

식품안전 선진국의 HACCP제도 및 지원시스템 현황

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세계 식품안전시스템의 변화



Evolution of Global Food Safety System under the United Nations

1945	Food and Agricultural Organization (FAO)
1947	General Agreement on Tariffs and Trade (GATT)
1948	World Health Organization (WHO)
1963	FAO/WHO Codex Alimentarius Commission (CAC)
1994	Agreement on Applications of Sanitary and Phytosanitary Measures (SPS)
1995	World Trade Organization (WTO)
1997	Codex Document on HACCP principles and application





NAS Recommendation

- US National Academy of Sciences (NAS, 1985)
- From an inspection mode
 - based upon infrequent plant inspections using only subjective organoleptic tools
- To an audit mode
 - based upon a review of continuous HACCP records including verification records typically based on objective measures





선진국의 HACCP 제도





미국의 HACCP 제도(1)

- Meat and Poultry Products
- USDA, 1996
- Slaughter/packing and further processing plants
- Live animals enter one end of the slaughter plant, raw products exit the other end
- Control of the safety implemented farther down the Farm to Table chain
- Reduction of Salmonella not control





미국의 HACCP 제도(2)

* Seafood HACCP (FDA, 1997)

- Requirement of sanitation standard operating procedures (SSOPs)
- Potential and necessary controls that could be implemented during the harvesting and transportation of seafoods are specifically exempted
- not cover most hazards associated with non-fishery ingredients
- not cover the hazard associated with the formation of Cl. botulinum toxin in low acid canned foods (LACF) or shelfstable acidified foods
 - □ LACF regulation (21 CFR 113) and the acidified foods regulation (21 CFR 114)





미국의 HACCP 제도(3)

*Juice HACCP, 2001

- Production of fruit and vegetable juices
- A stepwise implementation depending upon the size of business
 - □ Effective dates; 2002/ 2003/2004
- The 5-log pathogen reduction must
 - □ be accomplished for the microbe you identify as the "pertinent microorganism," which is the most resistant microorganism of public health significance, e.g., *E. coli* O157:H7
 - be applied directly to the juice, except for citrus juices





미국의 HACCP 제도(4)

- Non HACCP regulations
 - □ Pasteurized Milk Ordinance (PMO), 1923
 - □ Low Acid Canned Foods (LACF), 1973
 - □ Current Good Manufacturing Practice (cGMP), 1973
- Voluntary HACCP Program
 - □ Land Food, Dairy Food





캐나다의 HACCP 제도(1)

- Food Safety Enhancement Program (FSEP)
 - a mandatory Program in all federally registered meat and poultry establishments and storages
 - □ a voluntary Program for some foods
- Regulatory system audits conducted by CFIA
 - audits are consistent with the International Organization for Standardization (ISO) approach to auditing





캐나다의 HACCP 제도(2)

- Quality Management Program (QMP)
 - a regulatory-based system that requires all federally registered fish processing plants in Canada to develop and implement an in-plant quality control program
 - □ a mandatory program, 1992
- On-Farm Food Safety Recognition (OFFSR) Program
 - □ a key program in support of the "Food Safety and Food Quality" element of the Agricultural Policy Framework
 - technically based on HACCP, internationally accepted food safety control system





유럽연합의 HACCP 제도

- Food Hygiene Laws
 - □ Regulation (EC) No 852/2004 on the hygiene of foodstuffs
 - Regulation (EC) No 183/2005 laying down requirements for feed hygiene
- Request food and feed businesses to implement and maintain procedures based on the seven HACCP principles





영국의 HACCP 제도

- Food Standards Agency (FSA)
- Require HACCP-based 'Own Checks' controls to be in place
- Establishments to document procedures
 - Identification of critical points
 - Monitoring arrangements
 - □ Sampling regimes
- Legal requirement for all food businesses (except primary producers) to put in place, implement and maintain a permanent procedure or procedures based on food safety management (HACCP) principles (2006.01.01)





뉴질랜드의 HACCP 제도

- Voluntary HACCP since the early 1990s
 - □ slow not until 1994
 - driven by increasing consumer awareness in food safety
- Mandatory HACCP
 - □ Risk Management Programmes (RMP)
 - □ Animal product
- A check-list
 - □ Pre-audit check-list
 - □ HACCP plan audit questionnaire





