



CHAPTER 8

PERSONAL HYGIENE

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Chapter 8: Personal Hygiene

1. Introduction

Current legislation uses words like “hygiene practices”, “hygiene” and “sanitary”, but these are seldomly fully defined. This chapter seeks to provide detailed descriptions to define the above and assist processors in the practical application of these requirements.

People or “food handlers”, as referred to by legislation, play a major role in the safety and quality of dairy products. It is therefore essential to manage personal hygiene practices in detail. People are a potential source of disease-producing microorganisms, since these pathogens may live in certain parts of the human body and can easily be transferred to hands and then to products. Preventing this cross-contamination by personnel relies on them being aware of the potential risks and behaving in the correct way to minimise these risks.

The management of personal hygiene deals with the requirements on hand washing, prohibitions on spitting, smoking, eating in food handling areas and the wearing of protective clothing. It also deals with the aspect of “notifiable” or specified diseases and inspections on employees for cuts or sores.



Management must ensure that effective personal hygiene procedures and practices are implemented. By law, management is required to ensure that all personnel handling food are adequately trained in food hygiene. This training should be provided by a suitably qualified person.

Personal hygiene starts with the selection of employees. The attitude towards cleanliness and tidiness forms part of selection, as hygienic working practices depend upon their cleanliness and their work habits.

All new employees should be exposed to a comprehensive induction programme as soon as they are employed. This programme should then be reinforced through posters and clear hygiene instructions placed in all ablu- tion blocks, changing rooms and hand-washing facilities in the processing

R 962, 10, 11

R 962, 10, 11

SANS 10049, 7.5.1

SANS ISO TS 22002-1, 13.8

CGCSA FSI GMCP B.B.1,
I.A.9

SANS 10049, 7.5.1

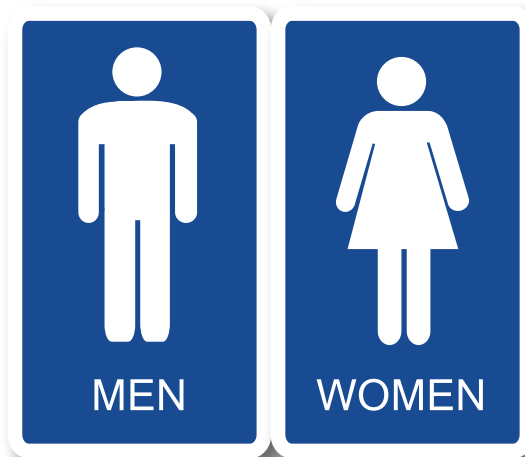
SANS ISO TS 22002-1, 16.3

R 962, 5 (3)(d)(i)
SANS 10049, 7.2.12
SANS ISO TS 22002-1, 13.2
SANS 1678, 5.13
SANS 1679, 5.13
CGCSA FSI GMCP I.B,
4.1-4.3, B.C 1.5

facility. There must be sufficient on-going supervision of personal hygiene procedures in production departments to ensure that everyone complies with these procedures. Management itself must set a good example in order to achieve the required standards.

2. Staff facilities and personal hygiene

Management shall ensure that there are enough toilets, urinals and wash-basins for use by food handlers. The number shall make provision for peak periods such as lunch times and start of work.



R 962, 5 (3)(f)

These facilities shall not open directly into processing, packaging or storage areas. Ventilation systems must not contaminate air systems in processing areas. The location of facilities must ensure employees do not take their protective clothing into the toilets.



R 962, 5 (3)(d)(v)
SANS 10049, 7.2.12
SANS ISO TS 22002-1, 13.2
SANS 1678, 5.13
SANS 1679, 5.13
CGCSA FSI GMCP I.B 2.1-2.3

The toilets and change rooms must be located conveniently for employees and positioned to ensure minimal potential contamination of protective clothing. These facilities should be well lit, well ventilated and easy to clean with washable floors and walls. Toilets shall be separate from the changing area.

R 962, 5 (3)(d)(ii)
SANS 10049, 7.2.12.4
SANS ISO TS 22002-1, 13.2
SANS 1678, 5.13
SANS 1679, 5.13
CGCSA FSI GMCP I.B 2.3

All toilets should be equipped with basins with either warm or hot and cold running water. Ideally, taps should not be hand-operated to avoid cross-contamination. Liquid hand detergent is preferred and paper towels are the recommended means of hand drying. Suitable refuse bins should be provided.

