MANAGING YOUR WEIGHT AS YOU MANAGE YOUR MENTAL HEALTH

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Topics To Be Reviewed

Weight Management
• Definition
• Behavioral approach
• FDA approved medications
• Bariatric surgery

• Discussion throughout...
Defining Obesity

• **Body Mass Index (BMI)**
  • Underweight (< 18.5 kg/m²)
  • Normal weight (18.5-24.9 kg/m²)
  • Overweight (25.0-29.9 kg/m²)
  • Class I Obesity (30.0-34.9 kg/m²)
  • Class II Obesity (35.0-39.9 kg/m²)
  • Class III Obesity (> 40 kg/m²)

## What Can We Recommend?

<table>
<thead>
<tr>
<th>Treatment</th>
<th>BMI Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25-26.9</td>
</tr>
<tr>
<td>Diet, exercise, &amp; behavior therapy</td>
<td>With co-morbidities</td>
</tr>
<tr>
<td>Pharmacotherapy</td>
<td>With co-morbidities</td>
</tr>
<tr>
<td>Bariatric Surgery</td>
<td>Lap-Band with co-morbidities</td>
</tr>
</tbody>
</table>

**Source:** The Practical Guide to the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults
# Some Medications Cause Weight Gain

<table>
<thead>
<tr>
<th>High Likelihood</th>
<th>Medium Likelihood</th>
<th>Low Likelihood</th>
</tr>
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<tbody>
<tr>
<td>Clozapine</td>
<td>Chlorpromazine</td>
<td>Amisulpride</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>Quetiapine</td>
<td>Aripiprazole</td>
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<tr>
<td></td>
<td>Risperidone</td>
<td>Asenapine</td>
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<tr>
<td></td>
<td>Paliperidone</td>
<td>Haloperidol</td>
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<tr>
<td></td>
<td></td>
<td>Ziprasidone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lurasidone</td>
</tr>
</tbody>
</table>

Portion Distortion!

TURKEY SANDWICH

20 Years Ago

320 calories

Today

How many calories are in today’s turkey sandwich?
TURKEY SANDWICH

20 Years Ago
320 calories

Today
820 calories

Calorie Difference: 500 calories
Maintaining a Healthy Weight is a Balancing Act
Calories In = Calories Out

How long will you have to ride a bike in order to burn those extra calories?*

*Based on 160-pound person
Calories In = Calories Out

If you ride a bike for 1 hour and 25 minutes, you will burn approximately 500 calories.*

*Based on 160-pound person
Lifestyle Modification

- Low-Calorie Diet
- Increased Physical Activity
- Behavior Therapy
“Which ‘sensible diet’ do you want me to follow? I found 123,942 of them on the internet!”
Energy Density and Weight Control

Protein: 4 calories per gram

Carbohydrate: 9 calories per gram

Fat: 9 calories per gram
Improving Adherence to a Low-Calorie Diet

- Adding structure enhances weight loss and maintenance
- More structure = Less room for error
- Underestimation of calorie-intake
  - Dietitians: \( \sim 10\% \)
  - Normal weight persons: \( \sim 20\% \)
  - Obese persons: 30\%-50\%
Self-Monitoring

ChooseMyPlate.gov; supertracker.usda.gov

http://www.myfitnesspal.com/

Sparkpeople.com

LiveStrong.com – My Plate tracker
## USDA Activity Recommendations

<table>
<thead>
<tr>
<th>Goal</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comorbid risk reduction</td>
<td>At least 30 min of moderate intensity activity on most days of the week</td>
</tr>
<tr>
<td>Prevent unhealthy weight gain</td>
<td>Up to 60 min of moderate to intense activity on most days</td>
</tr>
<tr>
<td>Sustain weight loss</td>
<td>60-90 min of moderate to intense activity per day</td>
</tr>
</tbody>
</table>
Standard Activity Recommendations

• Activity ≥ 5 days/week
  • Make it a habit

• Start slowly
  • Begin at 10 min/day and build

• A simple brisk walk will do
  • 3-4 mph
  • Bouts of at least 10 min

• Increase lifestyle activity
Behavior Therapy

- Skills include
  - Self-monitoring
  - “Environmental engineering”
  - Problem-solving
  - Challenging negative thoughts

