

A Practical Guide to Healthy Weight Management

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Agenda

- Intros
- Healthy Weight Management
- How to bring the topic up with your clients/patients
- Dispelling myths
- Stress and sleep
- Beverages
- Physical activity
- Food and eating habits

Intros

- **Me**



- **You?**
- POLL QUESTION:
- How many nurses?
- Advanced practice nurses?
- PAs?
- Docs?
- Administrators?
- Other?

How do you feel about your own weight management?

Healthy weight management is for everyone, including us.

Although weight management is a health topic, it is also highly personal and warrants respect.

Healthy Weight Management

| | |
|--|--|
| <p>Weight loss</p> <ul style="list-style-type: none"> • short-term • Focus on getting to a certain number • People who are overweight work to lose weight • Success defined by pounds lost • The more pounds you lose, the better • Aim to get to a "normal" weight | <p>Healthy Weight Management</p> <ul style="list-style-type: none"> • lifelong • focused on health • <u>Everyone</u> works to adopt healthy habits • Success defined by reaching behavior goals • Halting weight gain is a successful outcome • Fit and healthy at any size |
|--|--|

Thin does not necessarily mean *healthy*

Overweight does not necessarily mean *unhealthy*

How does it feel when you bring it up with your clients?

- Dread
- I don't know what to say
- I don't want to embarrass or offend
- I personally struggle with weight
- Not sure how to address the issue in a family planning visit
- Not enough time
- I am naturally tall and lean and I feel that patients will not think I empathize with them. I never feel comfortable addressing weight concerns with anyone, least of all my patients.

So, how DO you bring it up?

- First, bring it up with *everyone.*
 - “This month, I'm talking to all my clients about physical activity. How is that going for you?”
 - “Lately, I've been encouraging all my patients to drink water instead of other beverages. I've been trying to do that myself, too”
 - “We are learning more and more about the role of sleep in health. Did you know that not getting enough sleep at night can make you gain weight? Everyone is healthier if they sleep at least 7 hours at night.”

So, how DO you bring it up?

- Second, do not talk about “weight” or “pounds” or “BMI”.
Talk about behaviors.
 - Easier to start doing something good than to stop doing something bad.
 - Are you sleeping at least 8 hours at night? Are you drinking plenty of water? Can you add vegetables to your meal once a day? Can you commit to walking for 20 min a day?

So, how DO you bring it up?

- Third, if their weight is affecting their health or their medication, and you feel you must address it directly,
ask permission to talk about it.

How to talk about it:

- Your contraception may be less effective at preventing pregnancy because of your weight. Are you interested in talking about your weight with me today?
- How do you feel about your weight? (are you worried, frustrated, comfortable?)
- What have you done in the recent past to manage your weight?

Self-efficacy

- A person's belief that they are capable of performing a specific behavior
- Improvements in self efficacy linked to better weight loss outcomes

Self-efficacy

- Many overweight patients are dealing with misinformation, conflicting information, and a strong external locus of control
 - Weight is due to genes or other factors beyond my control. I've tried everything and nothing works. I need the right diet. I can't exercise because the weather is bad. My husband won't want to eat that way. I want to do x, but I don't have the time.
- Self-efficacy is about bringing the sense of control back to the patient

Self-efficacy

- Reframe the task from weight loss to self-care. People with a healthy sense of self-worth consistently and conscientiously take care of their own health.
- Teach patients how to self-monitor so they can identify the specifics of their emotional relationship with food and exercise. NOTICE what they choose to do when they are feeling sad, bored, upset, angry.
- Ask patients to just start talking about what they WANT to do differently ("I'm thinking of trying to cut back on soda") to people who matter to them.

How to talk about it: Setting Goals

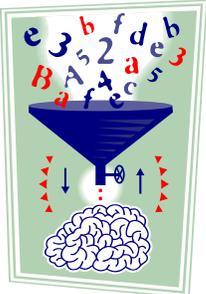
- Focus on healthy BEHAVIORS, not pounds to lose
- Goals should be specific, realistic and gradual
- Positive goals are easier than negative ones (easier to start something than stop something)

How to talk about it: Setting Goals

- Goals:
 - I will sleep for at least 8 hours most nights
 - I will choose water instead of another beverage at least twice a day
 - I will "step it up" at least once a day
 - I will add one vegetable to one meal most days
 - I will spend 5 minutes doing relaxation breathing after I leave work
 - I will pause before eating, and focus on the gratitude I feel for healthy food

Questions?

