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# R4ACT FACTSHEET

**IMPACT OF WASH  
ON ACUTE MALNUTRITION**



# I – THE R4ACT METHODOLOGY

The R4ACT (Research4Action) methodology, developed by Action Against Hunger in 2017, aims to facilitate the understanding and use of **scientific evidence to inform humanitarian policies, programming, and advocacy. It actively engages multiple stakeholders** throughout the entire process from framing a research question to translating scientific evidence into action.

## II – THE 2019 R4ACT: IMPACT OF WASH ON ACUTE MALNUTRITION

Responding to questions formulated by technical experts, the [2019 R4ACT Report](#) examined **the impact of WASH activities on acute malnutrition through a systematic screening of scientific publications**. It highlighted, based on 24 selected robust articles:

- **An evidence gap and a crucial need for further research** to understand the causal links between different WASH activities and the treatment and prevention of acute malnutrition.
- **The difficulty to discern the individual impact of specific WASH activities** on acute malnutrition, which are implemented together and are context-specific. This often implies mixed and/or weak evidence.
- The provision of household (HH) **water treatment products during Severe Acute Malnutrition (SAM) treatment improved recovery outcomes** (demonstrated by two high-quality studies<sup>1</sup>).
- **No association was found between the presence of an improved latrine at the HH level and the prevention or treatment of acute malnutrition** (demonstrated by three high-quality studies<sup>2</sup> and eight of lower-quality<sup>3</sup>).

For 14 out of 16 WASH activities investigated, evidence as of today is insufficient to assess the nature of their impact, if any, on acute malnutrition. The following table summarizes the state of evidence on the issue:

WATER	SANITATION	HYGIENE		
Distance to water point < 30 minutes	Access to household latrine	Absence of animal and human feces around children playing areas	Knowledge of hand-washing practices	<div> <div></div> MODERATE EVIDENCE OF POSITIVE IMPACT           <div></div> MODERATE EVIDENCE OF NO IMPACT           <div></div> LIMITED EVIDENCE TO ASSESS THE NATURE OF THE IMPACT           <div></div> NO EVIDENCE TO ASSESS THE NATURE OF THE IMPACT         </div>
Treated drinking water during Severe Acute Malnutrition treatment	Presence of household hygienic toilets or “improved latrine”	Provision of insecticide-treated bed net	Use of soap during handwashing	
Absence of E. Coli in drinking water	Presence of potties	Provision of a cup with handle for child to drink	Provision of soap	
Safely stored water	No open defecation Safe disposal of child feces	Individual and/or group hygiene sensitization sessions		

1. Altmann, M. et al. 2018. *The American Journal Of Tropical Medicine And Hygiene*. + Doocy, S. et al. 2018. *Public Health Nutrition*.  
 2. Humphrey, J. et al. 2019. *The Lancet Global Health*. + Luby, S. et al. 2018. *The Lancet Global Health*. + Null, C. et al. 2018. *The Lancet Global Health*.  
 3. Note: Sanitation interventions often reveal their benefits at the community level rather than the HH level. They have demonstrated a positive impact in reducing rates of chronic undernutrition (stunting). Ex: Pickering, A. et al. 2015. *The Lancet Global Health*.

### III – TRANSLATING EVIDENCE TO PROGRAMMATIC ACTION / A GLOBAL COMMITMENT

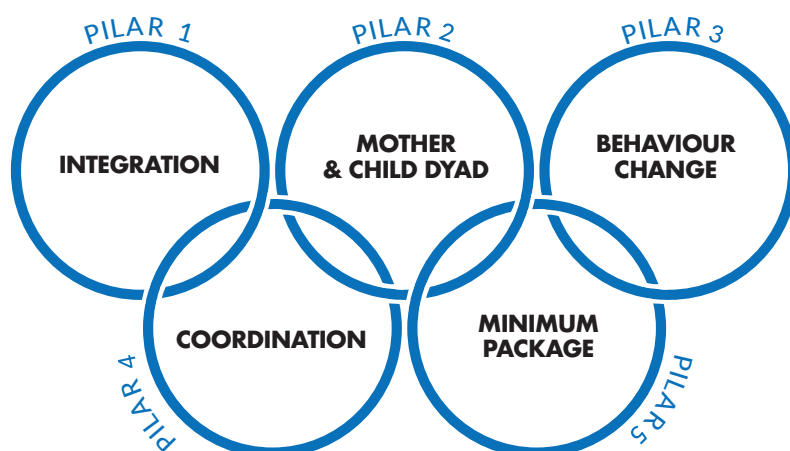
In response to those findings, the R4ACT process proceeded with a **workshop in November 2019 to produce programmatic recommendations**. This workshop gathered a multitude of stakeholders<sup>1</sup> and concluded with the **Nanterre Declaration**. Focussing the R4ACT research uptake on its most robust and actionable finding (impact of HH water treatment during SAM treatment), workshop participants outlined **six recommended activities to implement and advocate for in local and global fora**.



The Nanterre Declaration and its six recommended activities are relevant to both **field actors** and **policymakers**. It provides **evidence-based guidance for field actors to prioritize** their limited resources in contexts of SAM treatment interventions: including water treatment products as part of the SAM treatment improves both recovery rates and time to recovery. Moreover, the endorsement of the Nanterre Declaration by diverse and numerous stakeholders also makes it a powerful **advocacy tool** to campaign for greater financing of such interventions.

#### R4ACT AND THE WASH'NUTRITION STRATEGY:

Contingent upon a successful **coordination between WASH and Nutrition/Health staff**, these six activities are thus also aligned with the broader [WASH'Nutrition approach](#). This approach strives to better integrate the two sectors in order to **more effectively prevent and treat undernutrition through the strengthening of access to water, sanitation and hygiene services**.



