



Good Hygiene Practices compliance and traceability training

Control of Operation

November 2015



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General Objectives:

Mung bean collector, processor and exporter should ensure the safety of beans for sprouting by:

- Operating the business with respect to raw material, processing, and distribution.
- Designing, implementing, monitoring and reviewing the operation system.

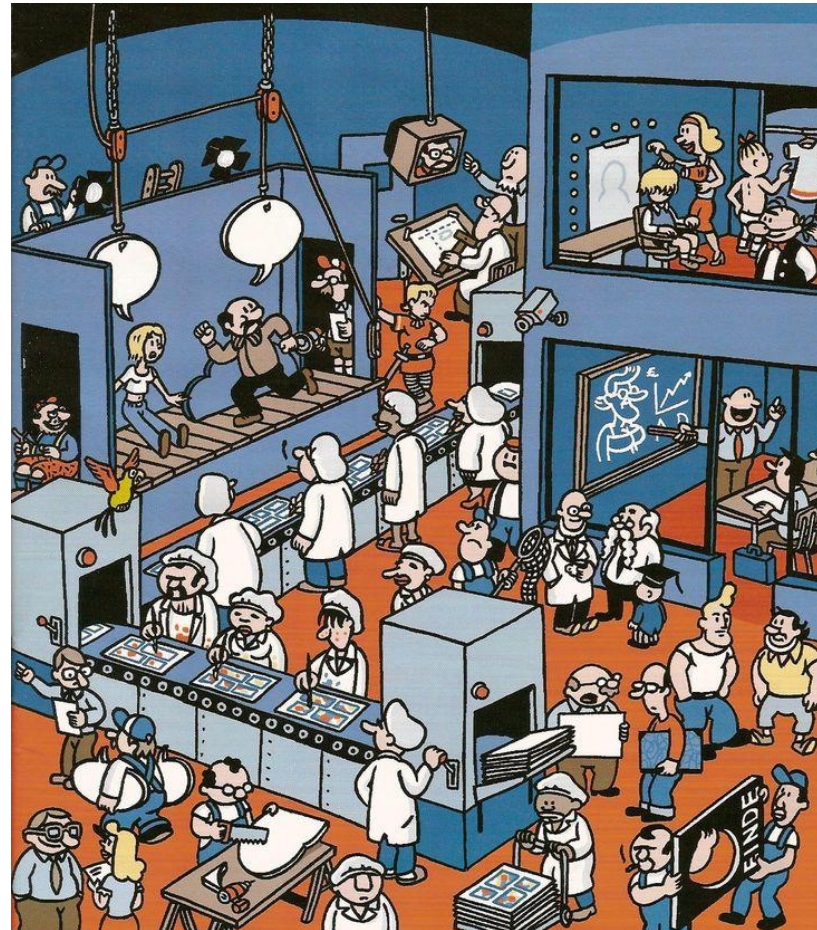


Food Safety Risks Might Present In A Mung Bean Parcel

- **Injury causing:** glass, stones, metal, plastic, wood, and etc.
- **Sick causing:** infection with microbes, fungus, residues of agrochemicals, heavy metals, and etc.
- **Fatal:** poisoning by metabolic products produced by certain fungus or microbes



How to Ensure Food Safety During Operation?





Ensure Food Safety Through A Systematic Way

- Identify any steps in the operations that are critical to the safety of food
- Implement effective control procedures at those steps
- Monitor control procedures to ensure their continuing effectiveness.
- Review control procedures periodically, and whenever the operations change.



Identify Critical Steps During Operation

Step 1. Assemble a team

Step 2. Describe the product ----- Mung beans intended to export to Europe for sprouting

Step 3. Construct flow diagram ----- What's the operation procedures from product in till product out? What equipment/material is used?

Step 4. On-site confirmation of the flow diagram

Step 5. Analyze the flow diagram and list all steps/points that potential safety risks might be introduced to food.



Key Aspects of Food Safety During Mung Bean Handling (1)

Incoming raw material

- Collectors and Processors/Exporters should not accept a parcel of mung bean if it is known to contain parasites, undesirable micro-organisms, pesticides, toxic, decomposed or extraneous substances which would not be reduced to an acceptable level by normal sorting and processing.



Key Aspects of Food Safety During Mung Bean Handling (2)

Storage for raw material and end product

- Allocate certain area for each batch, label clearly to prevent mix and cross contamination.
- Store raw material and end product separately
- Store beans for sprouting and for processing separately
- Storage area should be dry and clean, no access to birds and rodents
- Everything should be stored indoor, rain water and direct sunshine is not allowed





Key Aspects of Food Safety During Mung Bean Handling (3)

Packaging

- Packaging and material should provide adequate protection for beans to minimize contamination, prevent damage, and accommodate proper labelling. Packaging materials should be non-toxic and not pose a threat to the safety and suitability of beans under the specified conditions of storage and use. Where appropriate, packaging should be cleaned and disinfected.





Key Aspects of Food Safety During Mung Bean Handling (5)

Direct contact with beans

Avoid direct contact with beans as much as possible





Key Aspects of Food Safety During Mung Bean Handling (6)

Transportation – internally and externally

The conveyances, lifts and vehicles should be designed and constructed so that :

- They do not contaminate the beans and packaging
- Can be effectively cleaned and, where necessary, disinfected.
- Can effectively maintain the temperature, humidity, atmosphere and other conditions necessary to protect beans from harmful or undesirable microbial growth and deterioration likely to render it unsuitable for sprouting.