Dispelling some of the myths of weight management



The diagram shows a blue funnel with various letters (e, b, f, d, b, B, A, a, c, s) and numbers (3, 2, 5, 3) falling into it. Below the funnel is a brain, with red arrows pointing up and down, indicating a process of filtering and processing information to dispel myths.

Myth #1: Calories in, calories out

Too many calories in,
Too few calories burned



But it's not simple math

Calories in – calories out = weight gain
or does it?

3500 calories = a pound...
In the laboratory!

3500 calories may or may not result in
weight gain or loss **in a human!**

It's more like calculus

$$y = F(a) + m(x - a), \text{ where } m = \left. \frac{dy}{dx} \right|_{x=a} = F'(a)$$

$$\int \sin^5 x \, dx = \int (1 - \cos^2 x)^2 \sin x \, dx$$

$$\frac{dy}{dt} = F'(x) \frac{dx}{dt}$$

It's complicated!

- The physiology involved in weight management is extremely complex.
- Obtaining and storing energy is one of the most important survival skills of our bodies. They require multiple interrelated redundant systems.

Weight management is not just about will power

New science involving hunger and satiety hormones provides evidence that there are REAL differences in how much food people need to feel satiated, how hungry they feel, and their ability to recognize when they have eaten enough.

These are powerful biological signals that are difficult to override.

PLUS... Our obesogenic environment is another major contributor



Be gentle

One of the most powerful things you can do for your clients is to get shame, judgment and prejudice out of the exam room.

Myth #2: Anyone is capable of dieting down to their “ideal” weight

- Most of us have a weight set point, genetically determined
- Early childhood has a strong influence on your lifetime set point
- Most people have a typical weight, plus or minus 30 pounds
 - Quick weight loss or weight gain will be overridden by a powerful return to your set point
 - Slow, gradual weight gain or loss adjusts your set point upwards or downwards

Levin BE. Factors promoting and ameliorating the development of obesity. *Physiol Behav.* 2005 Dec 15;86(5):633-9.

Myth #3: Follow this plan, and you will lose 10 pounds a week!

- People vary in their response to intense exercise
- People vary in their response to very low calorie diets or very high calorie diets

You're not crazy

Bouchard, C. Gene-environment interactions in the etiology of obesity: defining the fundamentals. *Obesity* 2008 Dec;16 Suppl 3:S5-S10.

Questions?

Poll question

- How stressed would you rate yourself currently?
 - a) No stress at all
 - b) Some stress, but it is positive, challenging
 - c) Some stress, with a negative effect
 - d) A great deal of stress, but I'm coping ok
 - e) A great deal of stress, and I'm struggling

Stress



Stress

- Not all stress is bad for you: “threat” stress vs “challenge” stress
 - Challenges are positive, threats make us worry
 - Do I have the resources to cope with it?
 - Cortisol (burnout) vs. adrenaline (high or rush)
- In humans, threat stress triggers increased calorie intake, particularly high-fat food

Adam TC, Epel ES. Stress, eating and the reward system. *Physiology & Behavior* 91 (2007) 449–458

Stress

- Animal models have typically shown that stress *reduces* food intake.
 - Energy diverted to “fight or flight response”
- BUT, when highly palatable food is available, stress *increases* food intake

Adam TC, Epel ES. Stress, eating and the reward system. *Physiology & Behavior* 91 (2007) 449–458

Stress

- If someone has significant stress in their life, it is NOT a good time to do things that are difficult, such as drastically changing their diet or starting an exercise program.
- Encourage them instead to focus on relaxation practices, pausing during the day to reflect on what they are grateful for, or finding something that brings them joy.

Stress

- Do not underestimate the stress people experience about being overweight. As a health care provider, do all you can to not add to that stress.

The stress that people feel about being overweight is worse for their health than being overweight.

