum standards for the delivery of quality humanitarian response.

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**References**


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