



# Food hygiene for child health: an overlooked opportunity?

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# Effect of complementary food hygiene interventions: an overview of the evidence

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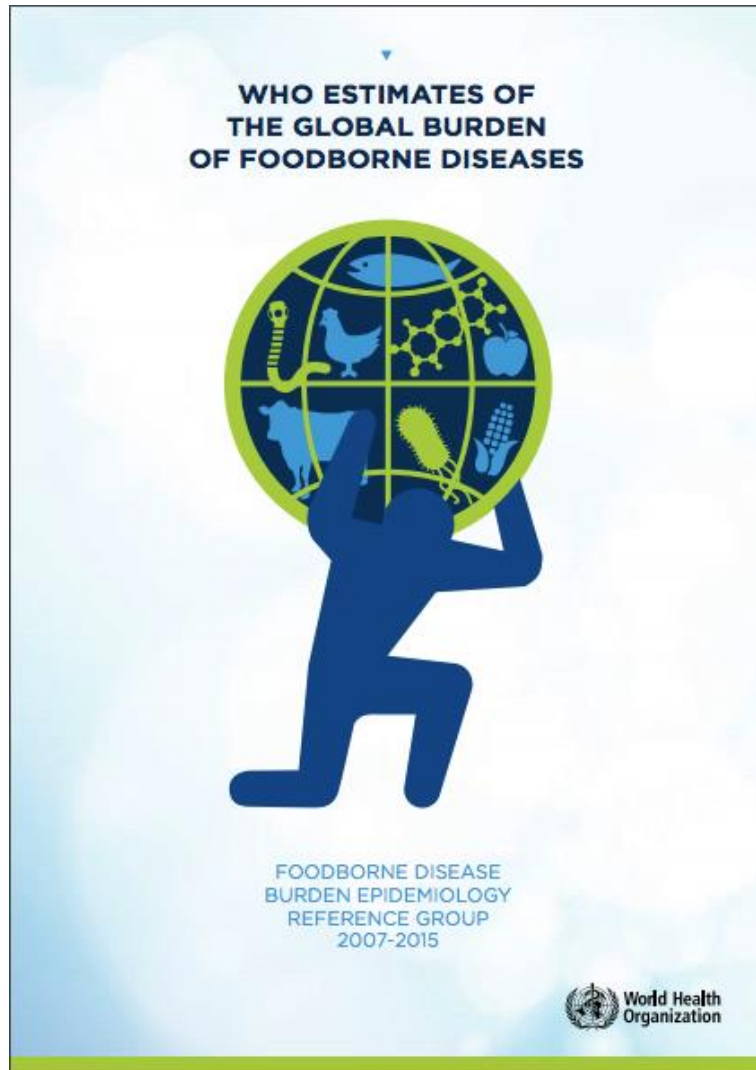
# What is it?



**Complementary feeding:**  
solid food introduced at 6  
months of age (addition to  
breastmilk)

**Complementary food  
hygiene:** hygienic prep.,  
storage, and feeding of  
complementary foods

# Why is it important?



- Global loss of 33 million DALYs due to food borne disease in 2010 (FERG, 2015)
- 70% of all global cases of FBD occur in sub-Saharan Africa and South/South East Asia
- **40% of the burden falls on children under 5 years of age**

# Why is it important?

Diarrhoeal disease agents were the main cause

Contamination in some contexts higher in comp. foods than in drinking water.

(Barrell and Rowland, 1980; Imong et al., 1989; Henry et al., 1990; Motarjemi et al., 1993; Lanata, 2003; Kung'u et al., 2009, Sheth et al., 2000)



# What are we doing about it?

## Guidelines

WHO Food Safety Department global guidelines

### Five Keys to Safer Food:



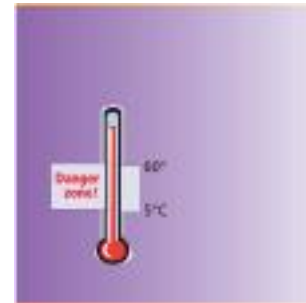
Keep clean



Separate raw  
& cooked  
food



Cook  
thoroughly



Keep food at  
safe  
temperatures



Use safe  
water & raw  
materials

# What are we doing about it?

## Policies & programmes

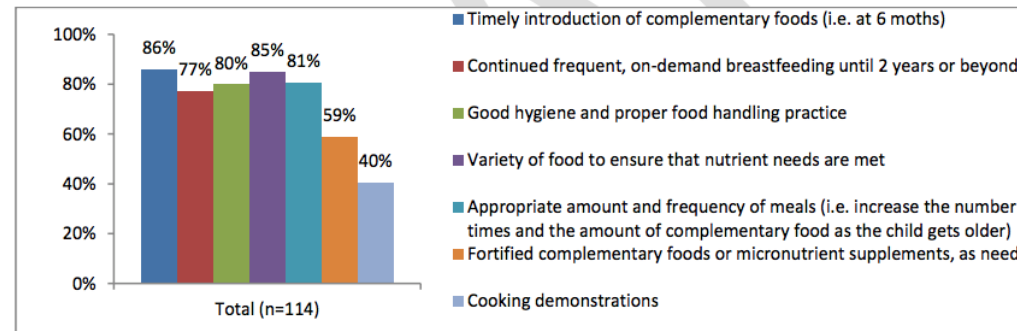
### Nutrition sector?

- Complementary feeding counselling programmes

### Multi sectoral approach encourages

- Include 'good hygiene and proper food handling' component
- Most countries do have a programme, including hygiene component ([WHO-led nutrition policy review](#))
- Unclear what this specifically entails, and how successful it is.

Figure 35. Components of complementary foods counselling in 114 countries providing detailed information



WORLD HEALTH ORGANIZATION  
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# Effect of CFH interventions







# Reducing food contamination



- **Hazard Analysis and Critical Control Point (HACCP)** approach
- **Mali study:** Small-scale hygiene intervention in peri-urban Bamako (Touré et al 2013)
- **Bangladesh study:** Replicated in different setting (rural Matlab) (Islam et al 2013)
- **Outcome of interest:** food contamination levels
- **Results:** Both studies effectively reduced contamination of complementary foods

# Improving food hygiene behaviours

## Nepal study

Food  
hygiene  
behavior  
intervention  
in rural area

Gautam, 2017



# Results

- After the intervention, **43%** of mothers practiced the 5 key behaviours (2% at baseline)
- Intervention **significantly improved** microbiological indicators in complementary foods



Credit: Om Prasad Gautam



# Measuring health outcomes

- **Gambia trial:** adapting Nepal intervention to different context using a low-intensive approach
- **Malawi trial (ongoing):** Hygienic family intervention in rural southern Malawi
- **Kenya trial (ongoing):** Safe Start – targeting caregivers in peri-urban Kisumu

