Meat Packing Safety Meeting Kit



WHAT'S AT STAKE

What kind of work is done in the meat department of a supermarket?

There are a variety of activities in the meat department of a supermarket. Three of them are:

- meat cutting
- meat packaging
- meat wrapping

These activities were selected for the physical effort they require and the health hazards they pose.

Meat processing requires a specific thermal condition; the ambient temperature is to be kept around +10°C or 50°F. This is far below the comfort zone for people. The temperature at which the meat is stored is even lower.

In addition, pain or injury from physical overexertion, repetitive manual tasks, or working in awkward positions is very common.

WHAT' S THE DANGER

Awkward body positions and forceful movements are the risk factors for the neck and shoulders and other upper limb injuries. In the supermarket, a non-adjustable work surface causes workers to use poor working postures.

Aggravating factors for WMSDs are the low room temperature and the temperature of the meat. Cold affects dexterity and increases the effort needed. This extra effort can cause earlier fatigue.

In addition, lifting heavy boxes and prolonged standing on a hard floor pose a risk for low back pain and lower leg discomfort.

Highly repetitive movements required in the wrapping of meat, combined with standing for long periods in an awkward position pose risks for repetitive motion injuries.

The wrapper's wrists are at a high risk for injury from frequent manipulative movements while wrapping, sealing and labelling. An aggravating factor to wrist injury is that each of these three tasks is carried out at a different height with reaches beyond recommended ranges. Frequent and forceful movements of the wrists

require considerable and sustained muscular effort of the neck and shoulders.

Prolonged standing in a stooped position and repetitious side motions can contribute to low back injuries, and standing on a concrete floor can contribute to lower leg and back discomfort that over time can develop into injuries.

HOW TO PROTECT YOURSELF

General Recommendation

Working in the meat department of a supermarket exposes workers to hazards for various musculoskeletal problems.

Workers in the meat department should rotate between the cutting, packaging and wrapping operations. The rotation is beneficial because it makes workers change body positions and use different parts of their bodies.

Meat Cutting

Awkward body postures and movements, along with considerable force exerted repeatedly while cutting are major risk factors for injuries among meat cutters.

Work postures can be improved greatly by providing meat cutters with adjustable work surfaces. There are a few options to consider:

- work platforms for shorter workers
- tables with fully adjustable surfaces
- a variety of worktables of different heights

The height of the work surface should be adjusted to the workers' individual needs and according to the task performed. Cutting large chunks of meat requires a lower work surface (65-95 cm | 26-37") while fine cutting requires a higher work surface (85-110 cm | 35-44"). Cutting in a position beyond the comfort zone requires more force.

In addition, meat cutters' gloves that fit properly can reduce:

- the effort needed to hold the meat: they also improve the grip on slippery meat
- the undesirable effects of contact with cold meat
- the hazards for cuts;

Selecting and maintaining proper knives can also reduce the need to exert force in the meat cutter's task.

Repetitiveness can be an integral part of meat cutting. To reduce its undesirable effects, re-designing the meat cutting job should be considered. One possible option is job rotation. Job rotation requires workers to move between different tasks at fixed or irregular periods of time. It increases the variety of tasks and involves more autonomy and control for the worker.

Workers should use anti-fatigue matting to reduce stress on the legs and back due to prolonged standing on a hard floor and footrests to encourage changes in body position where possible.

Meat Packaging

Major hazards in the meat packaging operation result from awkward body positions. To reduce these awkward postures, it is necessary to design the height of the work bench

for the tallest worker and according to the task. Shorter workers should use a work platform. The work bench should have a footrest.

It is also necessary to re-arrange the layout of the work materials. To avoid twisting, the work materials should be within easy reach, arranged in a semi-circle or L-shape.

To reduce bending, place the packaged meat on a lifting table on wheels. Lift tables can be raised and lowered pneumatically with a pump powered by battery or electricity or a pump operated by hand or foot. To reduce twisting, make sure that the lifting table is beside and not behind the worker. The use of a sit/stand stool should be considered for the packaging operation. Workers should use gloves because of the low temperatures. Workers should also use anti-fatigue matting to reduce stress on the legs and back due to prolonged standing on a hard floor.

Meat Wrapping

The major hazards in the meat wrapping operation result from awkward body postures that workers use because of the poor design of the wrapping machine. Ideally, wrapping, sealing and labelling should be done at the same height and within easy reach. This solution would require a complete re-design of the wrapping machine.

However, some improvements can be achieved with minor changes.

For example, lifting tables on wheels or meat bins on wheels with an elevating and rotating device could be used. These changes can minimize bending and stretching to pick up packages for wrapping and to store the packages.

The use of anti-fatigue matting will reduce stress on the legs and back due to prolonged standing on a hard floor.

FINAL WORD

Working in the meat department of a supermarket exposes workers to hazards for various musculoskeletal problems.

Workers in the meat department should rotate between cutting, packaging and wrapping operations. The rotation is beneficial because it makes workers change body positions and use different parts of their bodies.