Long-Term Survivorship: Maintaining a Healthy Body Weight

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• Why is weight management important after a breast cancer diagnosis?

• Research update: The role of exercise and weight control in reducing risk of recurrence

• Exercise and dietary strategies to help you reduce body fat, preserve muscle mass and control your weight
Why weight management is important after a breast cancer diagnosis

• Excess body fat has been shown to be a major risk factor for recurrence in both pre- and postmenopausal breast cancer.

• In women who have been diagnosed with breast cancer, recurrence rates are significantly higher among overweight women and 78% higher among obese women (BMI >30 kg/m2) than those who are normal weight (BMI 18.5-24.9 kg/m2).
Why weight management is important after a breast cancer diagnosis

• Excess body fat is also a risk factor for:
  – Other cancers
  – Type 2 diabetes
  – Hypertension
  – Heart disease
  – Stroke
  – Obstructive sleep apnea
  – Osteoarthritis
  – Dyslipidemia
  – Gallbladder disease
  – Other conditions

• Obese women with breast cancer have poorer prognosis than non-obese women with breast cancer (Protani 2010)
How does excess body fat ↑ breast cancer recurrence risk?

Possible mechanisms:

- Fat tissue produces estrogen. *High circulating estrogen levels are a risk factor for breast cancer incidence and recurrence.*

- Excess body fat causes insulin resistance thus the body needs to secrete more insulin. Insulin ↓ levels of sex hormone binding globulin. *Insulin also is growth factor, so elevated levels increase cancer risk.*

- Excess body fat ↑ inflammation. *Inflammatory factors cause insulin resistance and increase cancer risk.*
What happens to survivors’ body weight after diagnosis?

**Post-diagnosis, most breast cancer survivors gain weight, lose muscle mass and gain fat tissue (Melinda, 2005)**

**Why?**

- Duration of inactivity through treatment and some effects of treatment cause a reduction in muscle mass.
  - Decreased muscle mass = reduction in the basal energy expenditure, so weight gain is more likely to occur at the same level of caloric intake.
Weight gain risks

• In observational studies, weight gain after diagnosis was associated with ↑ risk for recurrence, as well as increased disease-specific and overall mortality (Kroenke et al., 2005).

• From a cohort of 3,993 women, among women who gained weight after breast cancer diagnosis:
  – Each 11 lb gain ≈ 12% increase in all-cause mortality, a 13% increase in breast cancer-specific mortality, and a 19% increase in cardiovascular mortality (P<0.05) (Nichols et al., 2009)

• The Nurse’s Health Study (NHS), a 26-year follow-up:
  – Among 87,143 postmenopausal women, there were 4393 documented cases of breast cancer
  – Weight at diagnosis and weight gain following diagnosis were found to be related to higher rates of breast cancer recurrence and mortality in the NHS cohort (Kroenke et al., 2005)
• The latest research on the role of exercise and weight control

• The effect of a weight loss intervention provided after the completion of initial treatments has been examined in a few small previous studies.

• **The Survivors Health and Physical Exercise (SHAPE) Study:**
  - 259 early stage breast cancer survivors
  - As compare to those who did not lose at least 5% body weight, those who lost over 5% body weight had
    - ↓ in insulin, leptin and bioavailable estradiol
    - ↑ in sex hormone binding globulin
    - All are favorable changes
The latest research looking at the role of exercise and weight control

• The Exercise and Nutrition to Enhance Recovery and Good Health for You (ENERGY) Trial
  – A randomized controlled weight loss study among 693 overweight or obese breast cancer survivors
  – Clinical sites in San Diego, Denver, St. Louis, and Birmingham
  – Strategically designed as a vanguard trial with the hope to extend to >2500 women to check the influence of weight loss on breast cancer recurrence.
Exercise and dietary strategies to help you reduce body fat, preserve muscle mass and control your weight.
Body Mass Index (BMI)

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<tr>
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<tr>
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Calculate Your BMI at: http://nhlbi.gov/guidelines/obesity/bmi/

Aim to move your weight in this direction.
How do we lose weight?