Food Safety Programmes (FSP)

- Processed Food and Retail Sale
- A written programme designed to manage food safety
- Currently voluntary
- To be approved by the New Zealand Food Safety Authority (NZFSA)
- To be audited by a NZFSA auditor contracted by you
- Based on the Hazard Analysis Critical Control Point (HACCP) System and be exempt from the Food Hygiene Regulations 1974
 - applicable to any size and type of food business





선진국의 HACCP시스템 지원현황





캐나다의 지원 시스템

- Provide tools to assist the processor in understanding the requirements
 - worked closely with industry, associations and institutions
- Allow the processors to develop a HACCP system to fit their operations
 - increase ownership and lead to more effective implementation





유럽연합의 지원 시스템

- Better Training for Safer Food
 - a new initiative of the Commission aimed at organizing a Community (EU) training strategy in the areas of food law, feed law, animal health and animal welfare rules, as well as plant health rules
 - designed for all staff of competent authorities of Member States and third countries
 - up-to-date with all aspects of Community law in the areas and ensure that controls are carried out in a more uniform, objective and adequate manner in all Member States
- Training Courses on HACCP
 - □ HACCP training at Community level within the Better Training for Safer Food initiative





Guides to Good Practice

- Article 7 of Regulation (EC) 852/2004 on the hygiene of foodstuffs
- The development, dissemination and use of both national and Community Guides of good hygiene practice and the application of HACCP principles
- Used on a voluntary basis by food business operators





영국의 지원시스템

- Good hygiene practice for industry
- A "tool kit" of guidance materials and supporting materials on different approaches to HACCP
 - recognizing the diversity/ no "one size fit all" solution
- Safer food, better business (SFBB)
 - an innovative and practical approach to food safety management
 - □ two different SFBB packs
 - one for small catering businesses and one for small retail businesses
- Training on SFBB tool kit
 - local authority officers and those nominated by local authorities





Model for SMEs

- Small and Medium Enterprises (SMEs)
- Limited application of HACCP in SMEs
- Model for reducing burden of HACCP
 - Build on existing good practice
 - □ User friendly
 - ☐ Good Hygiene Practice (GHP)
 - □ Focus on the true number of CCP's
 - Reduce record keeping
 - □ Ease verification





뉴질랜드의 지원 시스템

- Food had to be made in premises that were registered and inspected by local authority Environmental Health Officers.
 - □ Food premises were inspected for compliance with the Food Hygiene Regulations 1974.
- Premises that operate an approved Food Safety Programme are not required to register with, or be inspected by, the local council.
- An independent NZFSA approved auditor must audit the business on a predetermined frequency.





Food Safety Training

- Anyone who handles food at any point in the food chain should receive food safety training relevant to the food business they are employed in.
- New Zealand Qualifications Authority (NZQA)
 - □ National Qualifications Framework (NQF)





국내 HACCP 제도 지원 방향





국내 HACCP 제도 개선 시사점

- 교육 프로그램 개발
 - □ 관련 공무원/auditor
 - □ 전문성 및 현장감 부족으로 인한 적용 기준이 달라질 수 있는 문제 해결
- 업체 특성에 맞는 HACCP 모델 개발 및 교육
 - □ 중소기업/판매업 등
- HACCP auditor 양성
 - □ 지정 및 사후관리 업무 담당 심사원 인력 확보
 - □ 인력의 양적 확대, 교육프로그램 강화를 통한 전문인 력 정예화





HACCP 지원사업단 운영

- 인증기관
 - □ HACCP에 대한 기술지도와 지정
- 인정기관
 - □ 민간심사원/심사기관 인증 업무 병행
- 지정 업무 역량 강화 인증프로그램 개발
 - □ 민간 심사원/기관 양성 자격
 - □ 지정 및 사후관리 업무 담당 심사원 인력 확보 및 전 문성 부족 해결
- 교육프로그램 활성화
- 독립기관으로 확대 운영





Food Safety Standard

Safe and High Quality Foods

