# EVALUATION OF EFFECTIVENESS IN HAZARD ANALYSIS CRITICAL CONTROL POINT TRAINING FOR FOODSERVICE OPERATORS IN TAIWAN

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#### **ABSTRACT**

ESTIMATED NUMBER OF OUTBREAKS IN FOOD POISONING IS OVER 100 PER YEAR IN TAIWAN AREA. STATISTICAL ANALYSIS AMONG 592 OUTBREAKS OF FOOD POISONING THROUGH 1996 WITH 1998 IN TAIWAN AREA INDICATED THAT THE INTER-CONTAMINATION OF COOKED FOOD BY RAW MATERIAL (210 OUTBREAKS), THE DEFICIENCY IN COOKING TEMPERATURE OF FOOD (125 OUTBREAKS), AND THE TIME OF COOKED FOOD PLACING IN ROOM TEMPERATURE LONGER (103 OUTBREAKS). THESE OUTBREAKS HAVE RELATIONS WITH THE DEFICIENCY IN KNOWLEDGE, ABILITIES AND FOOD SAFETY ACTIVITIES OF FOODSERVICE OPERATORS. TO PREVENT FOODBORNE DISEASE, IMPLEMENTATION OF A HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP) SYSTEM IN FOODSERVICE OPERATIONS HAS BEEN RECOMMENDED BY THE FOOD AND DRUG ADMINISTRATION (FDA). ALSO IT HAS BEEN REGULATED IN FOOD SANITATION LAW IN TAIWAN. THE PURPOSE OF THIS STUDY WAS TO CONDUCT AND ASSESS THE EFFECTIVENESS OF FIVE DAYS HACCP TRAINING FOR 165 FOODSERVICE OPERATORS IN THREE LOCATIONS IN TAIWAN AREA. THE "POST-THEN-PRE" METHOD ALLOWED PARTICIPANTS TO RATE THEIR POST- AND PRE-TRAINING KNOWLEDGE AND ABILITY REGARDING THE HACCP SYSTEM AS WELL AS THEIR CONFIDENCE ABOUT IMPLEMENTATION OF FOOD SAFETY ACTIVITIES IN THEIR OPERATIONS AT THEIR CONCLUSION OF THE TRAINING. PAIRED T-TESTS ANALYZED DIFFERENCE IN MEANS BETWEEN POST- AND PRE-RATINGS WAS USED. THE RESULTS INDICATED THAT 165 PARTICIPANTS GAINED SIGNIFICANT (P=0.0001) HACCP KNOWLEDGE, ABILITY AND FOOD SAFETY ACTIVITY DURING THE TRAINING. THE GREATEST MEAN DIFFERENCE BETWEEN POST- AND PRE-RATINGS WERE IN PARTICIPANT'S KNOWLEDGE ABOUT HACCP SYSTEM, IN ABILITY ABOUT IMPLEMENT A HACCP SYSTEM, IN FOOD SAFETY ACTIVITY ABOUT USE A NUMERICALLY SCALED THERMOMETER TO CHECK TEMPERATURES OF POTENTIALLY HAZARDOUS FOODS (PHF) WHEN THEY ARE RECEIVED AND REJECT PRODUCTS NOT AT 7 OR -18 , AND IN COURSE ABOUT UNDERSTANDING IMPLEMENTION OF HACCP SYSTEM IN FOODSERVICE OPERATION NOT ONLY IN TAIWAN. HACCP TRAINING CAN BE EFFECTIVE, BUT FIVE DAYS OF TRAINING MAY BE INADEQUATE TO ENABLE FOODSERVICE OPERATORS TO COMPREHEND THE SYSTEM COMPLETELY.

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