

Lesson Overview

GOAL:

To increase knowledge of the diabetes-cancer connection, the basics of diabetes, and how eating right and moving more can prevent and control diabetes.

OBJECTIVES:

By the end of the class, participants will:

1. Recognize that 1/3 of cancers can be prevented by lifestyle modifications.
2. Understand the role of physical activity, exercise, and diet in diabetes prevention and management.
3. Identify 3 lifestyle modifications that can reduce the risk of diabetes or help to manage diabetes.
4. Understand the relationship between energy balance, obesity, and diabetes.
5. Identify ways to increase physical activity and exercise on a daily basis.

MATERIALS:

1. Handouts/Worksheets/Visuals.
2. Equipment for PowerPoints and other audiovisuals when applicable.

BHL Week 2 Guide for Instructors

The Diabetes-Cancer Connection



Getting Started:

HOUSEKEEPING

- Welcome the class & introduce yourself.
- Cover questions/comments/concerns related to both fitness and/or nutrition, and refer to the appropriate BHL staff member if unable to answer or console.
- Review the past week's *FADS* and *Weekly 3 C's*.
- Review the past week's *Weekly Challenge* when applicable.
- Have trained BHL staff take anthropometric measurements, distribute any materials or information, or make announcements when applicable.
- Have participants sign-in on attendance sheet.
- Give MetroCard to those applicable.
- Ensure that healthy snacks and water are provided.
- Distribute the lesson handouts.
- After each **TOPIC**, ask if the material is clear and if there are any questions.

Today's Lesson:

#1 PREVENT 1/3 OF CANCERS

- American Institute for Cancer Research: *Americans Can Prevent 1/3 of the Most Common Cancers* (Handout #1, ENG)

TOPICS

1. **Introduction:** If I told you that 1/3 of the most common cancers could be prevented, what would you think? (allow responses) Americans can prevent 1/3 of the most common cancers by staying lean, eating smart, and moving more (provide examples).

#2 THE DIABETES-CANCER CONNECTION

- B.O.L.D. Healthy Living Program: *The Diabetes-Cancer Connection* (Handout #2 or PowerPoint, ENG)
- B.O.L.D. Healthy Living Program: *The Diabetes-Cancer Connection — In-Class Worksheet* (Handout #3, ENG)

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TOPICS

1. **The Diabetes-Cancer Connection (slides 1-2):** Type 2 diabetes and cancer share common risk factors (place emphasis on obesity, lack of physical activity, and poor diet).
 - If asked about hyperinsulinemia: “Hyperinsulinemia means high levels of a hormone called insulin are in the blood. Insulin is what helps our bodies use sugars from foods. Hyperinsulinemia is a symptom of type II diabetes.”
 - If asked about inflammation: “Inflammation is complex; We are going to focus on obesity, physical activity and diet because these are 3 things that you can control.”
2. **Activity:** Ask the class to complete question 1 on their *In-Class Worksheet*. Share responses.
3. **3 Organizations, 1 Similar Message (slide 3):** Read through.
4. **Activity:** Ask the class to complete question 2 on their *In-Class Worksheet*. Share responses.
5. **Role of the BHL Program (slide 4):** Read through. Reinforce the services provided by the BHL Program, including referral services. Remind them that they can contact the BHL Program Coordinator or another BHL Program staff member at anytime.

#2 WHAT IS DIABETES?

- Learning About Diabetes: *What is Diabetes?* (Handout #4, ENG/SPN)

TOPICS

1. **What is Diabetes?** Read through booklet. Suggested introduction: “We know that diabetes has many health consequences. But what exactly is diabetes? Today we are going to find out.”
2. **(p3)** Being overweight is the major cause of Type II Diabetes in the United States. In general, Type II Diabetes is a preventable lifestyle-related disease, and in some cases, can even be reversed through lifestyle modifications. Some cancer treatments may promote diabetes in certain individuals, e.g. GI surgeries, chemotherapies, stress/increased sedentary lifestyle.
3. **(pp5-6)** If Type II Diabetes is poorly controlled, affected individuals will have to monitor their blood sugar daily and take medications.
4. **(p7)** Exercise can cause low blood sugar. Diabetics should bring sugar tabs or similar food items to their fitness class in case of an emergency. They should follow their prescribed range of blood glucose levels with their physician.
5. **(p9)** Reiterate that Type II Diabetes may be reversed through diet, exercise, and weight loss.

#3 STOP DIABETES BEFORE IT STARTS

- Learning About Diabetes: *Stop Diabetes Before It Starts* (Handout #5, ENG/SPN).

