



Food Services Proper Lifting (EDU)

Table of Contents

Introduction	3
Course Objectives	3
Back Injuries in Food Services	4
Common Causes of Back Injuries in Food Services	4
Causes of Lifting or Overexertion Injuries in Food Services	5
Preventing Back Injuries in Food Services	6
Proper Lifting Techniques for Food Services	6
Food Service Operations	7
Food Services Delivery, Storage and Cleaning	7
Handling	9
Food Services Safe Lifting Zones and Stocking Shelves	9
Saving Your Back	10
Tips to Help Avoid Food Services Back Injuries	10
Food Handling	12
Best Practices for Food Handling and Cart Use	12
Handling Oven Trays and Pans	13
Beverage and Liquid Handling	14
Proper Beverage and Liquid Container Handling Techniques	14
Food Services Cleaning and Waste Removal	15
Proper Food Services Cleaning Methods	15
Conclusion	16
Summary & Implications	16

Introduction

Course Objectives

The purpose of this course is to increase your safety awareness of the hazards associated with lifting in a school cafeteria.

The information contained in these lessons are based on actual assessments, interviews with key food services personnel and evaluation of claims data in several school districts.

Please pay attention to the various situations presented in this course to see if they apply to you or exist in your cafeteria. Then determine what best management safety practices can be put in place to prevent injuries to you and your coworkers.

After successfully completing this course, you will be able to:

- Recognize potential hazards associated with improper lifting
- Identify best management safety practices for preventing injuries to you and your coworkers
- Identify workplace conditions that can lead to overexertion

Back Injuries in Food Services

Common Causes of Back Injuries in Food Services

There are many common practices or conditions that often contribute to a back injury.

As we age, we often become more sedentary and less active, resulting in weakening of our back and abdominal muscles. Good physical condition and an active lifestyle can prevent back pain and injuries.

Excessive body weight increases stress on the lower back. Excess girth around the waist means that you will be carrying objects farther away from your body. The problem with carrying loads farther from your body means that you will not be able to keep your spine in proper alignment. This leads to increased chances of a back injury.

Bad lifting techniques are frequently associated with bending from the waist to pick up something. This may lead to added stress to the lower back, strained back muscles and tendons, or even torn ligaments in the back.

Preventing injuries to food services staff starts with you. In reviewing workers' compensation claims in School District Food Services departments, it has been determined that there are four types of injuries that account for most of the workers' injury claims. The four classifications of types are:

- Overexertion or Lifting
- Burns
- Cuts
- Slip, Trip or Falls

This module will focus on preventing lifting injuries--also known as overexertion, one of the leading types of injuries to food services staff.

Causes of Lifting or Overexertion Injuries in Food Services

Here are some of the most common causes of lifting injuries in food service.

Excessive bending

Bending over at the waist and placing excessive stress and strain on your lower back when lifting or handling material.

Twisting at the Waist

Twisting at the waist can be avoided, by simply moving your feet and stepping in the direction in which you are handling, carrying or placing the load.

Overreaching

Lifting above your shoulder or lifting and carrying the load away from your body, increases the amount of stress on your back and shoulders.

These causes all affect the vertebrae. The vertebrae provide support for the back and the discs act as shock absorbers to the spine. Unsafe lifts place stress on the tendons, muscles and ligaments.

Back pain is associated with pulling a muscle or tendon that connects the muscles to the spine, herniating a disc in the back, or pinching a nerve.

Good body mechanics can help prevent these injuries. Good body mechanics begins with:

- Maintaining good posture
- Using larger muscles in the legs to lift and carry
- Keeping the "S" curve in the back aligned
- Keeping abdominal muscles tight

By maintaining good body mechanics, the greatest level of stability, support and flexibility for the body will occur.

On contrary, awkward posture, which fails to maintain the natural "S" curve of the spine, can lead to deterioration of the disc over time.

Here we show improper bending from the waist to lift the load.

The natural "S" curve of the back is not maintained. As we increase the angle, it also increases the stress on the small of the back. This will increase the chances of a back injury from excessive bending.

Preventing Back Injuries in Food Services

Proper Lifting Techniques for Food Services

Prevention begins by following these simple best management practices:

- Use proper storage practices to avoid excessive bending and overreaching.
- Store heavy items properly on the middle shelves.
- Repackaging the product to avoid lifting heavy and bulky products.
- Remember the Safe Lifting Zones.

