



- · Necessity for personal hygiene
- · Health of staff
- · Personal appearance
- Sanitary practices
- · Habits
- · Protective clothing
- · Importance of rest, recreation and exercise

Personal Hygiene

INTRODUCTION

Microorganisms live in and on the human body and those that cause food-borne illnesses are present on the skin, in the nose and throat or in the gastro-intestinal tract. A chain of events links the human carrier of food poisoning bacteria to the food, either directly or indirectly. Once transmitted, the organisms may multiply in the food before it reaches the victim.

The strongest link in this chain of infection is humans. People are the greatest threat to the safety of food. This is because people are involved in food preparation at each and every stage it passes through. They carry microorganisms on their body even if they are not carriers or diseased.

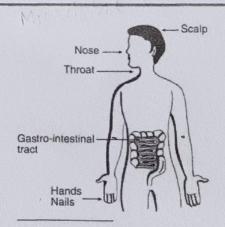


Fig. 15.1 Food handlers harbour microorganisms in and on their body

Only careful personal hygiene practices can prevent contamination of food and a conscious effort should be made by all food handlers to break this chain of infection. Good personal hygiene and good food service sanitation go hand in hand.

NECESSITY FOR PERSONAL HYGIENE

Personal hygiene is necessary for everybody but more so for food handlers because the health and well-being of hundreds of people is in their hands. A careless food handler could be responsible for the spread of an epidemic. It is the duty of every caterer to ensure that personal hygiene is a habit for all food handlers. The caterer is legally responsible for the wholesomeness of food supplied. It is also the moral obligation of every caterer to ensure that food is prepared and served hygienically. Sanitation codes call for a high degree of personal cleanliness for all employees in food establishments. An employee suffering from a disease that can be communicated by food or one who is a carrier of food-borne disease, is not permitted to work till he is medically certified.

Workers can spread infection knowingly by working when they are ill and infect other workers and consumers directly or indirectly. Sometimes, healthy workers spread disease by crosscontamination. They carry microorganisms from an infected area to one that previously had no

In some instances, the infected person does not show any visible signs or symptoms of the disease. harmful microorganisms. Such persons are called carriers and they unknowingly spread disease producing organisms which they carry in their bodies. They are the most dangerous of all food handlers as it is very difficult to trace the source of infection in such cases.

Hence, it can be realised that food poisoning does not just happen, it is always caused and the cause is carelessness on the part of the human being. It is estimated that 50 per cent of all food handlers carry microorganisms that can be transmitted to food. For these reasons, personal hygiene is very necessary and should be practised by every food handler.

HEALTH OF STAFF

A sick worker is not only a source of infection, but, being unwell, is likely to take less care in handling food.

All staff employed in food preparation and service areas should be in a state of good health. Working in a catering establishment means working long hours. The work may involve heavy physical exertion and mental tension and meal timings may be irregular. Workers may have to lift heavy loads, work in hot steamy kitchens and constantly be on their feet during working hours. They need to be active and alert. For this, both the body and the mind must be in the best possible health.

Good health is not only the absence of disease. It does not depend on the person's height and weight but means that both the body and mind are in excellent condition, free from illness or tension. It also means that a person is physically fit and mentally alert, capable of taking on spot decisions and handling crisis situations. He or she should be able to carry out routine work without any signs of undue fatigue and still have ample reserve energy for recreation or to meet an emergency if required.

To achieve all this it is necessary for the employer to ensure good health and safe working conditions for all employees by observing the following:

1. It is compulsory to have a detailed medical checkup at the time of recruitment. Recent history of any illness should be known before employing a worker. All food service workers should be free from any infection that is likely to be transmitted.

2. Medical check-ups every six months and a check-up following a severe illness, especially one related to the gastro-intestinal tract, should be done. The cost for this should be borne by

the employer.

-3. Periodic deworming (six monthly) and necessary inoculation (typhoid, tetanus, etc.) should - be ensured.