Relaxation exercises

- Close your eyes. Breathe in for a count of 5, hold, breathe out for a count of 7. Pause, and notice that your body has everything it needs for this one moment. Repeat.
- With slow deep breaths, silently say a mantra: Breathing in, I feel calm and content. Breathing out, I smile.
- In a relaxed seated position, close your eyes. Breathe slowly and deeply. Imagine your whole body is made of butter. Start at your toes, and imagine them slowly melting away into a puddle. Focus on each body part for at least 15 seconds, working your way gradually up your body to your face and head. The whole exercise should take 7-10 minutes. Great way to fall asleep at night!

Meditation

- Mindfulness practice
- When we bring our full attention to what we are doing, things change.
- Mindfulness includes noticing when you're hungry and full, so you don't eat out of automatic patterns
- Proven stress reliever
- If you can learn to notice your breath, and hold your attention there, you will begin to notice so much more.

Sleep

- Consistent finding in adults and children that less than 7 hours of sleep at night causes weight gain
- Sleep deprivation linked with decrease in leptin sensitivity
- Might be related to cortisol

Patel SR, Hu FB. Short sleep duration and weight gain: a systematic review *Obesity (Silver Spring)*. 2008 March ; 16(3): 643-653

Sleep

- Only 26% of US adults get 8 hours of sleep or more
- Ideal seems to be 8-9 hours.
- Comparative increased risk for obesity:
 - 7-8 hours of sleep 9%
 - 6-7 hours of sleep 24%
 - 5-6 hours of sleep 49%
 - <5 hours of sleep 85%

Patel SR, Hu FB. Short sleep duration and weight gain: a systematic review *Obesity (Silver Spring)*. 2008 March ; 16(3): 643-653

Questions?

Beverages



Beverages

- Calories from beverages are more likely to cause us to gain weight than the same calories from food
 - Do not trigger satiety signals
 - Rapidly processed through the digestive track
 - No compensation at next meal
 - High-fructose diet causes leptin resistance
 - Reducing liquid calories is more effective for weight loss than reducing solid calories
- **THIS IS MORE THAN EXCESS CALORIES!**
- Rats fed high fructose diets subsequently ate more and gained more weight than controls when fed a high fat, high calorie diet.

Malik VS, Schulze MB, Hu FB. Intake of sugar-sweetened beverages and weight gain: a systematic review. *Am J Clin Nutr*. 2006 Aug;84(2):274-88.

Reducing liquid calories is more effective for weight loss than reducing solid calories

| | ↓ 100 cal/day solid | ↓ 100cal/day liquid |
|------------------|---------------------|---------------------|
| Wt change 6 mos | 0.06kg | 0.3kg |
| Wt change 18 mos | 0.09kg | 0.2kg |

Chen L. et al "Reduction in consumption of sugar-sweetened beverages is associated with weight loss: the PREMIER trial" Am J Clin Nutr 2009;89:1299-306.

Great example of how this is not arithmetic, it's calculus!
This is a prospective study looking at diet effect on htn

Diet beverages are not any better!

- Artificial sweeteners produce abnormal triggers in brain and liver
- Cause most people to seek and consume more calories
- People who consume artificial sweeteners on a regular basis gain more weight than those consuming regular sugar-sweetened beverages

Fowler SP et al. "Fueling the Obesity Epidemic? Artificially Sweetened Beverage Use and Long-Term Weight Gain" Obesity (2008) 16, 1894-1900



Physical activity

- Duration
 - Most people need 30 min a day of exercise to maintain health
 - Minimum of 60 min a day to produce weight loss
 - Some people may need 90 minutes a day
- Start slowly and work up to those goals.
 - 15 min x 2 is the same as 30 min continuously

Physical Activity

- Consider activities that can be done by yourself, with others, inside and outside
- Make it FUN
- Variety helps
- Intensity matters –
 - you should be able to talk, but not sing
- Three components:
 - Aerobic
 - Strength-building
 - Flexibility
- Spot-reducing does not work

