



Health and Safety Toolbox Talks

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TOOLBOX TALK:

Energy Balance

I. Introduction

Hi, everyone. My name is [name]. I'm here today to focus specifically on diet and physical activity, and specifically the idea of energy balance. Energy balance is the idea that in order to maintain a healthy weight and a healthy lifestyle, you should balance the number of calories you consume with those you burn off with physical activity.

II. Relevance of Topic: Why is this Important?

1. This is important for everyone, but especially construction workers since your job is physically demanding and your everyday tasks require the use of your whole body.
2. 74% of construction workers are overweight or obese versus 65% of the general population.¹
 - a. Being overweight or obese are strong risk factors for Cardiovascular Disease, type two diabetes, and high cholesterol.
 - b. You're already at a disadvantage for overuse and strain injuries due to your job. Carrying around extra weight can exacerbate these issues.
3. Maintaining a healthy weight has many health benefits, such as reducing the risk for heart disease and type 2 diabetes, to name a few. It can also help you in your day-to-day life, at home, and at work. Maintaining a healthy weight and a healthy heart means you may have fewer missed days of work due to an illness, and you may be able to move around the worksite quicker and easier.

III. Self-Efficacy Building

What we know about construction workers:

1. We've found that your jobs are both physically demanding and physically active.
2. Most construction workers get more than the CDC-recommended minimum daily physical activity on the job.
 - a. Does anyone know what the guidelines for aerobic physical activity to increase cardiovascular health are? Does anyone want to guess?
 - i. 30 minutes of moderate-intensity physical activity at least 5 times per week. [This adds up to a total of 2.5 hours of moderate physical activity in a week.] OR
 - ii. 75 minutes of vigorous-intensity physical activity over the course of a week.²
3. Based on measurements done with Boston-area commercial construction workers, an average construction worker burns about 3,500 calories per day.
4. You may be thinking: I'm on my feet all day doing manual labor, operating heavy machinery, etc., doesn't that mean I'm healthy? And yes, that does count for a lot. However, although you work hard throughout the day, research shows that construction workers still have higher rates of obesity, cardiovascular disease, and type 2 diabetes than the average population¹.
5. Any ideas why this might be?
 - a. So while construction workers burn a lot of calories, often the food they're consuming is unhealthy and calorie-dense. This prevents them from seeing many of the health benefits of an active lifestyle and keeps them at a caloric surplus. That's why we're focusing on diet in this talk.

IV. Calorie Intake

1. You already know that your work as construction workers is very physically demanding. It's important that you fuel this activity with healthy food that will keep you productive, not sluggish or tired. Fueling your body properly

keeps you working smoothly. You know you have to take proper care of your tools for them to last; your body is the same. The average healthy-weight adult male should be consuming roughly 2,500³ calories a day to maintain his weight. If he wanted to lose weight, he would have to eat less than that - a caloric deficit. An average woman should consume about 1800 calories a day.

2. Think about what you have eaten today, or what you just ate. How many calories do you think that is? Realistically, when are you going to be hungry again? [Refer to common food times and caloric content]
 - a. [Food truck items]
 - b. Breakfast foods (Dunkin' Donuts, McDonald's, bagel, muffin, sandwich)
 - c. Coffee
 - d. Deli sandwich
3. What characteristics of food do you think keep someone full for longer? What kinds of foods are these? Any other volunteers? [use suggestions]
4. So now that we've gone through a few examples, does anyone else have ideas about what it is about food that keeps us full? [Ask for input.]
 - a. A big part of staying full is eating foods with lots of fiber. Fruits, vegetables, and whole grains have more fiber than many other types of food, especially processed or sugary foods. They also have more nutrients that are essential for a healthy body.
 - b. Another obvious component is the amount. You can eat a much larger amount of fruits and vegetables to get the same amount of calories as a much smaller portion of other foods.
 - i. How many of you are full after eating a Hershey's candy bar or a donut?
 - ii. How about when you eat an apple, a handful of baby carrots, and a medium-sized salad with chicken on it?
 - iii. You get a lot of bang for your buck in calories when you substitute fruits and vegetables. Even replacing one snack with

a fruit or vegetable-based snack will benefit your health and help maintain a healthy weight.

