

Issue 108 | July 19, 2013 | Focus on Food Hygiene

This issue contains studies and resources on food hygiene from 2012 and 2013. Included are studies on weaning foods, food hygiene in households, food hygiene in schools and informal sector street-food vendors. The World Health Organization estimates that unsafe food kills 1.2 million people over age 5 in Southeast Asia and Africa each year. This statistic makes it clear that food hygiene is a critical issue to address.

We welcome suggestions for Weekly topics. Future issues will focus on innovation, water point mapping, mobile applications, and WASH in schools; more than 100 past issues of the Weekly are [archived](#) on the WASHplus website.

REPORTS/BLOGS

- **Improving the Lives of People Living with HIV through WASH: Water Sanitation and Hygiene**, 2012. AIDSTAR-One. ([Food hygiene chapter](#)) | ([Complete manual](#))

AIDSTAR-One has recently finalized a new training resource that aims to address problems around water, sanitation, and hygiene (WASH) at health facilities to improve the quality of life of people living with HIV.

- **Insights from a Food Hygiene Intervention Study in Nepal**, 2013. O Gautam. ([Blog link](#))

This study aims to implement a simple, feasible and replicable food hygiene intervention and assess the effect of this intervention on mothers' food hygiene practices, and to assess the impact of the interventions on the level of microbiological contamination in food and diarrhoeal diseases burden. The study will also explore how food hygiene interventions can be integrated into nutrition, health and WASH policy and programs in Nepal.

- **Integrating Water, Sanitation, and Hygiene into Nutrition Programming**, 2013. WASHplus. ([Full text](#))

This publication discusses "small doable actions" to improve food hygiene and other water, sanitation and hygiene issues.

- **Prevention of Foodborne Disease: The Five Keys to Safer Food**, n.d. World Health Organization. ([English version](#)) | ([Other languages](#))
This handout lists the five keys to safer food: keep clean; separate raw and cooked; cook thoroughly; keep food at safe temperatures; use safe water and raw materials.
- **The WHO Five Keys to Safer Food: A Tool for Food Safety Health Promotion.** *African Jnl Food, Agriculture Nutrition & Development, June 2012.* L Mwamakamba. ([Full text](#))

Foodborne diseases continue to cause significant morbidity and mortality within Africa. Many cases of foodborne disease occur due to basic errors in food preparation or handling either in food service establishments or at home. Educating food handlers, including consumers, therefore, can significantly reduce the chances of contracting food-borne illnesses and the effects of outbreaks, as well as improve public health.

JOURNAL ARTICLES

- **Escherichia coli Contamination of Babies' Food-Serving Utensils in a District of West Sumatra, Indonesia.** *WHO South-East Asia Journal of Public Health, Jan-Mar 2012.* A Kusuma. ([Full text](#))
Escherichia coli contamination of a baby's complementary food may be caused by several sources including unclean utensils. This study examined the relationship between socio-economic conditions, environmental factors, characteristics of food handlers and contamination of babies food-serving utensils with *E. coli*. The majority of the respondents' hands and of the eating utensils were found to be contaminated by *E. coli*. Contaminated hands of food handlers were more likely to contaminate the baby's food-serving utensils.
- **Feeding Practices for Malnourished Children under Two Years Old.** *Rev. Gaúcha Enferm, Dec 2012.* P Chuproski. ([Full text](#))
This study concluded that the children's nutritional status was related to a lack of food variety, to grandmothers' influence, and poor hygiene of complementary foods.
- **Food Safety Knowledge among Women in Selected Areas in Khartoum City.** *Int Journal of Science & Research. Feb 2013.* S Gutbi. ([Full text](#))
The aim of the study was to examine knowledge and attitudes related to food safety among women responsible for purchasing and preparing food for the home. Age significantly correlated with the confidence in the safety of poultry, milk and dairy products, while educational level with that of meat, milk and dairy products. Age also significantly influenced the purchasing behavior of meat and poultry while educational level only mattered for purchasing meat.
- **Hygiene Intervention Reduces Contamination of Weaning Food in Bangladesh.** *Trop Med Int Health, Mar 2013.* M Islam. ([Abstract](#))

This study measured the impact of a hygiene intervention on the contamination of weaning food in Bangladesh. Food samples were collected on three occasions after cooking but before feeding. Following Hazard Analysis Critical Control Point (HACCP) procedures, critical control points were determined. The mothers in the 30 study households were then trained for four weeks in how to attain the control point conditions. A hygiene intervention following the HACCP approach reduced the weaning food contamination significantly. Awareness building among mothers about weaning food hygiene could be an important intervention for preventing weaning food-related diarrhea in Bangladesh.

