

**Division of Prevention and Control of Non-Communicable Diseases  
Food Safety and Nutrition**



## Fact Sheet 2º

### FAST FACTS

- Many foodborne diseases and pathogenic microorganisms are spread by contaminated hands.
- Foodborne pathogens, such as *salmonellosis*, *shigellosis*, *hepatitis A*, *giardiasis* and *campylobacteriosis* are transmitted via the faecal-oral route. These account for a substantial number of disease outbreaks in developing countries.
- Good quality drinking-water and good personal hygiene in food preparation and handling are therefore of utmost importance in preventing the spread of disease.<sup>1</sup>

## *Hand Washing and Food Safety*

*A bulk of the foodborne disease outbreaks are attributable to poor hygienic practices and improper handling of food. Undoubtedly, adequate personal hygiene practices are essential in reducing the risks of a foodborne illness. Hand washing is one of the most effective and cheapest measures against infections and foodborne diseases.*

### ***Foodborne disease***

Many foodborne diseases and pathogenic microorganisms are spread by contaminated hands. Many of these illnesses occur unnecessarily, since the faecal-oral routes of disease transmission are easily prevented.<sup>1</sup>

WHO reports that 90% of the annual deaths from diarrhoea are among children particularly in developing countries. A significant number of the deaths could be attributed to shigella, which causes dysentery or bloody diarrhoea.<sup>2</sup>

A study on the microbial quality of street foods in Accra, Ghana showed among others the significance of proper hand-washing practices, use of soap and environmental hygiene. Among the reported risk factors for street food contamination were cooking

of food well in advance of consumption, exposure of food to flies, and working with food at ground level and by hand.<sup>3</sup>

### ***Significance of proper hand washing to food safety***

Judicious washing of hands can significantly reduce bacterial contamination and risk of foodborne illness.

Reports indicate that the simple act of washing hands with soap and water reduces incidents of diarrhoea from *shigella* and other causes by up to 35 percent.<sup>2</sup>

### ***Proper hand washing***

Hands should ideally be washed, with soap or ash, under running water. Rubbing hands vigorously 15-20 seconds until a soapy lather

<sup>1</sup> Healthy Villages – A guide for communities and community health workers. WHO. 2003.

<sup>2</sup> Water for Health: Taking Charge. WHO. 2001.

<sup>3</sup> Mensah *et al.* Street Foods in Accra, Ghana: How Safe Are They? Bulletin of the World Health Organization. 2002.



appears, and scrubbing between fingers and fingernails.

Where there is no system, running water can be organized by using a water butt with a tap. If there is a shortage of water, using soap with a small quantity of water in a bowl is adequate.<sup>4</sup>

Washing of hands should be particularly be done:

- Before food preparation;
- Before eating;
- Before serving food;
- During food preparation to avoid cross-contamination;
- Before and after handling raw meat, poultry and fish products;
- After changing diapers;
- After blowing nose/sneezing;
- After using the toilet, not just after defecation, since the pathogens can also be picked up from previous users of toilets via door handles, taps and drying towels.<sup>5</sup>
- After handling unsanitary objects such as waste/garbage containers;
- After contact with toxic substances or chemicals;
- After touching/handling livestock or pets

In all these activities hands may become contaminated with pathogens or toxic chemical residues that can be transferred to food.<sup>5</sup>

### ***Health education in food safety***

Experience has shown that well designed and implemented educational programmes, is a feasible and cost-effective means of improving health status.<sup>6</sup>

Adequate food safety and hygiene education/promotion particularly in schools with the provision of adequate sanitary and hand-washing facilities are essential.

### ***WHO technical support and actions in food safety education***

A special focus is being made at collaborating with education authorities to promote food safety education in primary and secondary level, among both students and parents. Work is also underway on the promotion of participatory community-based food safety education and awareness-raising strategies.

**For More Information on Food Safety and Nutrition** please contact Division of Prevention and Control of Non-communicable Diseases (DNC). B.P. 6 Congo Brazzaville.

<sup>4</sup> Food, Environment and Health: A Guide for Primary School Teachers. WHO. 1990

<sup>5</sup> Basic Food Safety for Health Workers. Adams M and Mortarjemi Y. WHO. Geneva. 1999

<sup>6</sup> Foodborne disease: a focus for health education. WHO. 2000