4. All illnesses should be reported to the management and ill workers should be kept away from food during that period.

5. Personal cleanliness of employees in terms of general appearance, uniforms, hands and fingernails, should be checked discreetly.

6. Sanitary accommodation, i.e. water closets (W.C.'s) and urinals for males and WCs for females with sanitary bins should be provided. Restrooms and lockers used by employees should be inspected for cleanliness.

7. A nutritious and wholesome meal should be provided while on duty in a separate room

designed for this purpose.

- 8. The work area should be planned in such a way that accidents like falls, cuts and burns are prevented from occurring while at work. The workers should also be trained in proper methods of work.
- 9. Work hours should be 48 hours a week. This may be in shifts.

10. A weekly off is compulsory.

The employer should realise the importance of good health and help the employee in maintaining it. Good health and the right attitude towards work increases work efficiency and productivity and this, in turn, increases the profits of the establishment.

PERSONAL APPEARANCE

A good personal appearance helps both the employee and the organisation. It increases one's self confidence. It helps in promoting business by improving performance at work. It reflects on the standards set by the organisation and customers know what to expect.

It inspires customer confidence, makes them feel important and helps in attracting more customers. Good health and good personal appearance can be achieved by maintaining personal cleanliness both at home and at work.

SANITARY PRACTICES

Bathing

Workers must bathe daily as body odour is offensive and skin is the main breeding ground for bacteria. Use of good soap is important to wash away sweat and dirt, to emulsify secretions of the sebacious glands and to make cleaning of skin easy. A good deodorant should be used after a bath and undergarments should be changed everyday.

Hair

Hair can be a breeding ground for bacteria found on the skin. Unclean hair causes dandruff and lice, and makes the scalp itch.

Running hands through hair or scratching the scalp is a common habit because of which *Staphylococci* present on the scalp may spread and hair may fall into food. The presence of hair in food is obnoxious and can be avoided if food handlers wear caps, scarves or use nets. These would discourage the employees from touching their scalp and contaminating food.



THE STATE OF THE S

Fig. 15.2 Do not touch or scratch your head while cooking

Fig. 15.3 A head cover prevents hair failing into food

A head covering helps to keep hair out

of food, prevents contamination by *Staphylococci*, keeps hair free from kitchen grease and prevents long hair from getting entangled in machinery.

Hair should be neatly tied if long. Hair length for men should be up to mid-ears. Hair should be shampooed regularly. Moustaches and beards should be clean and trimmed. Men without moustaches or beards should be clean shaven. Kitchen staff are not permitted to grow beards.

Eyes

Eyes must be kept clean and washed frequently. Rubbing of eyes should be avoided. An employee suffering from sore eyes should not be allowed to work.

Teeth and Mouth

Teeth should be brushed regularly and thoroughly cleaned with a moderately hard brush. This should be done twice a day, i.e., first thing in the morning and last thing before retiring. Food particles get lodged in the teeth and cause decay. Deposition of tartar requires attention or teeth may loosen at the root. Toothbrushes must be kept clean and should be changed frequently. The tongue tends to get coated and can be cleaned with a tongue cleaner. The mouth should be rinsed well and gargling is a must after every meal. These habits ensure good dental health, prevent painful cavities and bad breath.

Hands

Our hands are possibly the most unsafe serving equipment in the chain of infection in the entire food service operation. Bacteria flourish on the skin because of the ideal temperature conditions. Skin secretions provide food for growth and microbes get lodged in pores, crevices and possibly cracks on the skin. The presence of *Staphylococcis* on the skin is dangerous for the food industry.

In addition to the normal flora on the skin, inadequate hand washing could cause accumulation of microorganisms usually found in the bowels or those which could have been picked up from raw contaminated foods.

