House names

Food for life

- Everybody expects the safe and suitable food
- Food safety and wholesomeness has concern to humankind since the dawn of history
- Growers, manufacturers, food handlers, government, consumers have responsibility to assure food quality

Food safety and quality?

Assurance that food will not cause harm to the consumer when it is prepared and/or eaten according to its intended use
What is Halal?

**Halal & Food Safety/HACCP**

- He hath forbidden you only carrion, and blood, and swine flesh, and that which hath been immolated to (the name of) any other than Allah....
- Al-Baqara Verse 173

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**What is Halal?**

- Halal means permissible and lawful
- It is a standard for dietary law for Muslims
- Halal requires the food and food product clean and wholesome
- It applies not only food but also on cosmetics and pharmaceuticals products

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**Halal consumer perception**

- Halal labeling provides adequate information about the products to make the right personal choice

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Traditional food safety systems

Safe food = GMP + GHP

*These practices are necessary*

But do you think these are sufficient?

Good manufacturing practices

- To keep the food free from contaminants
- Emphasize on personal hygiene
- Educations and trainings
- Pest control and maintenance
Good hygiene practices

Conditions and measures necessary to ensure the safety and suitability of food at all stages of the food chain

Food safety-sources of contamination

What is HACCP?

- A preventive system for assuring the production of safe food products

  *Objectives*

  - To make a safe product
  - To be able to prove it
What is HACCP?

HACCP provides a **scientific** and **systematic** approach to assure safety of food from raw material to finished product by means of **identification**, **evaluation** and **control** of significant hazards.

How HACCP works?

- **Address three hazards**
- **Biological**
- **Physical**
- **Chemical**

- Emphasis on microbiological issues
- Metal fragment (Physical) – one consumer
- E. coli in meat – many consumers

Why HACCP?

- **Need for hygiene requirements** (control measures) specific to food and process and their associate potential hazards
- Prioritizing control measures
- Need for ensuring that essential measures were correctly implemented and carried out
- Need for planning of corrective measures in case of failure
- Need for monitoring the process parameters to be able to control safety at all times
It happens in HACCP

- Identification of potential food safety problems
- Determination of how and where these problems can be prevented
- Description of what to do and training of the personnel
- Implementation and recording

First five steps to implement HACCP are
- Development of HACCP team
- Product description
- Intended use identification
- Process flow diagram construction
- On site verification of flow diagram

HACCP principles
1. Conduct a hazard analysis
2. Determine the CCP
3. Establish critical limit(s)
4. Establish a monitoring system
5. Establish corrective actions
6. Establish verification procedures
7. Establish documentation
HACCP is the most important part of various Global Quality Management Systems.

**Key messages delivered**

- Safe food is obtained by applying HACCP "from farm to fork".
- Hazards are all kinds of agents when present at unacceptable levels.
- Control means "having things under control".
- Good Manufacturing Practice (GMP) and Good Hygienic Practice (GHP) are the basis of HACCP.

**HACCP-Halal principles**

Similarities between Halal-HACCP standards are based on the major common principles and even the objective of both standard is same "Safe wholesome food"
Halal food requirements

Production of Halal products requires certain requirements to meet the criteria of term "Halal"

- Raw materials
- Additives
- Process
- Handling
- Transportation

Halal principles

1. Standards of Halal management and Halal system
2. Standard audit of Halal system
3. Halal Control Point (HCP)
   - Identify and assess all Haram materials
   - Identify the Halal critical control points
   - Establish the monitoring procedures
   - Establish corrective actions
   - Establish a record-keeping system
4. Halal guideline
5. Halal database

Halal control points

HCP = Halal Control Point
A point, step, or procedure in a Halal food manufacturing at which control can be applied and, as a result, Halal food cross contamination hazard can be prevented or eliminated

HCCP = Halal Critical Control Point
A point, step, or procedure in a Halal food manufacturing at which control can be applied to prevent or eliminate the hazard (haram) otherwise it will result a critical failure
It is important to understand that Halal Control Points and Halal Critical Control Points may be added in addition to Control Points and Critical Control Points of an existing HACCP program.

Total Quality Management

HACCP
Food Hygiene
ISO & Halal
Halal Critical Control Points in a Halal-HACCP standard should be monitored same as CCP's in a HACCP program.

Failure of HCCP in a Halal-HACCP production is a critical failure means rejection of the finished product.