Here are tips to follow for proper lifting technique:

- Focus on the lift.
- Move close to the load.
- Feet shoulder-width apart.
- Squat down to use your leg muscles to lift the load.
- Make sure your body is close to the load and grasp it with both hands.
- Maintain an "S" curve during lifting.
- Tighten the stomach;
- Lift the head.
- Rise up with your legs.
- Keep the load close to your body.

Remember to squat down while lifting. Do not bend from the waist. You still are lifting your upper body weight when you bend from the waist.

When carrying and lowering the load into place:

- Keep your back's "S" curve in proper position.
- Use your feet, not your waist, to change direction.
- Avoid leaning over.
- Keep load close to the body and avoid overreaching.
- Set the load down in one slow motion.

The most critical information to remember is never twist at the waist to change directions.

Always step with your feet in the direction of travel and use the same lowering techniques as you did to lift the object.

Food Service Operations

Food Services Delivery, Storage and Cleaning

Let's explore a typical Food Services operation to properly address lifting injuries and the preventive steps to avoid them.

The tour is divided into three major phases:

- Delivery and Storage
- Handling
- Cleaning

Let's look at each more in-depth.

Delivery and Storage

Food products and commodities are received on a regularly scheduled basis from a third-party vendor. Generally, the incoming products must be stored in either cold or dry conditions.

Proper handling and storage begins with the delivery of food products and commodities to the school.

It is important to remember, that how the vendor sorts and stacks your incoming product is key in avoiding excessive lifting.

Two of the most important questions to consider in preventing accidents are:

- How do you plan to handle incoming deliveries?
- How will you organize your storage to avoid injury?

Handling

For purposes of this lesson, food handling is the process of removing food, beverages and commodities from storage, preparing the food and delivering the food to the students. This work phase also includes removing the drinks and beverages from storage and placing them in the service line.

Once the delivery is complete, stocking the shelves begins, the first part of handling.

You should ask yourself the following questions below to avoid excessive handling of the food products when you begin to put the products away.

- Did the vendor place the food products in a stable condition and top-side up so you can avoid turning them over?
- Did the vendor sort the products, or are the products randomly placed, requiring excessive handling?

- Did the vendor place the food products near the shelves so you can avoid carrying products excessive distances?

Cleaning

This phase includes cleaning the food preparation areas, cooking equipment, floors and eating utensils, as well as removing the garbage to outside trash bins. Food preparation and cooking are usually followed up with cleaning. However, cleaning is generally conducted simultaneously with food preparation and cooking, thus making cleaning part of all phases.

Handling

Food Services Safe Lifting Zones and Stocking Shelves

Avoid storage practices that increase your chances of injury when you place heavy items, such as meat products and bottled water on the top shelf.

While stocking shelves, the chances of injury are increased if you use poor lifting techniques.

These include bending from the waist, twisting (not stepping in the direction of the lift or placing of the load), overreaching above the shoulders, and carrying loads away from the body.

Food Services staff must remember:

- When stocking shelves, keep heavy items in the lifting power zone.
- Avoid the danger zones, which are above the shoulders and below the knees.
- Keep the weights as close to your body as possible and stay within the safe zones for lifting.

Saving Your Back

Tips to Help Avoid Food Services Back Injuries

Use good storage practice by placing heavy items in the safe lifting zones, (middle or lower shelf) and placing lightweight items on the top shelf.

Consider limiting the height of storage so that the top shelves are not beyond safe reach distances.

Proper planning and organizing your storage can eliminate an injury later.

One method of avoiding lifting heavy boxes or bags multiple times is to repackage the product into smaller sizes. For example, some schools repackage rice, sugar, flour and other commodities in sealed bins.

Repackaging allows you to take the necessary quantities needed without excessive handling of heavy, bulky items.

Avoid overreaching when placing supplies and food products on the top shelf. Place only lightweight items on the top shelf. Use a safe ladder to reach high areas. Set the ladder up in such a way that you avoid twisting at your waist.

Even though the weights being handled may not be heavy, overreaching causes excessive strain on your lower back, arms and shoulders.

Remember, to keep the load, your arms and hands as close to your body as possible.

Never carry a heavy, awkward item if it can be rolled. Always remember that lifts are personal. It is quite possible, that what is heavy and unsafe for one person may be acceptable for another.

Know your limits and don't compromise your back. If needed, ask for help or find a safe alternative. Usually, there is more than one safe way to accomplish most tasks.