SANS 10049, 7.5.4

Clear notices directing staff to wash their hands after using the toilet must be displayed.



R 962, 5 (3)(d)(v)
SANS 10049, 7.2.12
SANS ISO TS 22002-1, 13.2
CGCSA FSI GMCP I.B 2.1

Separate, spacious change rooms shall be provided with lockers or other means, for employees to store their personal belongings. These change rooms should be easy to clean.



Wire lockers allow for inspection, but most employees do not favour these. Sloping tops or built-in lockers are ideal for cleaning.

Separate dining facilities shall be available with storage for food. Food shall not be stored in lockers as these are not temperature-controlled. Lockers will need to be inspected from time to time. This would ensure that no food is stored in them, which would prevent pests being harboured there.

Toilets, change rooms and dining areas must be kept scrupulously clean and hygienic. The frequency of cleaning should be monitored to ensure that this is maintained.

An adequate number of showers should be provided.

3. Medical fitness

As mentioned previously, personnel pose a threat of contamination due to the possible spread of pathogenic organisms. Given this threat, the law requires management of the medical fitness of personnel and any injuries which may result in cross-contamination.



SANS 10049, 7.2.12.7
SANS ISO TS 22002-1, 13.3
SANS 1678, 5.15
SANS 1679, 5.15
CGCSA FSI GMCP I.B 2.4

SANS 1678, 5.13
SANS 1679, 5.13

R 962, 11

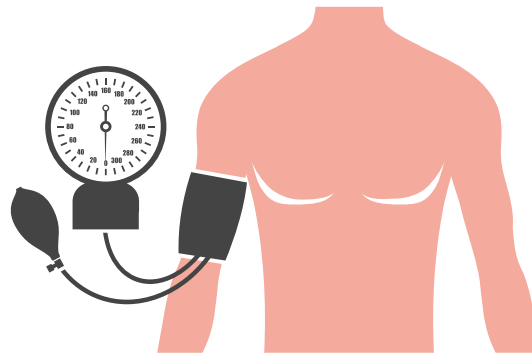
SANS 10049, 7.5.3.2
SANS ISO TS 22002-1, 13.5
SANS 1678, 6.2
SANS 1679, 6.2
CGCSA FSI GMCP B.B.1.3

R 962, 10
SANS 10049, 7.5.3.3-3.8
SANS ISO TS 22002-1, 13.5
SANS 1678, 6.2
SANS 1679, 6.2
CGCSA FSI GMCP B.B.1.4

SANS 10049, 7.5.5.1
SANS 1678, 6.2
SANS 1679, 6.2
CGCSA FSI GMCP B.B.1.4

SANS 10049, 7.5.3.10
SANS ISO TS 22002-1, 13.6
SANS 1678, 6.2.4
SANS 1679, 6.2.4

CGCSA FSI GMCP B.B.1.4



Occupational health and safety legislation requires that all employees undergo a pre-employment medical check and thereafter annual medical fitness checks. The purpose is to ensure that the employer is aware of any conditions that may pose a risk to the employee during their work and to ensure that the medical status of the employee is not affected by the work environment.

In addition to this requirement, legislation requires that management see to it that personnel's medical status continues to ensure no potential cross-contamination. Management has to ensure that no person, who is known to be suffering from a disease that is capable of being transmitted through food, works in areas where there is a likelihood of transmission. In order to effectively manage this, the following should be in place:

- All personnel and all visitors should complete a medical questionnaire to assess their fitness to work in or enter a food manufacturing environment. There should be clearly defined policies for dealing with this information.
- There should be a suitable policy and procedures in place covering returning to work after sickness and, where necessary, after foreign travel.
- Daily health supervision is important and therefore inspections should be done daily. Records must be kept of all inspections.
- This requirement relies on the co-operation of employees and the most important aspect is employees immediately reporting their condition to management, should they be ill.
- Management should define their policies for sickness carefully and ensure that personnel are trained on this policy. All medical records should be dealt with confidentially.

4. First aid

Occupational health and safety legislation requires that an adequate first aid kit must be available in each area in the processing facility. This first aid kit should be clearly displayed and identified with the correct signage.

