



Food Manufacture

Internal Auditing

Lesson 3

Become competent in internal auditing in a food manufacturing environment.





When performing an audit if a problem is discovered the best way of dealing with it is to perform a root cause analysis.





A root cause analysis is the process of finding out what the root cause of the problem is. When this is discovered then an effective solution can be implemented.



The three principles of a root cause analysis are:

1. Find the root cause of the problem
2. Understand how to fix or deal with the problem/issues
3. Implement what you have learnt from the analysis to consistently prevent any problems /issues from occurring in the future



There are several different methods of performing a root cause analysis. Some popular methods are:

- 5 whys
- Change analysis/event analysis
- Cause and effect fishbone diagram





5 whys

This approach involves asking why a problem occurred, then for every answer ask an even deeper but, why?





5 whys example

1. Question – Why does your head hurt?
1. Answer – Because I have a bump on it.
2. Question – Why do you have a bump on your head?
2. Answer – Because I hit my head on a beam.
3. Question – Why did you hit your head on a beam?
3. Answer – Because the room had low ceiling beams.
4. Question – Why did the beam hitting your head hurt so much?
4. Answer – Because I wasn't wearing a helmet.
5. Question – Why weren't you wearing a helmet?
5. Answer – Because we didn't have enough helmets for all the staff in the department.
- Solution – Purchase more helmets





5 whys

The amount of whys asked can be as little or as much as needed to find the conclusion to the root cause.





Change analysis/event analysis

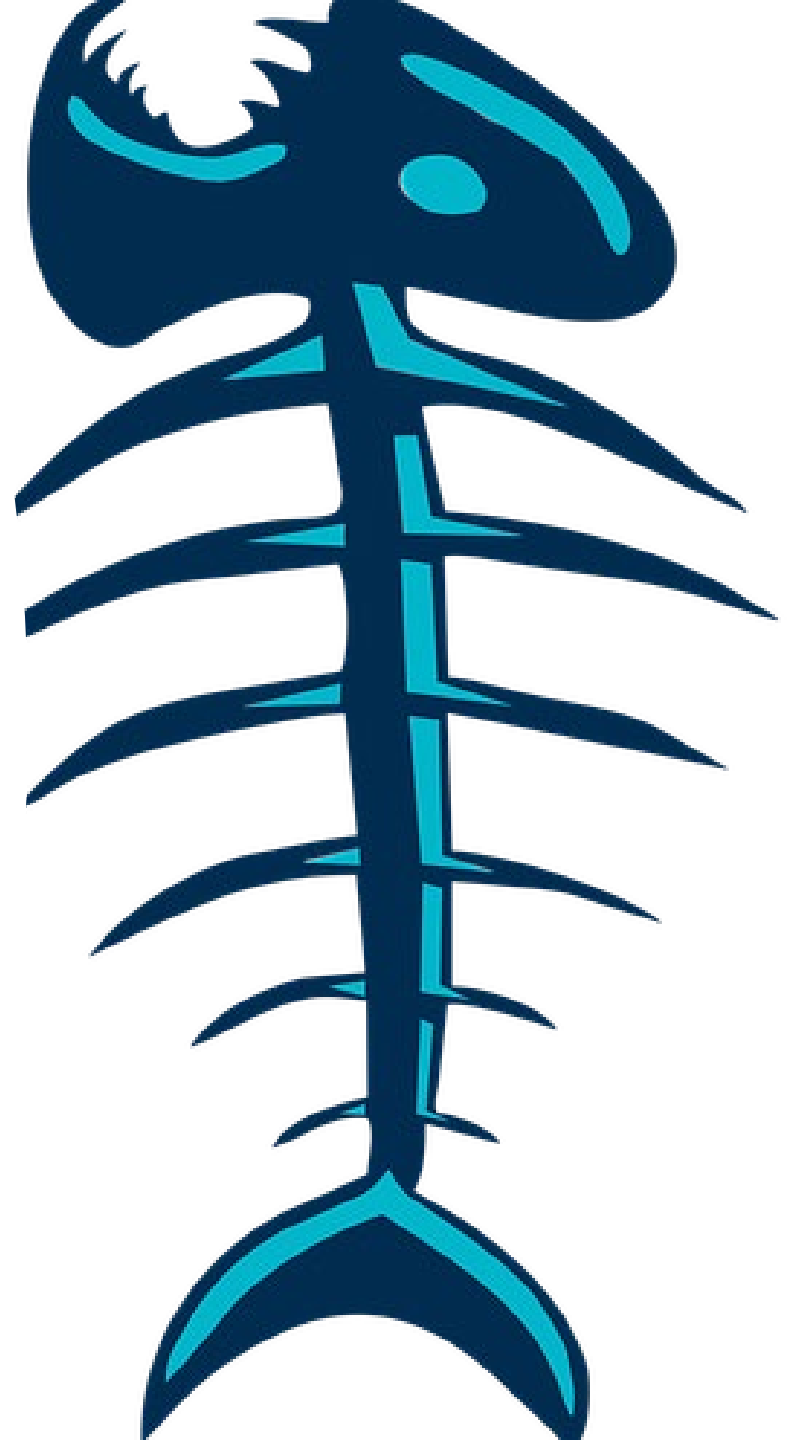
This method involves analysing in detail any changes that occurred leading up to the problem occurring. This is useful when the potential cause of the problem could be a number of reasons. Longer periods of time are analysed using this method.





Cause and effect fishbone diagram

This method is also known as Ishikawa diagram. The problem is written on a diagram in the spine of the fish then branches off the spine e.g. the bones of the fish are potential causes of the problem.





Cause and effect fishbone diagram

Some categories of potential causes are:

- Machinery
- Method/process
- People
- Materials
- Measurements
- Product
- Suppliers
- Maintenance





Cause and effect fishbone diagram

The category of potential causes are then investigated in depth to determine and eliminate causes. A root cause can then be found.



Revision Activity 3

List two types of root cause analysis?