• A calorie is a unit of energy.
  – Calories come from the foods and beverages we consume.
  – Excess energy is stored as fat.
  – We burn calories through normal body functions and exercise.

• Your body weight stays the same when the amount of calories you eat equals the amount of calories that you burn—in other words: **calories in = calories out.**

1 lb of fat is 3,500 calories
How do we lose weight?

• Estimate calories needed to maintain your weight: current weight in pounds \times 12
  – Example: To maintain her weight, a 200-pound woman will need about \(200 \times 12 = 2400\) calories/day.

• To lose weight, plan to eat 500 to 1000 calories less than needed to maintain your weight
  – Example: \(2400 - 500 = 1900\) calories/day
  – Will result in a weight loss of 1-2 lbs per week
  – It is not recommended to go below 1200 calories/day in order to meet your body nutritional needs

• Read the food label and limit portion sizes.
Exercise

• Start exercising each day. The long-term goal for weight control is to get at an average of at least one hour a day of moderate exercise.

• Enjoyment and convenience: Find exercises you enjoy and that are easy for you to incorporate to your day (such as walking).

• Intensity: Moderate intensity is when you can speak but not sing and you develop some sweat.

• Exercise is always possible. Have a back-up plan!
Out of Sight – Out of Mind: Out of Mouth!

• Environmental Control:
  – The less you see and think about food, the easier it is to control your weight
    • Store foods out-of-sight.
    • Hide the high-calorie foods.
    • Keep healthy snacks and foods readily available.

• Portion Control:
  – Don’t eat from the package.
  – Platters of food on the table lead to “picking” so serve yourself and eat what is on your plate.
  – Quit the “clean plate club.”
  – Store any leftover food right away.

• Regulate Eating Pattern: Don’t skip meals.
Your tool box – Planning

• Plan your meals to meet your calorie goal.
  – Be flexible: if you know you will have a day that will require more calories plan for less calories on other days.

• Schedule the activity into your day or plan your day around the activity.
  – Know where, when, what and with whom
  – Have the right clothing and good exercise shoes.
  – Be flexible: If you know a day will be very hectic and you won’t have as much time as you want to exercise, plan for more activity on other days.

• Remember: Something is better than nothing.
Your tool box – Self-Monitoring

• Record what you eat and your exercise activities.
  – Options on recording: Pre-record or record as you go.

  – Use a notebook or free online or phone apps like
    • MyFitnessPal: http://www.myfitnesspal.com/
    • LoseIt: http://www.loseit.com/
    • SparkPeople: http://www.sparkpeople.com/
    • Other options are available
Your tool box – Goal Setting

• Use The **SMART** way to set goals:
  – **Specific**: What will you do for exercise?
  – **Measurable**: How will you measure it?
  – **Attainable**: Are you able to do it?
  – **Realistic**: Will time and money allow you to do it?
  – **Timely**: When do you want to achieve it?
• Reward yourself on regular basis for achieving your goals.
  – *Example*: If you walked 7 times this week for 30 minutes (210 minutes total), you will set aside time to read a book you’ve been wanting to read.
Your tool box – Alternative Behaviors

• Develop a list of things to do when you want to eat, but know you should not:
  • Take a deep breath and relax
  • Go outside and feel the breeze and the sun (or the moonlight)
  • Cuddle with your spouse, child, or pet
  • Write a letter to a loved one
  • Wash your face slowly with a soft washcloth and warm water
  • Soak your feet in warm or cool water; apply lotion

  • Organize pictures
  • Turn on music and dance around the room
  • Imagine yourself on the beach or in a green lush forest
  • Pound a pillow
  • Sing out loud
  • Get busy (writing emails, calling a friend, laundry)
Your tool box –
Take Care of Yourself
(self-nurturing)

• Too busy? Too bored? Remember, you’re the one in charge of your life. Take time to care for yourself!
Time management is really about setting your priorities.