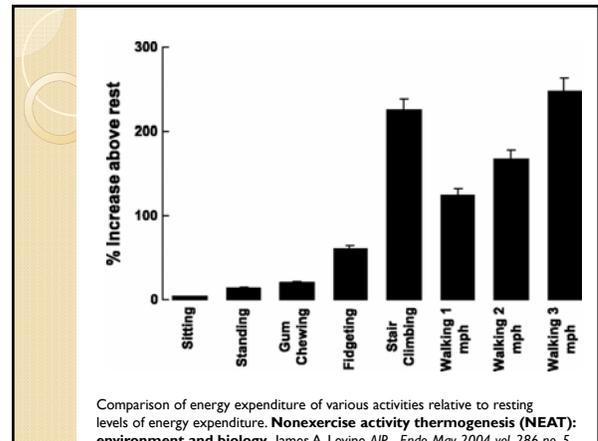
Exercise

- Aerobic: walking, running, dancing, riding a bike, jumping rope, rollerskating/blading, swimming, aerobic classes
- Strength-building: weight lifting, calisthenics (situps, push-ups, squats)
- Flexibility: stretching, yoga

NEAT

- Non-exercise activity thermogenesis
- Energy expended for everything we do that is not sleeping, eating or sports-like exercise.
 - Even trivial physical activities (fidgeting) increase metabolic rate substantially.
 - NEAT could be a critical component in how we maintain our body weight and/or develop obesity or lose weight.
 - NEAT accounts for 15-50 % of total calories expended in a given day depending on whether an individual is sedentary or active.

1. Levine JA et al Non-Exercise Activity Thermogenesis: The Crouching Tiger Hidden Dragon of Societal Weight Gain. *Arterioscler Thromb Vasc Biol.* 2006;26:729-736.
2. "The role of exercise for weight loss and maintenance." *Best Pract Res Clin Gastroenterol.* 2004 Dec;18(6):1009-29



Step it up!

- Instead of sitting, stand
- Instead of standing, pace
- Instead of slow walking, walk faster
- Instead of sitting still, fidget, tap you feet, shake your hands, chew gum.

Questions?

Food and eating habits

- Too much information out there about what to eat, what not to eat, and how to eat
- We are obligated to provide simple, clear, evidence-based recommendations to our clients about HEALTH
 - There is a plethora of information out there about what to eat if you want to lose weight. Most of it does not lead to better health.
- Most people do NOT need to see a dietician to learn how to eat well

Nutrition guidelines

- Eat breakfast every day (fiber and protein)
- Eat 3 cups of vegetables and 2 fruits every day
- Eat real foods, not processed, packaged foods
- Choose whole grains instead of refined grains
- Plant-based diet – the fewer animal foods the better
- Choose water instead of other beverages
- Do not skip meals, and stop eating 3 hours before bed
- Focus on your food (mindful eating)
- Stop eating when you are satisfied, NOT when you feel full.

Breakfast

- Eating a healthy breakfast every day has been consistently shown to help with weight management
- Routinely skipping breakfast makes you 4.5 times more likely to be obese
 - BUT: only applies to home breakfast; eating breakfast OUT makes you 2x as likely to be obese
- More frequent meals produce less weight gain than infrequent meals

Ma Y. "Association between Eating Patterns and Obesity in a Free-living US Adult Population" Am J Epidemiol 2003;158:85-92

Plant-based diet

Fruits and Vegetables

Whole Grains

Healthy Protein sources

- Clear scientific proof of better health with plant-based diets – the less animal foods the better
- Our bodies respond to VOLUME of food, not amount of calories
- Energy density of food matters – calories per cup of food. Low-energy-dense food makes you feel full with fewer calories than high-energy-dense foods.

Plant-based diet

- Vegetables
- Fruits
- Beans, lentils, soy
- Nuts, seeds (especially walnut, almond, flax) include nut and seed butters
- Whole grains (brown rice, oats, whole wheat, corn tortillas, quinoa, millet)

Eating habits

- Develop awareness of hunger cues. Eat when you are hungry. Be aware of wanting to eat because you are upset, bored, or it just looks good, and have only a small amount at those times.
- Serve yourself less food. The most reliable predictor of how much someone will eat is how much they are served.

Questions?

Thank you!

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