- **Hygienic Practices among Food Vendors in Educational Institutions in Ghana: The Case of Konongo.** *Foods 2* 2013. I Monney. ([Full text](#))

With the booming of the street food industry in the developing world there is an urgent need exists to ensure food vendors adhere to hygienic practices to protect public health. This study assessed food vendors' adherence to food hygiene practices in educational institutions in Konongo, Ghana.

- **Improving Mothers' Hygienic Practices to Prevent Food Poisoning Among Their Children.** *American Journal of Research Communication*, 2013. E Abd El Aal. ([Full text](#))

This study aimed to identify the effect of an educational health program to improve mothers' hygienic practices to prevent food poisoning among their children. The health education program about food poisoning had a positive effect to upgrade mothers' knowledge and improve their hygiene practices. Highly educated mothers and older mothers had good knowledge, good hygienic behavior, and positive attitudes regarding food poisoning. Recommendations include that illustrated booklets containing food hygiene practices should be available in every health center. A continuous educational program for mothers regarding food hygiene and food poisoning through nurses and other health team should also be provided.

- **Modifiable Diarrhoea Risk Factors in Egyptian Children Aged <5 years.** *Epidemiol Infect*, Feb 2013. A Mansour. ([Abstract](#))

By conducting a case-control study in two university hospitals, this study explored the association between modifiable risk behaviors and diarrhea. The strongest independent risk factors for diarrhea were: presence of another household member with diarrhea, introduction to a new kind of food, and the child being cared for outside the home. In total, the study findings suggest that community-based interventions to improve practices related to sanitation and hygiene, handwashing and food could reduce the burden of diarrhea in Egyptian children under age 5.

- **Piloting an Intervention to Improve Microbiological Food Safety in Peri-Urban Mali.** *Int Jnl Hyg Env Health*, Mar 2013. O Touré. ([Abstract](#))

Studies related to infant diarrhea have demonstrated a higher level of fecal

contamination in weaning foods than in drinking water. Many studies have examined the microbiological quality of such foods, but few of them have resulted in an intervention. The present study builds on an experiment in which the HACCP approach was applied when preparing two common weaning foods (moni and fish soup) and used to develop simple hygiene measures that mothers could take to prevent contamination when preparing and serving foods to their children.

- **Systematic Approach for the Management and Control of Food Safety for the Street/Informal Food Sector in Ghana.** *Food and Public Health, 3(1) 2013.* C Tortoe. ([Full text](#))

Street food vending can be considered one of the fastest growing informal business sectors in Ghana. However, the safety of these foods sold on the street is of concern. In response to this concern, over the past 15 years, various project studies and activities have been implemented to address issues of the safety of these street vended foods. One study was a series of projects involving scientists, development partners, regulators and street-food vendors associations from 1999 to 2005, funded by the UK Department for International Development's crop-post-harvest program. One main output of these projects was the development of nine modules for systematically managing and controlling food safety for the street-food vending sector in Ghana.

Each WASHplus Weekly highlights topics such as Urban WASH, Indoor Air Pollution, Innovation, Household Water Treatment and Storage, Hand Washing, Integration, and more. If you would like to feature your organization's materials in upcoming issues, please send them to Dan Campbell, WASHplus knowledge resources specialist, at dacampbell@fhi360.org.



About WASHplus - WASHplus, a five-year project funded through USAID's Bureau for Global Health, creates supportive environments for healthy households and communities by delivering high-impact interventions in water, sanitation, hygiene (WASH) and indoor air pollution (IAP). WASHplus uses proven, at-scale interventions to reduce diarrheal diseases and acute respiratory infections, the two top killers of children under five years of age globally. For information, visit www.washplus.org or email: contact@washplus.org.

Please let WASHplus know at any time if you have resources to share for future issues of WASHplus Weekly or if you have suggestions for future topics. An [archive](#) of past Weekly issues is available on the WASHplus website.

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