Food Handling

Best Practices for Food Handling and Cart Use

Food handling is another major area in which employees of Food Services are subject to injuries from excessive bending, twisting, and overreaching.

Always substitute mechanical lifting for manual lifting whenever you can.

In Food Services, use handcarts or equipment with wheels to move and carry canned food and commodities.

Using hand carts should be standard practice for transporting heavy and/or awkward containers, as well as hot food and liquids.

Carts allow for safer transportation and reduce the chance of dropping and spilling items, while saving steps in a busy kitchen.

Carts are available in various styles and sizes. Used correctly and often, a good cart can save your back from injury.

Handling Oven Trays and Pans

The cart helps get you safely around the kitchen. However, you need to remember that there are lift hazards involved in the movement and placement of pans to and from the oven.

To avoid overreaching, slide the pan across the cart to a position closest to your body. Hand positioning is important for the lift and for the placement of the pan into the oven. Incorrect hand placement will make the lift more difficult and increase the chance of a burn or a spill.

When placing the pan in the oven, avoid excessive bending from the waist by using the legs and squatting in position to keep the "S" curve of the spine in proper alignment.

Consider hand and body positioning before lifting the tray. Be sure your feet are not inside the wheel space and that you can turn with your feet rather than twisting your body at the waist, which can lead to a back injury.

For proper grip, hot pads or mitts in good condition should always be used when handling hot food containers.

Lifting above the shoulders is dangerous when hot foods and containers are involved. To prevent burns, care should be taken with oven doors and hot racks.

If the full rack is not going to be used, choose shelves below shoulder height. Turn your body using small steps rather than twisting at the waist.

Beverage and Liquid Handling

Proper Beverage and Liquid Container Handling Techniques

Beverage handling presents another set of hazards to Food Service staff.

Cases and bulk containers commonly weigh 30 to 40 pounds per case and are often stacked in hard-to-reach locations inside of coolers. In regard to beverage handling, lifting and twisting can still be a hazard even though rolling carts are commonly used to transport beverage cases.

Repackaging or removing singular items from the case, rather than lifting the whole case reduces the possibility of injury to the back.

A wide-step, sturdy stepladder is very beneficial in filling liquid drink dispensers that are otherwise too high to reach.

Remember, not to fill the container to the top with liquid. Manage weights by limiting liquid or ice in the container.

Also, do not lift filled liquid containers above shoulder height, nor carry them away from the body.

Food Services Cleaning and Waste Removal

Proper Food Services Cleaning Methods

In Food Services Operation, cleaning generally occurs throughout the entire shift. In this lesson, cleaning will refer to removal of bulk trash bags and hauling to the outside dumpster for disposal.

Proper lifting techniques, use of handcarts, and getting assistance are all important when handling the waste.

In general, lifting trash bags can lead to excessive lifting above your head just to clear the top of the trash container.

During the collection of trash, a vacuum between the trash bag and trash container often occurs. When this happens, it requires excessive force to lift the bag out of the container. Eliminating the vacuum reduces the excessive force, and therefore reduces your chances of injury.

To release the vacuum, tip the container to one side or place it on its side with the trash bag closed. You should now be able to easily pull the trash bag out of its container.

Smaller trash receptacles placed on a handcart minimizes the weight of the trash bags and allows the handcart to carry the load.

Platforms around the large trash dumpster allow food services staff easy access to dump the trash.

Furthermore, the platform eliminates overreaching and awkward postures.

Conclusion

Summary & Implications

Preventing injuries to Food Services staff starts with you. This module focused on proper techniques and best practices used in Food Services to prevent back injuries. It has been shown that with proper training and planning you can significantly reduce the number of people being injured by overexertion in Food Services. Furthermore, please take the lessons learned in this module and incorporate these safety techniques for proper lifting into your everyday life, especially at work.

Acknowledgements

Directors of Food Services

Citrus County School District – Shirley Greene

Columbia County School District - Madonna Coughlin

Gilchrist County School District - Dana Tucker

Manatee County School District - Sandra Ford

Cafeteria Supervisors

Bell Middle/High School Food Service Staff- Carla O'Steen,

Forrest Ridge Elementary Schools - Antae Summerlin

Fort White High School Food Service Staff- Teresa O'Steen

Sugg Middle School Food Services Staff - Helen Nuttall

James Barnidge - Florida School Boards Insurance Trust

Russ McIntire - Northeast Florida Educational Consortium

James D. Smith, CSP - Technical Consultant/Developer

Arthur J. Gallagher - Boca Raton/Miami