

Behavioral Weight Loss for Obesity Management

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Disclosures

“Neither I nor my spouse/partner has a relevant financial relationship with a commercial interest to disclose.”

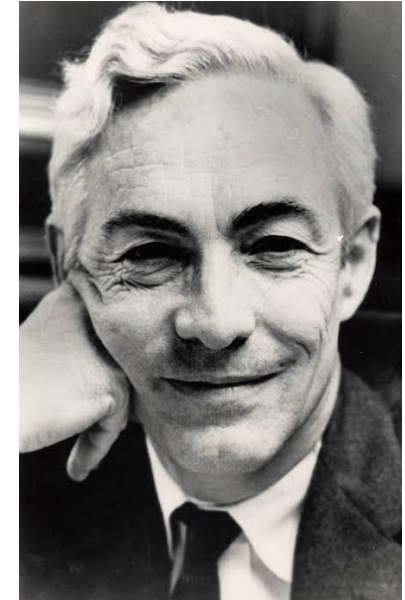
Agenda

- What is BWL?
- Components of BWL
- Does BWL work?
- BWL: Disordered Eating & Weight Stigma
- BWL vs. CBT
- Treatments for BED + Obesity
- Future Directions

Brief History of Behavioral Weight Loss (BWL)

- Obesity initially seen as lack of self-control
- Albert J. Stunkard, MD
- One of first leaders in the field of obesity research
- Published “Eating patterns and obesity” (1959)
 - Emphasize importance of contextual factors

Stunkard A.J. *Eating patterns and obesity*. *Psychiatric Quarterly* 1959.



“Most people with obesity will not stay in treatment for obesity. Of those who stay in treatment, most will not lose weight, and those who do lose weight, most will regain it.”

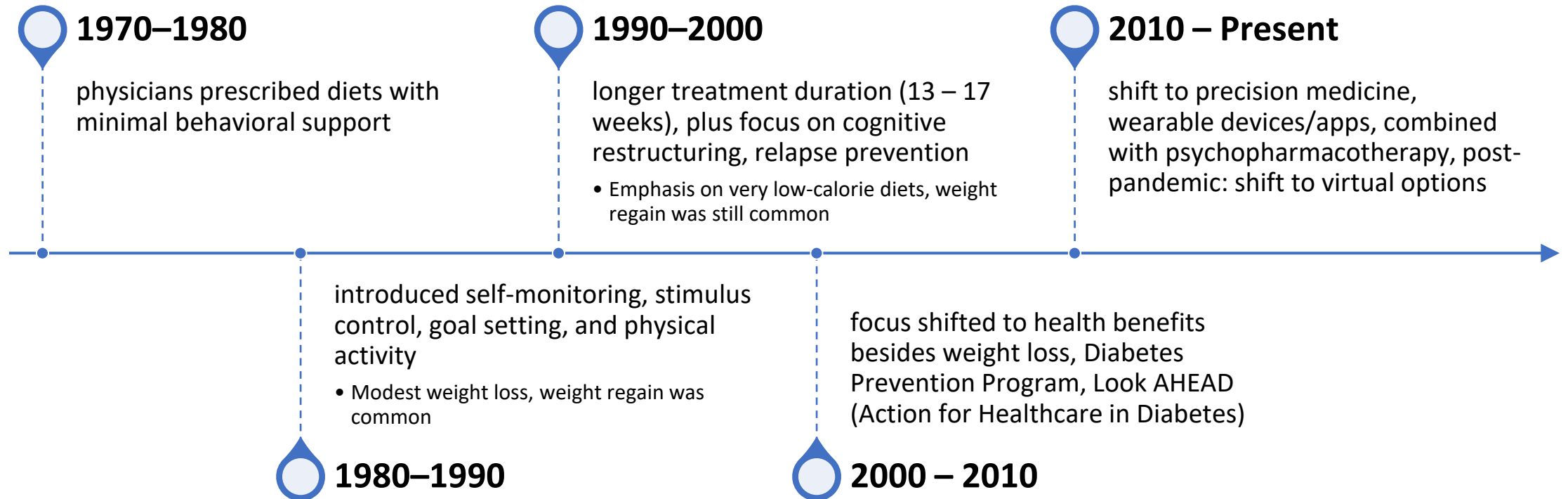
What is BWL?

- Behavioral Weight Loss (BWL) is an evidence-based lifestyle intervention that combines dietary change, physical activity, and behavioral strategies to promote sustainable weight loss and improve health.
- Sometimes referred to as structured lifestyle management
- **Three components:**
 - Dietary changes, physical activity, and behavior therapy
- Typically includes **two phases:**
 - Core
 - Regular individual or group counseling (3 – 9 months)
 - Support/Maintenance
 - Periodic support/check-ins (9 – 12 months)
- Typically led by therapists, dietitians, or guided self-help



Curry S.J., et al. *JAMA* 2018.
LeBlanc E.S., et al. *JAMA* 2018.
Wadden T.A. et al. *Am Psychol* 2020.