5. Remember: Even if you think you are being mindful of eating healthy, whole foods, you still have to be careful about the number of calories you're taking in.
 - a. For example, A handful of cashews can have as many as 200 calories. And while many nuts do contain a lot of healthy nutrients, you could easily eat a couple handfuls of cashews without thinking twice about it, and already your calorie count is skyrocketing.
 - b. If you want to eat a lot of calories, you're going to need to increase your physical activity level and have a regimen outside of work; you may want to have one regardless. There are a lot of benefits to physical activity alone.
 - i. "Leisure time physical activity", which can be anything from running or walking to golf or landscaping, has been shown to increase life expectancy. What do you do for "leisure-time physical activity?"
 - ii. One easy way to incorporate physical activity into your lifestyle is to exchange half an hour of TV for a half-hour walk in the evening. Another is to sign up for a community sports team or to practice sports with your kids. You can ask for your friends' or family's help to plan one outdoor activity each week.
 - iii. Are there any ways to alter your commute to and from work to make it an opportunity for physical activity? If you take public transportation, can you walk or bike to the station in the morning?

V. Barriers

1. What makes it difficult for you to eat healthy day-to-day?
 - a. Tired at the end of the day
 - b. Fast food only choice at work
 - c. Lack of time
 - d. Taste
 - e. Habit

2. Does anyone have any tricks they use to improve their healthy eating options?
 - a. Meal prepping/cooking (pasta with tomatoes and sauce, hard-boiled eggs, cut-up peppers, or other veggies). Make big batches of healthy, delicious food in advance!
 - i. Buying pre-cut veggies and things like canned tomato sauces can make this a lot easier.
 - b. Food choices at fast food restaurants and restaurants in general
 - i. Fast food: Many fast-food restaurants are required to post calorie content. Shoot for the low-calorie options - some of them might surprise you! Also, try some of the items with more fruits or vegetables. Grilled chicken instead of fried, for example.
 - ii. Restaurants/Eating away from home: Ask for half your meal to be put in a doggy bag before the meal. Portion sizes at restaurants are huge, and you can end up with more than 1,000 calories on one plate! Another way to reduce calorie content at restaurants is to ask for your food not to be cooked in butter or get the dish steamed rather than fried.
 - c. In general, energy balance is about being proactive—anticipate the problem!

V. Weight Management Resources

1. A good way to keep track of your calorie input and output is to use one of the many online resources that are becoming more and more available. If you have a smartphone - or even if you don't - there are some applications and websites that you can use to track your calories to better estimate your energy balance. Some of these are listed at the bottom of the card we gave you.
2. If you don't have access to a computer, simply writing down what you eat during the day is known to be a useful tool in weight loss and maintenance.