The contents of the first aid kit should be checked regularly to ensure that it remains fully stocked.



In addition, each area should have a designated first-aidler, who has received the accredited training. A full list of all qualified first-aiders with their telephone numbers must be available for emergencies.



The law prohibits anyone handling food with unprotected cuts or grazes. All cuts and wounds must be covered with a waterproof dressing and gloves to prevent the dressing from contaminating the food.

Plasters should be conspicuously coloured to enable easy detection and ideally should contain a metal strip (this can be detected by a metal detector). There should be a documented plaster policy which should provide for records of issue and end of shift checks.

5. Staff training

All staff should undergo appropriate personal hygiene induction training prior to commencing work. This includes temporary staff where applicable.

Within three months of commencing employment all staff should have undergone food hygiene training commensurate with their work activity.

Management staff at supervisory and more senior levels should have more advanced hygiene training relevant to their responsibilities.

There should be a programme of regular refresher training based on needs identified during internal audits, customer complaints and any process or product changes.

All training should be recorded and employees as well as trainers should sign in acknowledgement of their completion of the specific training process.

It is essential that the training material utilised is appropriate for the dairy industry.

Effectiveness of training should be assessed to ensure that employees are competent after training.

R 962, 11
SANS 10049, 7.5.3.9
SANS ISO TS 22002-1, 13.6
CGCSA FSI GMCP B.B.1.4

SANS 10049, 7.5.3.9
SANS ISO TS 22002-1, 13.6
CGCSA FSI GMCP B.B.1.4

R 962, 10
SANS 10049, 7.5.1
ISO 22000, 6.2
SANS 1678, 6.3
SANS 1679, 6.3

CGCSA FSI GMCP I.A.9

SAMPRO training material

SANS 10049, 7.5.1.4
ISO 22000, 6.2
CGCSA FSI GMCP I.A.9

R 962, 9
SANS 10049, 7.5.2
SANS ISO TS 22002-1, 13.4
SANS 1678, 6.6.3
SANS 1679, 6.6.3
CGCSA FSI GMCP B.B.1.6

SANS 10049, 7.5.2.3
SANS ISO TS 22002-1, 13.4
SANS 1678, 6.6.3
SANS 1679, 6.6.3
CGCSA FSI GMCP B.B.1.6

6. Protective clothing

6.1 General

Protective clothing in the dairy industry must not be confused with the concept of a uniform. In the case of dairy processing, the clothing is to protect the product from any contamination by the employee and not to protect the employee from the process.

Management is required to provide sufficient and suitable protective clothing. Management must also ensure that this clothing is kept clean and in good repair. Protective clothing always remains the property of the processing facility. Documented records should be available for the issue and replacement of protective clothing.



All staff and visitors entering food processing or storage areas should wear clean protective clothing provided by the facility.

Protective clothing should, ideally, totally cover the individual's own clothing including trousers and skirts. Factory trousers should be provided where this clothing comes into close contact with food. There should be no buttons or external pockets. It should be regularly inspected to confirm it is in good condition, has no loose threads, etc. The use of boiler suits should be avoided. Two-piece overalls are recommended.

The recommended sequence for putting on protective clothing is to first cover the hair, then the boots (if applicable), and finally the overalls. Hands should be washed and dried upon entering the production area. Hairnets should be kept on all day.

Protective clothing should not be worn outside the factory buildings. Protective clothing should not be worn in toilets (upper coats and aprons should be taken off in a dedicated area). All future designs of premises should remove the need to wear protective clothing in toilets, canteens or outside the factory buildings. Where a site is split, coats should remain in the individual units; hair covers may remain on.

Protective clothing, including head covers, should not be allowed to leave the site for any reason except for professional contractor laundering.

Protective clothing must be designed to minimise contamination. Buttons are not permitted. Pockets should only be above the waist and preferably internal.

It is important to remember that employees may require additional protective clothing when working with corrosive chemicals during CIP, etc. These items are for the employees' protection but must be handled hygienically to avoid cross-contamination.

6.2 Laundry

Protective clothing must be clean and neat.

Effective laundering should be done in-house or by an external company. The following should be considered and managed:

- Adequacy of clean/dirty clothing segregation.
- Garment repair/maintenance systems.
- Ensuring that there are no hazardous items, e.g. pins, needles.

