

Integrating Gender and Nutrition within Agricultural Extension Services

Activity Sheet
May 2018

The Spread of Germs Using Turmeric

Time: 65 Minutes

Materials Needed:

- Ground turmeric spice (or another dark spice)
- One bowl
- A small pitcher of water



Figure 1: Adapted WASH Nutrition Pathways (Cumming et al. 2015)



Figure 2: Ground turmeric used for

Introduction

Undernutrition affects billions of people throughout the world and can be indirectly caused by poor hygiene and sanitation.¹ Over 90% of deaths in young children are caused by diarrheal diseases attributed to insufficient water, sanitation, and hygiene (WASH) practices.¹ Handwashing is the most cost effective intervention in preventing the spread of diseases when done at critical points (e.g., before eating, before preparing food, after defecating, changing a diaper, or after dealing with small and large livestock). In order for handwashing to be most effective, clean water and soap should be used; however, soap substitutions may include wood ash or clean sand with water.

Objectives

- ✓ To provide an interactive way to show the invisible spread of germs that cause disease by making it visible.
- ✓ To review the six fecal-oral pathways to spread germs.
- ✓ To demonstrate the importance of washing hands thoroughly at all critical points throughout the day.

Steps

- 1) Review title of activity, objectives, and brief introduction. **(5 min)**
- 2) The facilitator should spread a small amount of water over their hands then cover their hands in the bowl with ground turmeric. Explain that the turmeric represents germs, germs that we all encounter by touching surfaces, animals, people, etc. The facilitator should be shaking hands with participants then asking them to shake other peoples' hands. Place more water and/or turmeric on hands as necessary. The turmeric should now be leaving a trail of those it's encountered. Once most or several participants have turmeric on their hands, indicate that this is what happens with germs when someone does not wash their hands. **(10 min)**
- 3) Review and discuss the critical points for handwashing. Ask how long it takes to properly wash one's hands. Once everyone comes to a consensus, remind participants (in case no one said it) that washing hands should take two cycles of the Happy Birthday song (or a minimum of 20 seconds). Review the 6 fecal-oral pathways in Annex 1,

the activity.



Figure 4: Participants on WASH training in Tajikistan

specifically flies, fluids, fields, foods, feet, and fingers. **(15 min)**

- 4) Ask the participants to break up into small groups (3-4 people). Each group should choose one of the six fecal-oral pathways and identify a potential intervention to prevent the spread of disease. Interventions may include things like handwashing, using an enclosed area away from water to defecate, covering prepared food from flies, etc. **(15 min)**
- 5) Once participants have identified interventions, bring everyone back together to discuss each group's intervention. **(20 min)**
- 6) Discuss the consequences of handwashing and how it relates to the spread of disease.

Imagine that you are now about to sit down to dinner with your family, but before you do you scratch your face or hold your child's hand. Then you notice the turmeric covering your hands. Would you wash your hands at this point? Would you wash your child's hands? Would you continue to eat?

The turmeric represents germs that we normally cannot see on our hands and how easily and quickly they spread among us.

How many times in the last hour have you touched your face? In the last day?

Where are the handwashing facilities in this building? Where are they in your home? Where on a typical farmstead? What are low cost, realistic ways to bring a handwashing station to a homestead (e.g., setting up a tippy tap)?

After this activity the participants can clean hands with soap to remove turmeric.

References:

1. *Nutrition-WASH Toolkits: Guide for Practical Joint Actions Nutrition-Water, Sanitation and Hygiene (WASH)*. United Nations International Children's Emergency Fund (UNICEF), 2016. www.unicef.org/wash/3942_59785.html .
2. Cumming O, Watson L, Dangour AD. *Water, Sanitation and Hygiene - A Missing Link to Food and Nutrition Security*. In: Pritchard W, Ortiz R, Shekhar M, editors. *Routledge Handbook on Food and Nutrition Security*. London: Routledge, 2015.



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Annex I: Oral Fecal Route (Figure from WaterAid)