TOPICS

1. **Stop Diabetes:** Read through. Elaborate where necessary. Emphasize importance of prevention.

#4 CALORIES IN CALORIES OUT

- Learning About Diabetes: *Calories In Calories Out* (Handout #6, ENG/SPN)

TOPICS

1. **Calories In Calories Out:** Read through. Emphasize the importance of balancing calories with exercise on a daily basis. Combining both eating right and moving more is the most effective way to lose weight. Their FADs will help them to achieve their goals.

#5 BEAT DIABETES

- NYC DOHMH: *Physical Activity Can Help BEAT Diabetes* (Handout #7, ENG/SPN)
- NYC DOHMH: *Healthy Eating Can Help BEAT Diabetes* (Handout #8, ENG/SPN)

TOPICS

1. **Physical Activity:** Read through.
2. **Activity:** Ask the class to complete question 3 on their *In-Class Worksheet*. Share responses. Provide some of your own examples.
3. **Nutrition:** Read through. Have class complete question 3 on their *In-Class Worksheet*. Invite volunteers to share their answers. Provide some of your own examples.
4. **Activity:** Ask the class to complete question 4 on their *In-Class Worksheet*. Share responses. Provide some of your own examples.

#6 WEEKLY CHALLENGE

- BOLD Healthy Living Program: *Weekly Challenge #1* (Handout #9, ENG)

TOPICS

1. **Instructions:** Instruct participants to complete the *Weekly Challenge #1* and bring it with them to the next nutrition class. Participants check off the hour range that they spend sedentary (not moving) each day.
2. **Provide an example** of how to complete the worksheet, e.g., use Monday as an example and check the 6-8 hours box because you sat for 6 hours at work and 2 hours watching television at night. Participants should record on the worksheet everyday, including weekends (exclude sleep).

Closing:

HOUSEKEEPING

- Allow time for questions, comments, and concerns.
- Make sure that everyone has 3 blank *FAD* worksheets and 1 blank *My 3 C's* worksheet to complete over the week.
- Read their weekly *FAD* instructions (*Week-by-Week Guide* in *Orientation Packet*).
- Remind the class to review the *BHL Weekly Checklist*.
- Make sure that everyone knows the time/location of the next fitness and nutrition classes.
- Thank everyone for coming and offer your availability after class for questions, comments, or concerns. Provide referrals as necessary to the appropriate professionals.

Material References:

Handout #1:

Americans Can Prevent 1/3 of the Most Common Cancers. American Institute for Cancer Research Web Site. Available at: http://preventcancer.aicr.org/site/PageServer?pagename=reduceyourcancerrisk_home. Accessed July 10, 2013.

Handout #2:

B.O.L.D. Healthy Living Program. *The Diabetes-Cancer Connection (PowerPoint)*. Bronx, NY: Psychosocial Oncology Program, Albert Einstein College of Medicine; 2010.

Handout #3:

B.O.L.D. Healthy Living Program. *The Diabetes-Cancer Connection (Worksheet)*. Bronx, NY: Psychosocial Oncology Program, Albert Einstein College of Medicine; 2010.

Handout #4:

What is Diabetes? Learning About Diabetes Web Site. Available at: <http://www.learningaboutdiabetes.org/freeprograms.htm>. Published 2008. Accessed July 10, 2013.

Handout #5:

Stop Diabetes Before it Starts. Learning About Diabetes Web Site. Available at: <http://www.learningaboutdiabetes.org/freeprograms.htm>. Published 2008. Accessed July 10, 2013.

Handout #6:

Calories in Calories Out. Learning About Diabetes Web Site. Available at: <http://www.learningaboutdiabetes.org/freeprograms.htm>. Published 2008. Accessed July 10, 2013.

Handout #7:

Physical Activity Can Help BEAT Diabetes. New York City Department of Health and Mental Hygiene Web Site. Available at: <http://www.nyc.gov/html/doh/downloads/pdf/csi/diabeteskit-pt-phyactivity-fact.pdf>. Accessed July 10, 2013.

Handout #8:

Health Eating Can Help BEAT Diabetes. New York City Department of Health and Mental Hygiene Web Site. Available at: <http://www.nyc.gov/html/doh/downloads/pdf/csi/diabeteskit-pt-nutrition-fact.pdf>. Accessed July 10, 2013.

Handout #9:

B.O.L.D. Healthy Living Program. *Weekly Challenge #1 (worksheet)*. Bronx, NY: Psychosocial Oncology Program, Albert Einstein College of Medicine; 2010.