Medical Surveillance of food handlers.

“We are what we eat”
One thing that we all have in common—we eat! And we eat every day. The Economic research service suggests that the average daily calorie intake increased by 24.5% between 1970 and 2000 in America and other developing countries—like South Africa. If our calorie intake has increased by 24%—it means that we are eating more—and a lot more. With our fast and modern lifestyle, we tend to eat out more—tend to stop for take-outs more. But do we consider what goes into producing the food that comes so readily to our table?
If we are what we eat and we are eating more food prepared by somebody other than our selves, shouldn’t we take a very good look at the people handling our food?

What is a food handler? A food handler is a person who, in their normal routine work, comes into contact with uncovered food not intended for personal use. Food includes water and any other liquid intended for human consumption. For our purpose a food handler is thus any person involved in the processing, production, manufacturing, packaging, preparation, sale or serving of any foodstuff including water and beverages.

According to the Occupational Health and Safety act—Medical surveillance is the planned program of periodic examination (which may include clinical examinations, biological monitoring or medical tests) of employees by an occupational health practitioner. With standard medical surveillance, we determine whether the hazard, identified during a risk assessment, is contained by means of administrative-or engineering control or by the use of personal protective equipment (PPE). With food handlers, the hazard is the food handler as he/she carries the pathogenic organisms.
We all know that medical examinations of workers are costly, and must be effective to justify the cost.
- With food handlers, medical examinations do not guarantee the detection of more than a small portion of carriers of pathogenic organisms. (There are more than 250 known food borne diseases, caused by Bacteria, viruses or parasites)
- Furthermore is the identification of a carrier not likely to contribute to the control of food borne diseases.
- Routine medical examinations of food handlers may also lead to a false sense of safety.

If the "normal" way of medical surveillance is not the way to go-what is the way to go?
According to the Dept of health the following strategy should be followed for the health surveillance of food handlers: The definition of health is “free from illness”, and the fact that the department focuses more on the health surveillance than medical surveillance indicates that the food handler must be "free from illness" not to pose a hazard to the public. The following principles are suggested:
1. Management commitment
2. Education and training
3. Health interviews
4. Reporting illness to management
5. Applying basic food handling practices
6. Applying basic personal hygiene practices

1. Management commitment:
This is always the tough one-this is also the stepping-stone or the cornerstone of a successful health surveillance program. If you get buy in from management, the greatest stumble block has been rolled away.
The hygiene of food during the processing, production, manufacturing, packaging, preparation, sale or serving -remains the responsibility of management and cannot be delegated to the food handlers.
Management’s commitment includes the following:

- **Engineering control**
  - Creating optimum hygiene conditions
  - Improving working conditions and product reliability

- **Quality control**
  - Implementing a quality program to ensure that only food of high quality leaves the premises
  - Responding to consumer complaints regarding hygiene

- **Administrative control:**
  - Employment of technical experts to advise on hygiene
  - Open discussion and reporting of hygiene problems by employees and quick response with corrective measures
  - Reassurance that food handlers will not suffer loss of pay/jobs if they report symptoms.
  - Develop mutual trust between food handlers and management—this can only be achieved if food handlers are empowered through proper training and education

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2. **Education and training:**

The following aspects are important:

- All employees must know and understand the basic principles of food safety and their own responsibility in this respect.
- Particular attention should be given to the need to report illness by food handlers.
- Managers must be aware that employees who have gastroenteritis or open lesions must be prohibited from handling food while symptoms persist.
- Practical and functional educational methods should be used, taken into consideration educational standards and literacy.
- Food handlers should be required to undergo a test of their knowledge of the subject.
- Refresher courses should be given periodically
- Training to be conducted by properly trained personnel.
- Training must also be extended to all levels of the business—from management, administrative staff, cleaners and all other personnel involved with food handling.
3. Health interview

A health interview is the completion of a questionnaire by the employee to assess the general suitability for work as a food handler. The following should be taken into account when setting up the questionnaire:

- Interview should take place before employment.
- Interview may be repeated under special circumstances—e.g., absence from work due to sickness.
- Questions should be directed in a manner to identify the excretion of organisms of importance to food safety.
- Medical advice can be sought if the interviewer feels that more detailed medical examination is needed.

- Recruits suspected of suffering from the following conditions will require a medical examination and if confirmed, be disqualified from being appointed as a food handler:
  - Chronic bronchitis with productive, purulent sputum
  - Widespread chronic skin conditions such as psoriasis or eczema, which make skin cleansing difficult and are often associated with secondary infection.
- Leadership as well as peers should, where possible, be part of the interview stage to strengthen mutual trust between staff members.

4. Reporting illness to management:

When it comes to reporting illness to management, management has as big a role to play in reporting as personnel. Management’s responsibility:

- Management should have a general knowledge of food borne diseases and their symptoms to ensure that employees suffering from it can be identified.
- Management should encourage employees to report to their supervisors whenever they have diarrhea, sore throat, fever, a cold or open skin lesions, or are jaundiced.
Which medical conditions disqualify a person temporarily from food handling?

- Infection of the eyes or eyelids
- Inflammation and or discharge from ears
- Oral sepsis
- Staphylococcal conditions—e.g. recurrent boils or open sores
- Recent history of gastrointestinal infection

What is the time frame from exclusion from work after a specific illness?

- Hepatitis A: 6 weeks from onset of jaundice
- Salmonella food poisoning, cholera, dysentery and typhoid: 3 consecutive negative stool specimens taken 48h apart.
- Parasite conditions: until successfully treated
- Staphylococcal and streptococcal: Until successfully treated
- All other gastrointestinal illnesses: until symptom free
- TB: 7 days from onset of effective treatment.

These measures are aimed to protect co-workers as well as the public from becoming infected.

5. Applying basic food handling hygiene practices.

Golden rules of hygiene food handling:

- Obtain basic foodstuff from a health-approved source.
- Cook food thoroughly
- Eat cooked food immediately or within 1 hour from preparation
- Store cooked foods immediately
- Reheat cooked food thoroughly and only once
- Cover and or seal cooked food during storing
• Do not thaw frozen food in hot/cold water for more than 6 hours
• Do not inflate food containers (plastic bags) by means of blowing in them by mouth.
• Avoid contact between raw and cooked food
• Keep all kitchen surfaces clean at all times.
• Use clean, running water to clean kitchen and utensils
• Waste foods must be properly disposed off.

6. Applying basic personal hygiene practices.
Managers should ensure that food handlers adhere to the following at all times:
• Hands should be washed and fingernails scrubbed in warm soapy water:
  ✓ Before food is handled
  ✓ After visiting the toilet
  ✓ After blowing the nose
  ✓ After smoking/eating
  ✓ Between handling raw /cooked food
  ✓ After handling any soiled objects-eg dustbin.
• Hands should be dried with a paper towel or hot air dryer-no communal towel!
• Finger nails: short & clean
• Hands: away from nose, ear, eye, hair during the time food is handled
• Finger: No licking while preparing food
• Cuts: covered with a waterproof dressing
• Overall: clean, washable, pale color which will show off dirt
• Hair: Kept covered to prevent dust and bacteria it contains to fall into food.
• Nose: never cough or sneeze over food
• Do not smoke, chew tobacco while preparing food
• No jewellery that can come in contact with food
• Clean of person: shower daily before commencing work. Soap and clean towels must be provided
Reference:

- *Occupational Health & Safety Act 85 of 1993*
- *Guidelines for the management and health surveillance of food handlers*-Department of health (2000)