

Light-Touch Intervention on Hygiene Practice to Improve Pork Safety in Cambodian Traditional Markets

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Problem statement

Pork sold in Cambodian traditional markets is often exposed to poor hygiene conditions, increasing the risk of foodborne pathogen contamination, such as *Salmonella*, *E. coli*, *S. aureus*, etc.,

This study evaluated hygiene improvements using TBC and *Salmonella* indicators through a randomized controlled trial in 24 markets (a total of 360 pork vendors, control = 180; trial = 180), across six provinces in Cambodia in 2022. The intervention included vendor training and provision of hygiene equipment, followed by pork sampling, veterinary observation and KAP assessments.

The solution/Innovation



Key intervention for safer pork at tradition market in Cambodia (This picture was generated from AI using 4 keywords and command from original text, by Chea Rortana, NAHPRI, GDAHP)

Key results/impacts

1- The intervention contributed to the reduction of the total bacterial count in pork by 0.58 log CFU/g in trial vendors compared with control vendors.

2- *Salmonella* prevalence in pork samples was lower 17.8% in the trial vendors (17.8%) compared to the control vendors (11.7%).

3- Pork retailers in the intervention group showed significant improvement in food safety knowledge, attitudes, and hygiene practices.

Trial retailers:

- 84% of the trial retailers had a good knowledge of safe meat handling compared to the control group (44%)
- The KAP scores of retailers in the intervention significantly improved.

Trial: Vendor who get our incentive and used

Control: Vendors who practices and operate their selling as usual



Changes practice among Vendors who practices and operate their selling as usual (photo: Chea Rortana, NAHPRI, GDAHP)

Scalability and regional relevance

- The low-cost intervention (i.e., training and hygiene tools) can be easily scaled to traditional markets across Cambodia.

- The approach is suitable for low- and middle-income countries with informal food markets.

- Combining training, incentives, and veterinary oversight can improve pork safety across Southeast Asia.

Partners and donors involved

- National Animal Health and Production Research Institute (NAHPRI), General Directorate of Animal Health and Production
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- Uppsala University, Sweden
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