

COOKING AND BAKING



The hazards of cooking and baking are mostly related to high temperatures – heat, poor air quality, standing for a long time in the heat, hot dishes, burns, and fire. In addition, there may be some MSD risks from lifting heavy items.

Hazard: Heat

Details

Primary cooking and baking areas often have hot surfaces, as well as hot air, making the room temperature very high. Standing in the heated environment for long periods of time will increase the likelihood that you will have heat stress.

Threat

- Heat stress
- Heat cramps
- Fainting
- Heat exhaustion
- Heat stroke
- Stress on your feet, legs, and lower back
- Possible loss of consciousness

Safe Work Guidelines

At all times

- Make sure heat-insulating material has been used to reduce radiant heat wherever possible (e.g., on pipes and duct work)
- Do not rely on a thermometer to determine your heat stress (humidity, radiant heat from an oven or grill surface, level of activity and type of clothing can greatly increase the effect of heat stress)
- Whenever possible, bake and cook during cooler parts of the day or night
- If possible, rotate between cold and hot locations

When you are working in a hot kitchen or bakery

- Gradually prepare your body (i.e., acclimatize yourself) for working in the hot environment
 - If you are an experienced worker, work in the hot environment only up to 50% of the first day, 80% of the following day, and then the full day
 - If you are an inexperienced worker (e.g., a summer student) start at 20% of the day and increase your exposure to the hot environment by 20% each day
- Take longer rest breaks more often and spend them in a cool environment
- Drink 1 cup of water every 20 minutes (drinking fluids with electrolytes may also help you to acclimatize and provide minor first aid for heat stress)
- Check with your doctor to see whether you should add salt to your diet

- Work in a buddy system so that you and your buddy can watch each other for signs of heat stress
- After resting, check your pulse (a pulse equal to or more than 100 beats per minute after rest can be dangerous)
- If you had very little physical activity before your rest period, do appropriate light stretching exercise (to find out what exercises you should be doing, ask your doctor, ergonomist, or safety professional)

Hazard: Poor Air Quality

Details

There can be a significant buildup of heat in kitchens, as well as cooking smells and smoke which affect air quality.

Threat

- Breathing problems
- Asthma

Safe Work Guidelines

At all times

- Follow the schedule below for cleaning:
 - Solid fuel cooking systems – once a month
 - High-volume cooking systems (e.g., 24-hour cooking, charbroiling or wok cooking) – once every 3 months
 - Moderate-volume cooking systems – once every 6 months
 - Low-volume cooking systems (e.g., in churches, day camps, seasonal businesses, seniors' centres) – once a year
- Check the fire suppression systems and hoods

When you are cooking or baking

- Depending on the stove, adjustments to the burners may need to be made for clean burning to reduce carbon monoxide (CO) formation
- Make sure that there are monitors to sound an alarm if the CO level rises too high
- Make sure that there is active ventilation to exhaust hot air and supply cool air to control heat and humidity
- If the temperature is less than 35°C, increase air movement (e.g., use fans)
- Open windows and/or doors to create a path for air movement

Hazard: Lifting

Details

Lifting heavy items such as produce, dough bowls, or flour bags for large-scale baking can result in injury.

Threat

- Muscle and joint injury to your arms, legs, and back
- Heat stress

Safe Work Guidelines

Before you lift

- Learn and use safe lifting and moving techniques for heavy or awkward loads
- Make sure that you know the maximum weight limits for the work that you do
 - If necessary, ask your employer to provide a professional ergonomist to help determine the maximum legal weight limits

While you are lifting

- Avoid making continuous repetitive movements and holding awkward postures for long periods

- When you are lifting and moving heavy loads (e.g., large flour sacks, produce), pay particular attention to your hand grip and to possible shifting of the load (if possible, use a hand cart and get help from a co-worker)
- Whenever possible, while you are lifting:
 - Decrease the size of your load
 - Decrease the frequency of your lifts
 - Include more rest breaks, and
 - Improve your posture
- Whenever possible, use mechanical aids to help you lift
- If mechanical aids are not available, use ‘team lifting’ for heavy loads