Behavioral Elements

Cognitive Elements
Behavioral Elements: Stimulus Control

- Changing stimuli to change responses
- Identify eating- and activity-related cues
  - Limit/increase exposure to neg/pos cues
  - Social support often helpful
- Examples
  - Eating in front of TV
  - Purge pantry
  - Location, location, location
## FDA Approved Medications for Weight Loss

<table>
<thead>
<tr>
<th>Medication</th>
<th>Method of action</th>
<th>Weight change</th>
<th>Length of use</th>
</tr>
</thead>
</table>
| Orlistat               | Inhibits gastrointestinal lipases                                                | O  – 5.8 kg P  – 3.0 kg  
after 4 yrs  
5% loss: 52.8 vs 26.2% | Long-term |
| Phentermine-topiramate | Activates sympathetic ns and releases norepinepherine and dopamine              | -6.6% lower dose  
-8.6% higher dose  
(placebo subtracted loss)  
5% loss: 62 vs 21% | Long term |
| Lorcaserin             | Selective serotonin (5-HT2c) receptor agonist                                   | 3.6% at 1 yr, placebo subtracted  
5% loss: 47 vs 20.5% | Long term |
| Bupropion-naltrexone   | Inhibits dopamine and norepinephrine; opioid antagonist                        | B-N: -5.4%  
P: -1.3%  
5% loss: 42 vs 17% | Long term |
| Liraglutide            | Glucagon-like peptide 1 (GLP-1) receptor agonist                              | L: - 5% (placebo subtracted)  
5% loss: 63.5 vs 26.6% | Long term |
| Phentermine            | Sympathomimetic anorexogenic agent                                              | Phen: - 13%  
Plac: - 5%  
(36 wks) | Short term |
“The best way to lose weight is to have your stomach stapled...to your upper lip.”
Bariatric Surgery Procedures

- Adjustable Gastric Banding
- Roux-en-Y gastric bypass
- Sleeve gastrectomy (gastric sleeve)
BARIATRIC SURGERY

Losing 50% to 70% of excess weight is just the beginning...

- Migraines: 57% resolved*
- Depression: 47% reduced*
- Pseudotumor cerebri: 96% resolved*
- Obstructive sleep apnea: 74% to 98% resolved*
- Hypercholesterolemia: 63% resolved*
- Asthma: 69% resolved*
- Hypertension: 69% resolved*
- Nonalcoholic fatty liver disease: 90% reduced*
- Metabolic syndrome: 80% resolved*
- GERD: 72% resolved*
- Type 2 diabetes: 82% to 98% resolved*
- Polycystic ovarian syndrome: 79% resolution of hirsutism*/
  100% resolution of menstrual dysfunction*
- Urinary stress incontinence: 44% resolved*
- Osteoarthritis/degenerative joint disease: 41% resolved*
- Venous stasis disease: 95% resolved*
- Gout: 72% resolved*

Quality of Life Improved
in 95% of patients.*
Mortality Reduced
by 89% in five-year period.*
## Benefits of Bariatric Surgery

<table>
<thead>
<tr>
<th>Condition</th>
<th>Median (Range) Preoperative Prevalence</th>
<th>Median (Range) Percentage of Patients With Postoperative Improvement or Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 2 Diabetes</td>
<td>11% (3-100%)</td>
<td>100% (64-100%)</td>
</tr>
<tr>
<td>(21 studies)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td>38% (16-83%)</td>
<td>89% (25-100%)</td>
</tr>
<tr>
<td>(19 studies)</td>
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</tr>
<tr>
<td>Dyslipidemia</td>
<td>32% (3-65%)</td>
<td>88% (60-100%)</td>
</tr>
<tr>
<td>(11 studies)</td>
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</tbody>
</table>

Summary

• Weight gain may occur for many reasons – genetics, medications, eating habits, physical limitations for activity
• Lifestyle modification and medications
  • About equally effective (5-10% reductions)
  • Effects are additive – always pair behavioral weight loss with medications if you are taking them
• Surgery’s long-term results are best