Clean clothes must not come into contact with dirty or personal clothing.

6.3 Footwear

All employees and visitors should be issued with suitable site-dedicated footwear to protect the manufacturing environment from sources of external contamination.

Footwear should be kept clean and in good repair. It is considered best practice that such footwear is not worn outside the factory buildings. However, it is recognised that in certain job functions it may be unavoidable, e.g. removal of waste and access to separate engineering/storage buildings. Any new factory designs should incorporate these principles.



The best systems for keeping footwear clean are based on the following principles:

- Environment kept as dry as possible (including reduction in indiscriminate use of hose pipes for cleaning).
- Footwear dedicated to and confined within an area of the factory.
- Footwear cleaned and disinfected at the end of the production shift (i.e. nightly) in a contained wet area. Particular attention should be paid to the cleaning of treads.
- Boots/shoes stored on spikes after cleaning and allowed to air-dry.

How to wash boots:

The use of footbaths is not recommended as it spreads contamination. Where used, these require proper control, for example water changed every two to three hours and regular cleaning and disinfection of the surrounding wet floor surfaces. Footbaths must be included in the master cleaning schedule. The use of manually held brushes for cleaning of footwear by production staff during the day is also not recommended as the brushes/handles become grossly contaminated with bacteria.

Where communal footwear is used for visitors, an appropriate system should be in place both to maintain the footwear in a clean, sound condition and also to prevent the spread of foot infections.

For processors handling products requiring a high risk area, the additional requirements for high risk should be met.

SANS 10049, 7.2.13
SANS ISO TS 22002-1, 13.4
SANS 1678, 5.14
SANS 1679, 5.14
CGCSA FSI GMCP B.B.1.6

SANS 10049, 7.5.2.12
SANS ISO TS 22002-1, 13.4
SANS 1678, 6.6.3
SANS 1679, 6.6.3
CGCSA FSI GMCP B.B.1.6

SANS 10049, 7.2.9
SANS ISO TS 22002-1, 13.4
CGCSA FSI GMCP B.B.1.6

SANS 10049, Annex B
SANS ISO TS 22002-1, 10.2
CGCSA FSI GMCP B.B.1.6

R 962, 9
SANS 10049, 7.5.2.6
SANS ISO TS 22002-1, 13.4
CGCSA FSI GMCP B.B.1.6

6.4 Disposable clothing

The use of gloves should be limited. If gloves are used, a formal glove policy should be in place defining the frequency of changing gloves, the washing of gloves and replacing damaged gloves.



Disposable gloves, where used, should be non-latex and changed at least at every break or when damaged. Hand washing disciplines should still be rigorously applied. All gloves must be safely disposed of on leaving the production area.

Plastic washable aprons should be cleaned and disinfected daily. When wear or cuts are evident, aprons should be replaced. Disposable aprons should be of sufficient strength, suitable for the purpose and discarded after every shift.

6.5 Hair control

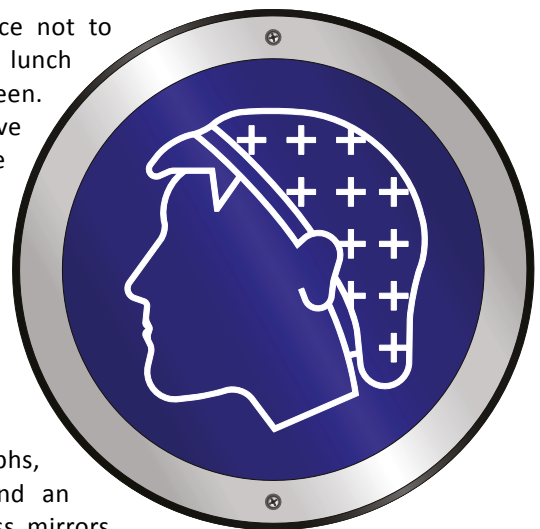
6.5.1 Practices

Suitable hair covers should be worn by everyone entering a production site at all times, covering the ears and completely enclosing any hair. This is also applicable when the site is not in production.

Hair covers should be put on before any other protective clothing at the beginning of the day and not removed until the end of the working shift on leaving the production environment. The hair covering should be the last item of protective clothing to be removed. Factory personnel should never wear protective clothing without a hair covering.