Hazard: Repetitive or Awkward Tasks

Details

Working on the same task over a long period of time (e.g., chopping food, etc.) can cause musculoskeletal injuries

Threat

- Wrist, elbow, and shoulder tendonitis
- Shoulder bursitis
- Back and neck pain
- Other muscle, tendon, and joint injuries

Safe Work Guidelines

- Rotate your work activities to break up repetitive or awkward tasks
- Maintain good body posture – keep your neck and back straight
- Take regular mini-breaks for stretching or moving to improve blood circulation and reduce muscle tension
- Alternate between sitting and standing to avoid fatigue

- Use anti-fatigue mats or put one foot at a time on a foot rest, if you stand for long periods
- Place materials and tools within easy reach when you are working with them
- Adjust counter heights (when possible) so that your work surfaces are at waist height, your upper arms are relaxed and your forearms and wrists are straight
- Use tools that allow you to keep your wrist straight while stirring food
- Set up your work area to avoid holding your arms at or above shoulder height for long periods
- Use mechanical tools that reduce repetitive actions

Hazard: Hot Dishes and Food

Details

Direct contact, steam and splash burns can occur when hot appliances (e.g., baking ovens, deep fryers) are used for cooking and baking. Steam may be trapped under the lid or plastic on a dish in the microwave oven or the lid of a steamer.

Threat

- Minor or major burns and scalds on your hands/arms
- Burns to any part of your body

Safe Work Guidelines

- Dress appropriately for cooking:
 - Wear short or tight-fitting sleeves
 - Work carefully near heat sources
 - Avoid reaching or leaning over a stove
- Turn the handles of pots and pans inwards so that the containers will not be knocked or pulled off the stove
- Wear gloves and an apron to protect yourself from hot dishes

- Make sure that you put anything containing hot food or drinks on a flat, stable surface and away from the edge

Hazard: Fire

Details

Cooking and baking with various ingredients (e.g., oil) may lead to kitchen fires.

Threat

- Burns

Safe Work Guidelines

At all times

- Know the location of the fire extinguisher
- Pay attention to everything that is cooking
- Keep the stovetop free and clear:
 - Use the stovetop for cooking only, not for storage
 - Do not let food or grease build up
 - Do not store combustibles, like wooden utensils, on the stovetop
- Use caution with electrical appliances
 - Do not plug too many devices into one outlet
 - Do not overload extension cords – unplug those not in use
 - Have appliances with frayed or cracked cords repaired
- Be sure that you know what to do if you have a grease fire
- Check the fire suppression systems and hoods

When you are cooking or baking

- Make sure that work areas near water have ground fault outlets for appliances
- Do not stand in or near water when you are using electrical appliances

- Do not use an outdoor-type grill or barbecue indoors
- Keep all appliances clean (spilled food could cause a fire)
- Heat oil slowly and monitor hot oil carefully
- Guard against splattering grease

If a fire starts

- If a pan fire starts on the stovetop:
 - Carefully slide a lid or larger pan over the fire
 - Turn off the burner
 - Do not pour water on a grease fire
- If the fire starts inside the oven:
 - Turn off the heat
 - Keep the door closed to smother the flames
 - If the fire does not go out right away, activate the fire alarm
- If a fire starts inside the microwave:
 - Do not open the door
 - Push the stop button
 - Keep the door closed until the fire goes out
 - If the fire does not go out quickly, activate the fire alarm
- If your clothing catches fire:
 - Do not run
 - Stop, drop, and roll over and over to smother the flames
 - If you can, cover your face with your hands as you drop to the floor and roll

Fire control program

- Make sure that your workplace has a fire plan, including:
 - A workplace evacuation map
 - Designated fire wardens to coordinate evacuations, and
 - Inspections and drills

- Make sure that professional contractors or members of your joint health and safety committee check the sprinklers and extinguishers once a month
- Check the regular service of the fire suppression systems and hoods

Note: Your employer can call the local fire department for further help, including information in the proper use of fire extinguishers. Calling fire suppression technicians that installed the kitchen system is also recommended.

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Revised: November 2011