Because our hands are in direct contact with food all the time, cross-contamination can occur and bacteria can be transferred to high risk foods. To prevent this hands should be washed

- (a) before beginning work and after a break
- (b) before handling foods
- (c) after eating or smoking a cigarette
- (d) after using the toilet
- (e) after touching infected or unsanitary areas of the body or combing hair
- (f) after using a handkerchief, sneezing or coughing into the hands
- (g) after handling raw foods, especially meat, fish and poultry
- (h) after scullery or any cleaning operation
- (i) after handling waste food or refuse
- (i) whenever they are dirty
- (k) every hour while working in the kitchen

Hands should be washed with plenty of soap and water and preferably rinsed in running water. If soap tablets are used, they should be kept dry. Liquid soap is more hygienic and economical to use. Washing hands with antiseptic soap and water reduces the load of coliform organisms and Staphylococci from the skin. But some Staphylococci still remain and this is the reason why foods which favour growth and which may not be heated before service, should not be touched by the fingers.

Hand washing should be done properly or it will not be effective.

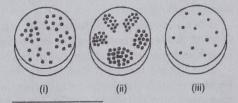


Fig. 15.4 Bacterial colonies from fingers from

- (i) Unwashed hands
- (ii) After handling raw fish
- (iii) Washed hands

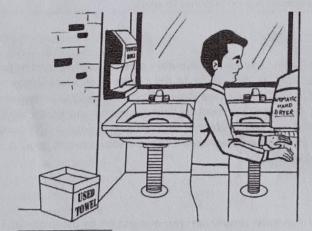


Fig. 15.5 A hot air dryer, paper towels or a roller towel are hygienic ways of drying hands

Hands must be dried thoroughly by using a roller towel, a hot air dryer or disposable paper towels. Frequent hand washing with soap and hot water can make the skin crack causing roughness. This can be prevented by wearing gloves or using a cream to keep them soft. Gloves are helpful as long as they are unbroken and cleaned well. The use of gloves is recommended while working with foods like sandwiches, cold cuts, pastries and salads. Plastic gloves must be changed frequently.

Cuts, burns and raw surfaces can harbour staphylococci. These should be covered with a

Cuts, burns and raw surfaces can harbour staphylococal waterproof dressing. If the wound is infected, inflamed or pus is formed, the person should not be allowed to handle food. Even the smallest cut can harbour a large number of bacteria.

Food should be touched with bare hands only if absolutely necessary. Fingers must not be dipped into food to taste it. The use of tongs or spoons for handling or tasting food should be encouraged.

Fingernails

Fingernails are a frequent source of contamination or cross-contamination. They should be trimmed and kept clean. Long nails with ragged edges tend to harbour more germs. Nail polish should be avoided in production areas as it may mask accumulated dirt or it could chip and enter the food (some nail polishes are toxic). It has been observed that if nails are varnished, food handlers do not like using nail brushes or

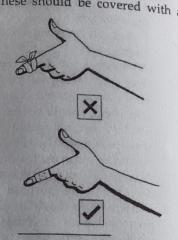


Fig. 15.6 All Injuries should be covered with a waterproof dressing

trimming their nails. Hence use of nail polishes should be discouraged.

Jewellery

Any jewellery which comes into contact with food should not be worn. Finger rings can accumulate dirt, like dough accumulating in a ring while kneading, which could later enter the food. There is also a danger of stones or small parts of rings, earrings and necklaces falling into food. Bangles and bracelets get heated soon and come in the way of work. Wrist watches should not be worn in the kitchen. They can fall off, wrist watch faces can break and glass can accidently get into food. Also, the skin underneath remains moist and may harbour bacteria.

Feet and Footwear

As most of the jobs in catering establishments have to be performed standing, the feet of employees are subjected to extra stress and strain. So extra attention should be given to the feet. Feet should be washed and kept clean, especially between the toes. Socks should always be worn with shoes to keep away dirt and absorb perspiration. They should be washed daily. Shoes should be sturdy, clean, well polished and form a part of the uniform. They should be comfortable and well fitting with a low heel. Shoes are necessary for protection of the feet against falling objects and spills.