

## Adoption of good manufacturing practice in caterings at Queen Sirikit national institute of child health

P. Artitdit<sup>1\*</sup>, S. Ratanachu-ake<sup>2</sup>, S. Ratanapumpapin<sup>3</sup>, P. Lerdtanapijit<sup>1</sup>, A. Peratanakul<sup>1</sup>, J. Runglerdkriangkrai<sup>4</sup>

<sup>1</sup>Department of nutrition and dietetic, <sup>2</sup>Department of Pediatrics, <sup>3</sup>Department of dentistry, Queen Sirikit national institute of child health, Bangkok, Thailand. <sup>4</sup>Department of fishery products, Kasetsart University, Bangkok, Thailand. \*Corresponding author: aodpaponpat@hotmail.com

### Abstract

Food safety has become a significant role to solve outbreaks of foodborne illness. Good manufacturing practice (GMP) involves the use of hygienic practice to prevent food contaminations. Therefore, hospital foodservice needs to adopt GMP to ensure the safety of food production. This objective was investigated the adoption of GMP in 2 catering (milk supply and food service) at Queen Sirikit national institute of child health. This program was conducted from April-September 2013. Each catering was surveyed location area, structure system and production flows. All staffs were trained and monitored into hand washing, cleaning and sanitation programs, proper-facility and equipment-maintenance. Samples of milk (n=24), food (n=24), food handlers (n=24) and utensils (n=30) were analyzed to identify microbiological safety. An assessment of GMP was carried out by a checklist at the end. The structures, facilities and utensils of caterings were reformed. Each step of production was controlled to prevent the risk of contaminations. The heating temperature (>70°C /30 min) of milk and food was controlled and monitored every batch. This condition was demonstrated the absence of pathogens (*Staphylococcus aureus*, *Listeria monocytogenes*, *Vibrio cholera*, *Salmonella spp*, *Bacillus spp* and *Escherichia coli*). In terms of hygienic training, it was effective to improve in sanitary behavior. *Escherichia coli* was found less than 10 cfu/ml (3.3%) from utensils and not isolated from handler's workers. Both caterings were achieved to meet the regulations of GMP that was intended to develop the food safety system in hospital. Infant and children patients can be sure to consume meals served.