It is good hair control practice not to remove the hair covering for lunch breaks, visits to toilets or canteen. However, where personnel move between 'low risk' areas where raw products are handled, and 'high risk' areas, hair covers should be changed. Where hair covers are removed during breaks, this must be carefully controlled to avoid the risk of hair contamination.

Clear notices and/or photographs, outlining correct practices and an adequate number of non-gloss mirrors should be present in changing rooms.



6.5.2 Management controls

Hair contamination can only be prevented by correctly designed hair covers.

The use of boiler suits and bib-and-brace overalls should be avoided due to potential contamination from contact with floors etc.

Management should set an example by obeying all site hygiene rules. Pre-shift and appropriate checks with records during production must be executed to ensure the correct wearing of hair covers.

6.5.3 Design of hair covering

All staff should wear disposable mob caps. These should be sized appropriately and colour-coded to confirm daily changes at the very least.

Where alternative styles of hair covers are being used successfully, e.g. disposable or cotton balaclava hairnets, their use should be with a risk assessment.

Beards and moustaches should be avoided, but where they are worn they should be covered with a snood or balaclava, which totally covers facial hair.

7 Personal practices/hand-washing facilities

Sufficient hand-washing facilities should be provided for the number of personnel employed, with a supply of water at a suitably controlled temperature, i.e. minimum 45°C. Taps should be operated by a knee, elbow, foot or photoelectric-cell.

Hand-washing facilities should be located at all entrances to production areas and at easily accessible locations throughout the factory. Hands should be washed before starting work and whenever necessary throughout the day. The use of odourless bactericidal liquid soap and disposable paper towels are recommended.

Suitable receptacles for used paper towels should be provided in the immediate vicinity.

By law no smoking is permitted in production areas. Smoking should only be allowed in designated areas with adequate ventilation. Protective clothing should not be worn in smoking areas.

A suitable policy of restricting the wearing of jewellery based on hygiene and safety considerations should be in place. This should include issues such as not allowing earrings, watches, studs, any rings in other exposed part of the body (with the possible exception of a plain wedding ring). The law is quite clear that no jewellery is permitted.

Eating should not be allowed other than in canteens, mess rooms and designated quality control tasting areas (after which hands should be washed). A separate storage facility must be provided in canteen areas for the storage of food. Refrigeration should be considered to ensure that staff is protected.

Personal items such as smoking materials and newspapers should not be taken into production storage or engineering areas. This includes mugs, plates, glasses, etc.

SANS 10049, 7.5.2.2
SANS ISO TS 22002-1, 13.4
SANS 1678, 6.6.3
SANS 1679, 6.6.3
CGCSA FSI GMCP B.B.1.6

R 962, 10(h)
SANS 10049, 7.2.8
SANS ISO TS 22002-1, 13.2
SANS 1678, 5.13
SANS 1679, 5.13
CGCSA FSI GMCP B.B.1.1

SANS 10049, 7.5.3.16-19
SANS ISO TS 22002-1, 13.8
SANS 1678, 6.6.1
SANS 1679, 6.6.1
CGCSA FSI GMCP B.B.1.5

SANS 10049, 7.5.5
SANS ISO TS 22002-1, 13.8
CGCSA FSI GMCP B.B.1

SANS 10049, 7.5.3.16-19
SANS ISO TS 22002-1, 13.8
SANS 1678, 6.6.1
SANS 1679, 6.6.1
CGCSA FSI GMCP B.B.1

Employees should not wear heavily perfumed or after-shave products, or false fingernails or eyelashes, within the factory area. Nail polish is not permitted.

All visitors including contractors should be made aware of the company's personal hygiene standards and sign to indicate their understanding and acceptance of the company rules.

Smoking, spitting, chewing gum and licking fingers are some of the other undesirable practices which should be defined and documented in the facility's personal hygiene code of conduct. All staff should receive regular training on this code of conduct and should sign this document to commit them to compliance. Daily supervision of this will be necessary and management shall set a good example.

8 Spectacles

Spectacles worn in the production area should be appended with a chain around the neck.

IMPORTANT LINKS



HACCP

Remember to refer back to Chapter 1 to recap on the hazards identified and preventive measures in the handling of raw milk and the DVD



DOCUMENTATION

Remember to refer back to Chapter 12 and the DVD for more details on the suggested documentation required for raw milk handling