Halal Control Points (Examples)

- Halal and non Halal ingredients should be segregated or stored in dedicated areas
- Cases of Halal certified food product should not be placed with non-Halal food product cases on same pallet

- Processing of Halal product without acceptable cleaning after production of non Halal product and results in a cross contamination
- Addition of non-Halal ingredient (Lard, Non Halal Gelatin) in Halal product during prep or processing
- Rework of non-Halal product in Halal product during processing
First five steps
- Assemble HACCP/Food Quality Team
- Discuss description of Halal products
- Identify intended use
- Construct flow diagram
- On-site verification of flow diagram

Seven principles
1. Identify all possible hazards and analyze those hazards
2. Determine Halal Critical Control Points in addition to existing HACCP CCP’s
3. Establish control measures
4. Establish a monitoring system for Halal CCP’s
5. Establish corrective action for deviations that may occur
6. Establish verification procedures
7. Establish record keeping and documentation including the disposal of product after failure of a Halal CCP’s

Suggested documents
- Product description and ingredients specifications
- Halal – HACCP flow chart form
- Hazard analysis form
- Halal CP’s and Halal CCP’s decision form
- Monitoring and corrective action form
**Halal & HACCP could be common**

**Suggested documents**
- Record keeping and verification form
- Validation form
- Halal-HACCP summary form
- Additional forms - as necessary for various types of food processing operations

**Halal & HACCP similarities**
- Compliance through Systems Approach – GMP/GHP are integral part*
- Preventive in nature*
- Based on holistic approach – not a stand alone*
- Contaminants (Microbial, Physical, chemical + Haram ingredients)
- Halal ingredients and packaging
  (* common)
Halal & HACCP similarities

Controlled process
Sanitized environment
Cleaned equipment and consumables
Halal trained operators
Good health of employees

(* common)

Halal CCP's (HCCP's)

Based strictly on Halal vs haram (permissible or not)
Presence of hazard will result a failure similar to presence of an allergen in allergen prevention program
Failure will result all products unacceptable (Manufacturer may re-label as non Halal or dispose it)

HACCP CCP's (CCP's)

Based on food safety requirements
There is a control range and out of limit will result a failure of the system
Operator can use measures to bring product within acceptable range and out of range product reworked, salvaged or disposed

Knowledge concerning the likelihood of the presence of hazards in raw materials is the basis of any Halal and HACCP system
Flow diagram for Halal certification

1. Food formula arrives for review
2. Look for alcohol origin ingredient have been used
3. Alcohol
4. Look for animal origin ingredient have been used
5. Animal
6. Halal certificate

HCPs in meat and poultry processing

1. Halal animal
2. Holding under humane conditions
3. Stunning
4. Muslim slaughter person
5. Slaughter with sharp knife
6. Slaughtered in front side of neck cutting all passages
7. Post slaying treatment
8. Halal carcass
9. Deboning
10. Meat cuts
11. Packing/Labeling

Further processed meat products

1. Meats
2. Clean equipment
3. Mixing/Coating
4. Non meat ingredients
5. Forming/filling
6. Casings
7. Packaging/Labeling
8. HCP-1
9. HCP-2
10. HCP-3
11. HCP-4
12. HCP-5
13. HCP-6
14. HCP-7
15. HCP-8
16. HCP-9
HCPs for a conventional process for extracting enzymes from animal organs

HALAL & FOOD SAFETY/HACCP

HCPs in Bread making

HALAL & FOOD SAFETY/HACCP

Impact of Halal-HACCP standard program on facility audit

- The application of Halal-HACCP standard can aid Halal inspection by providing higher level of confidence to auditor during inspection process
- A strong Halal-HACCP protocol can prevent accidental contamination of process lines and products that could make the process and product unacceptable
There should be a strong platform consists on influential meat exporters to convince the FDA and USDA authorities about Halal-HACCP commonality in meat processing plant.

HACCP team of any processing plant can easily incorporate Halal CCP and Halal control points in an existing HACCP program without the need of a separate program.

Development of a Halal-HACCP standard is strongly suggested for those food processing operations where Halal and non-Halal products with objectionable ingredients are processed in the same area or equipment.
All Global Halal Certification bodies should consider the inclusion of Halal-HACCP standard as a part of their Halal audit. Other Global Safety and Quality Management Systems can include this standard in audit process to help evaluate the commitment of a facility to produce safe quality Halal food.

Final thoughts

- Adopting a combination of Halal and HACCP standard is a powerful marketing tool for both the Muslim and non-Muslim food industries, as there is an increasing awareness of Muslims all over the world on their obligation to consume Halal food.

- Furthermore the Islamic awareness of Halal food is expanding worldwide especially in the non-Muslim countries.
- Halal-HACCP standard will help in minimizing the food safety issues, especially in high risk food processing operations.
Halal certification logo

Key message

- Halal food is a safest and wholesome food
- Demand of Halal food increasing globally
- Halal certification with HACCP becomes a vital combination for a vast market

HALAL FOOD CERTIFICATION
it brings the WORLD to You