– Imagine it’s 10 years from now. What are some things you would like to do?
– What would you need to do to make those dreams come true?
– How important is staying healthy in being able to do those things?
– Look at how you spend your day and START planning it based on things that are important to you.

Ways to Save Time

• Cut back on (or stop doing) what’s not important to you.
• Say “no” when asked to take on a new task.
• Combine tasks.
• Combine errands (go to the drug store and the post office in one trip).
• Double recipes when you cook and freeze extras to eat at a later time.
Body image is the mental picture we have of the appearance of our bodies. It is how you would describe yourself to yourself.

Body image contributes to self-esteem, and influences our behavior.

Body checking and avoidance reinforce a poor body image.

Look at yourself and get to know your body

- Tell yourself “This is who I am; I am a strong woman!”
- Thank your body for helping you through everything
- Find what you love about your body
- Developing self-acceptance promotes the maintenance of a realistic goal weight.
• Triggers are things around you that make you want to eat.
• Certain thoughts, things you see, feelings, times, places, and activities can be powerful triggers to eat, even when you’re not physically hungry.
• Goal: Break the link between these thoughts and the act of eating.

Reduce Your Triggers
1. Limit eating to one place at home and one place at work.
   – At home: Eat in a place that already includes food (e.g., kitchen, dining room)
   – At work: Eat in a place that is separate from your desk or work area (e.g., staff kitchenette, cafeteria)
2. Eat food slowly with a spoon or a fork to become more mindful of eating.
Your tool box –
Self-talk

• Self-talk is the mental conversation we have with ourselves.

• Self-talk is very powerful—it affects feelings and actions.

• **Positive self-talk** is hopeful—it gives confidence and power it can move you toward your exercise and eating goals.

  — *Example:* “I am doing something positive to take control of my health”

• **Negative thoughts and self-talk** can lead you away from your goals. When you find yourself with negative self talk, stop the thought or confront it!

  — *Example:* Instead of thinking “Look at what I did. I ate that cake. I’ll never succeed.” Tell yourself “One slip-up isn’t the end of the world I can get back on track.”
• What do others say or do that affects your eating and activity? Think about ways that your family and friends could be more supportive.

• Most people will want to give you support, but they may be unsure how to help. Give them examples of how they can support you.
  – Example: “I know you are trying to help me when you say that I should get off the couch and go for a walk rather than eat and watch TV. But pointing out my problems upsets me. It would be more helpful if you could comment when you see me doing something positive—like when I walk up the stairs—and ignore me when you see me on the couch.”

• Share the progress you have made with others!
Ways to Prevent Stress

• Practice saying “NO.”
• Try to say “yes” only when it is important to you.
• Share some of your work with others.
• Set goals you can reach.
• Take charge of your time.
• List planned activities in order of importance. Can you cancel activities that fall at the bottom of your list? If not this time, then how can you plan ahead to avoid them in the future?
• Plan ahead.
• Keep a positive outlook
• Be physically active.
• Practice some instant coping strategies such as deep breathing.
• “Slips” are times when you don’t follow your eating or activity plans.
• Slips are normal and are expected.
• Almost all people have slips on their way to losing weight and being more active.
• No one instance of overeating not being active (no matter how extreme) will ruin everything.
What to do after a slip:

1. Remove yourself from the situation.
2. Use sensible thoughts to argue against negative thoughts.
3. Involve yourself in another activity.
4. Regain control as soon as you can. Resist the impulses to starve yourself or skip a meal.
5. Throw out any leftover food(s) that you overate.
6. Count the number of calories you ate. You probably ate far fewer than you thought.
7. Make a plan to make up for the excess calories.
8. Think about the things that triggered your overeating. Concentrate on how, when, where, and what instead of why.
Successful tools we used

• Walk at home DVD’s
  http://www.walkathome.com/

• Strength and courage DVD
  http://www.strengthandcourage.net/

• Yoga for cancer recovery DVD
  http://www.oceansoulyoga.com/yogaforcancercr
  ecoverydvd.html