Hybrid training for quality assurance and food safety programs designed for small-scale food processors and distributors

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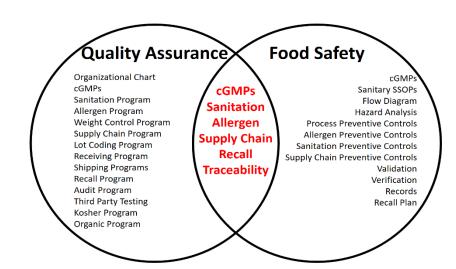






Problem Statement / Issue Definition:

- Quality assurance and food safety programs overlap
- Many small-scale processors can benefit from enhanced understanding of these overlaps
- Certificate training courses (PCQI, BPCS) are targeted to managers and supervisors and may not address the training needs of many in the industry
 - Limited availability of Spanish courses due to limited bi-lingual instructors
- Small and very small businesses prefer an online option for training
- Hybrid (online and in-person) courses have been shown to be as effective in learning outcomes as strictly in person instruction



















Approach / Methods:

Goal: Development of a hybrid training program on basics in quality assurance and food safety programs

 Online course Supplementary in Preventive General Regulatory Controls cGMPs Food person workshops Overview for Human Safety Food Rule ood regulation Personal hygiene Physical narards primer Exemptions For employee Sanitary facilities and controls **Foundational** Chemical hazards training programs: Rules of FSMA Spanish translation

Biological hazards

Products and

associated

hazards

Outbreak case

studies

Sanitary operations Dairy Regulations **Equipment and** utensils Low acid and acidified foods Process controls **Cottage Food** Training Laws requirements

Validation Hazard and **Analysis** Verification Defining validation and verification Hazard definitions Qualified Facility documentation In depth requirements Gathering data **Fully** covered Example of facilities validation study

Quality Control Micro ΕM testing and **Programs** Assurance Target organisms Types of EM Introduction Microbial limits Preliminary steps and criteria Tools and charts Pathogen EM Sampling plans











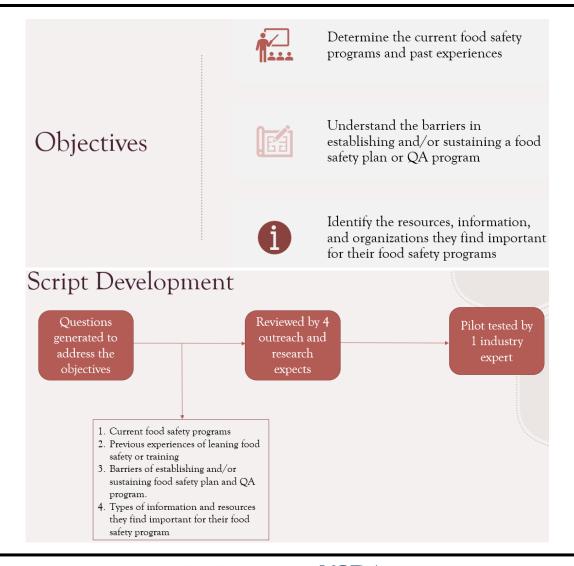






Results / Outcomes:

- Module development
 - Learning outcomes, PowerPoint presentation, scripts, supplementary handouts, recordings
- Interviews and evaluation
 - IRB approval
 - 20 interviews
- Translation
- Integration into Moodle 2023



















Results / Outcomes:

Perception of In-Person vs. Online Training

| | · · · · · · · · · · · · · · · · · · · | | |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| | In-Person | Online | Hybrid |
| Pros | Highly preferred Visually infer for understanding Provide demonstrations, realworld examples, & connections Better concentration and grasp of information Efficient | Convenient More accessible Larger reach Information verified No time or travel restrictions | Can fix current problems Save time Don't need to come in everyday |
| Cons | Time and travel restrictions Loss of production Distractions Less details Boring | Lacks interactions Few resources Internet problems Expensive Monotone Distractions No communication or questions | Expensive Internet problems |

Challenges of Food Safety Training



95% of the interviewed processors had ESL employees 45% of those did not offer training in another language













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