V. Conclusion

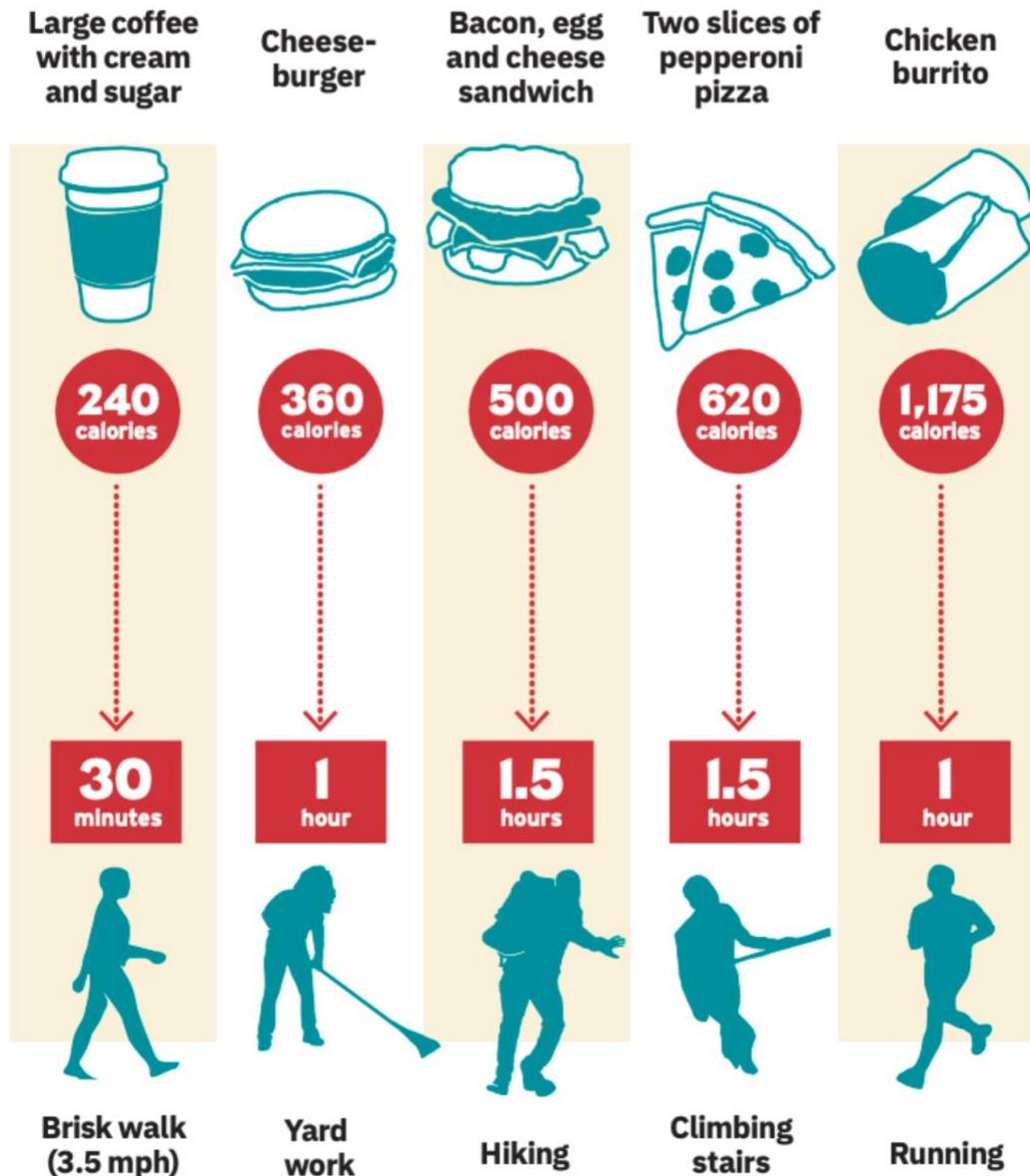
We have limited time here, so I want to close by saying that eating well and practicing energy balance are within your reach. It may be a bit more effort, but the benefits are well worth it. Pay attention to the resources on the cards as well. Treat your body like the machine it is and give it the proper fuel, maintenance, and care. Thanks for your attention.

Sources

1. CPWR Chart Book
2. CDC Guidelines; <http://www.cdc.gov/physicalactivity/everyone/guidelines/adults.html>
3. Center for Nutrition Policy and Promotion. USDA.
<http://www.cnpp.usda.gov/Publications/USDAFoodPatterns/EstimatedCalorieNeedsPerDayTable.pdf>

FOOD & ACTIVITY

Your energy for work & life



Support for OPTIMAL ENERGY

Free online resources and apps will track physical activity and food consumption to help you maintain energy balance:

MyFitnessPal

www.MyFitnessPal.com

Calorie counter app

MyPlate

[www.livestrong.com/](http://www.livestrong.com/TheDailyPlate)

[TheDailyPlate](http://www.livestrong.com/TheDailyPlate)

Calorie tracker

MyPlate Plan

[www.choosemyplate.gov/](http://www.choosemyplate.gov/MyPlatePlan)

[MyPlatePlan](http://www.choosemyplate.gov/MyPlatePlan)

Customized food plan

**The National Heart, Lung,
and Blood Institute's
Delicious Heart Healthy
Recipes**

[healthyeating.nhlbi.nih.gov/](http://healthyeating.nhlbi.nih.gov/default.aspx)
[default.aspx](http://healthyeating.nhlbi.nih.gov/default.aspx)

Recipe database, includes
many types of cuisines

**CDC's "Overcoming Barriers to
Physical Activity"**

[www.cdc.gov/physicalactivity/](http://www.cdc.gov/physicalactivity/basics/adding-pa/barriers.html)
[basics/adding-pa/barriers.html](http://www.cdc.gov/physicalactivity/basics/adding-pa/barriers.html)

Resources to overcome the 10
most common reasons for not
being more physically active

FoodKeeper App

[www.foodsafety.gov/keep/](http://www.foodsafety.gov/keep/foodkeeperapp/index.html)
[foodkeeperapp/index.html](http://www.foodsafety.gov/keep/foodkeeperapp/index.html)

Allows you to look up how long
any type of food will last when
stored properly