1. (Action Against Hunger, Concern Worldwide, French Red Cross, International Committee of the Red Cross, International Medical Corps, London School of Hygiene and Tropical Medicine, Médecins Sans Frontières France, Première Urgence Internationale, Save the Children UK, Solidarités International, Welthungerhilfe, TUFTS University, USAID, as well as global WASH and Nutrition Cluster representatives)



## IV – THE R4ACT'S SIX EVIDENCE-BASED RECOMMENDED ACTIVITIES

The following page presents the six recommended activities defined by R4ACT partners, centered on ensuring HH water quality during SAM treatment. The implementation of these activities must certainly be **adapted to the specificities of the intervention context** and that they are **specific to the treatment of SAM**. As such, they are one part of a whole in the prevention-treatment continuum of all forms of undernutrition.

STEPPED ACTIVITIES	SMART INDICATORS FOR ACTIVITIES MONITORING	SUGGESTIONS OF IMPLEMENTATION (non-exhaustive)
1 - Select the most appropriate HH water treatment method in the area covered by SAM treatment through a participatory approach.	<ul style="list-style-type: none"> <li>% of nutrition treatment programs that include household water treatment assessments conducted through a participatory approach.</li> </ul>	<ul style="list-style-type: none"> <li>Integrate a WASH question in nutrition assessments regarding water treatment practices in use, formulated and analysed by a WASH expert.</li> <li>Carry out market-based analysis and programming on local opportunities to sustain HH water treatment.</li> <li>In case of ICCM+ approach, carry out joint distribution of HH water treatment product to accompany SAM treatment.</li> </ul>
2 - Systematically coordinate the delivery of HH water treatment adapted to the context with SAM management.	<ul style="list-style-type: none"> <li>% of caregivers with a SAM child under treatment who receive HH water treatment products.</li> </ul>	<ul style="list-style-type: none"> <li>Manage nutrition and WASH stocks in a coordinated way to mitigate risk of stockout</li> <li>Give to caregivers a follow-up stock of water treatment product at discharge.</li> <li>Explore opportunities for private sector/local businesses to develop local production of water treatment products.</li> <li>Assess cost-efficiency of distributing water treatment product during SAM treatment.</li> </ul>
3 - Train identified health facilities staff on a) health center water system management and b) building caregivers' capacity on correct use of HH water treatment products.	<ul style="list-style-type: none"> <li>At least one staff member is trained on water treatment and basic hygiene promotion in each health facility delivering nutrition treatment services.</li> </ul>	<ul style="list-style-type: none"> <li>Schedule regular WASH advisors visits to health facilities to provide hands-on training to different key persons (i.e. supervisor, hygienist, and staff distributing RUTF).</li> <li>Include a water training component in nutrition training sessions and vice versa.</li> <li>Include community health workers &amp; community members in hands-on water quality trainings given to health facilities' staff.</li> <li>Produce or use a brochure on correct use of water treatment products for caregivers.</li> </ul>
4 - Improve water system in health facilities.	<ul style="list-style-type: none"> <li>40-60 litres per patient/per day in inpatient facilities; 5 litres per patient/per day in outpatient facilities<sup>1</sup>.</li> <li>Free Residual Chlorine between 0.5 mg/l and 1 mg/l, Turbidity &lt;5 Nephelometric Turbidity Units (NTU).<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>Ensure water quality is taken into account in Health System Strengthening programming.</li> <li>Advocate at district level to have WASH dedicated human resources in health facilities.</li> <li>Advocate to systematize a water treatment product supply line in the health facilities' budget.</li> <li>Nominate and train one staff (ideally two) in charge of WASH per health facility (the cleaner could be trained to become a hygienist for example).</li> </ul>
5 - Develop behaviour change on water treatment in areas covered by SAM treatment.	<ul style="list-style-type: none"> <li>% of HH in the SAM treatment area covered by joint behaviour change projects.</li> </ul>	<ul style="list-style-type: none"> <li>Carry out quick behaviour change projects, focused on household water treatment, performed by joint WASH and Nutrition sectors.</li> <li>Include community workers in behaviour change projects.</li> <li>Train WASH/Nutrition practitioners on quick barrier analysis and behaviour change methodologies such as WASH'Em.</li> </ul>
6 - Ensure information, knowledge and data sharing between the WASH and Nutrition sectors.	<ul style="list-style-type: none"> <li>% of programs where both nutrition treatment and WASH programs are implemented in the same area.</li> <li>Number of times CMAM performance data are shared with the WASH sector.</li> </ul>	<ul style="list-style-type: none"> <li>Improve global coordination between the sectors by signing a joint roadmap between WASH and Nutrition Global Clusters, including to monitor jointly these 6 activities.</li> <li>Ensure that WASH and Nutrition sectors coordination are connected at country level, and share data to improve geographic coordination and joint activities.</li> <li>Implement Monitoring Evaluation Accountability and Learning (MEAL) processes in agencies operating at field level and improve data management.</li> </ul>

1. For dry or supplementary feeding programmes: 0.5–5 L/consultation depending on waiting time. Sources: SPHERE Handbook, 2018 and WASH FIT, WHO, 2017.

2. Source: WHO, 2017.

## R4ACT 2019 WORKSHOP PARTNERS



Action Against Hunger is the leading partner on the R4ACT project. For more information, please contact Stéphanie Stern, Knowledge Management Senior Advisor at Action Against Hunger: [sstern@actioncontrelafaim.org](mailto:sstern@actioncontrelafaim.org)