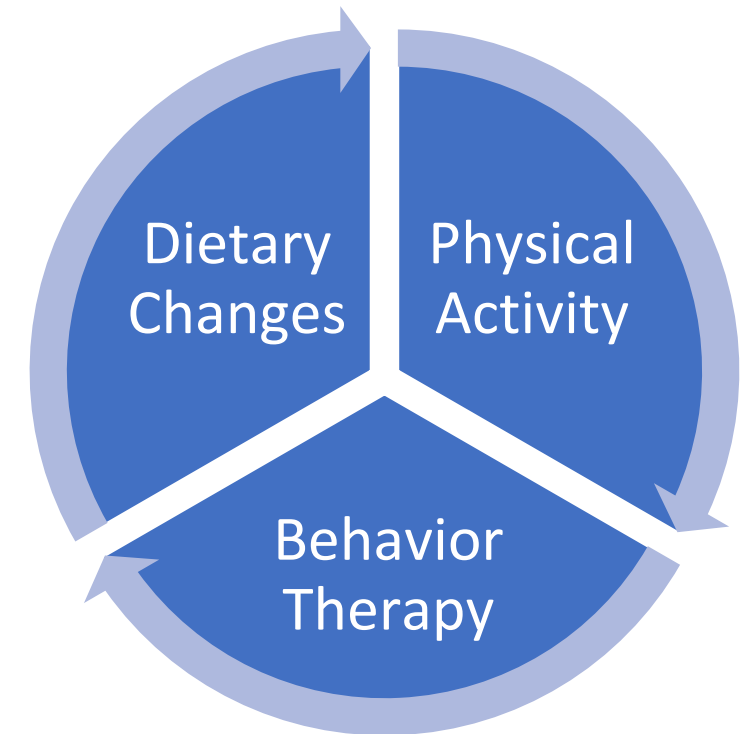
BWL Through the Years



Chao A.M. et al. *Int J Obes* 2025.

Components of BWL

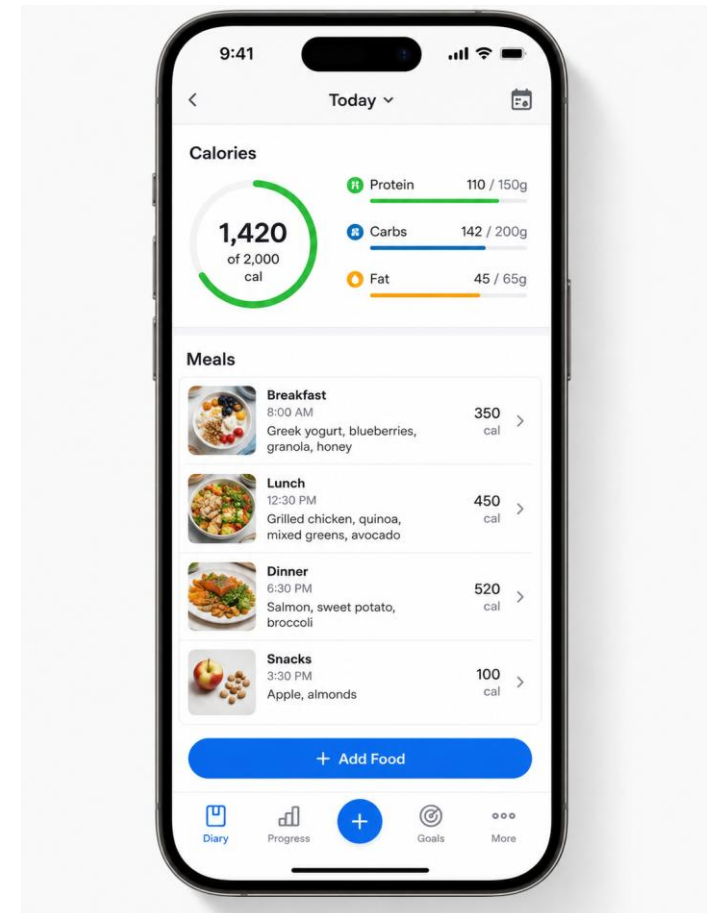
- **Dietary changes**
 - Calorie deficit: 500 kcal/day, structured eating schedule, portion control, macronutrient changes
- **Physical Activity**
 - Planned physical activity, lifestyle physical activity, step or minutes goals, gradual increase over time
- **Behavior Therapy**
 - Education
 - Self-monitoring (diet, physical activity)
 - Setting SMART goals + shaping
 - Stimulus control
 - Contingency management (positive reinforcement)
 - Behavior modification: behavior chain + functional analysis



Chao A.M. et al. *Int J Obes* 2025.

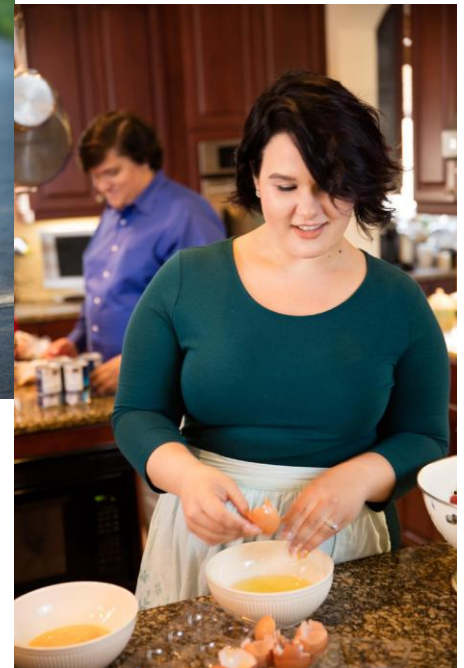
Self-monitoring

- Recording all foods, drinks, and physical activity
- Encouraged to record in *real time* to increase awareness about food choices
- Can include nutritional information
 - Calories
 - Quantity
 - Macronutrients (e.g., fat, carbs, protein)
 - Micronutrients (e.g., fruits, veggies)
- Trackers may also include thoughts, feelings, and relevant context/activities



Education

- Emphasis on regular eating schedule
- Incorporate all foods in moderation
- Program is not a diet, but long-term lifestyle change
- Tracking weight loss
 - Looking for trends, not specific numbers
 - Understanding normal weight fluctuations
- Benefits of all 5 food groups
- Dietary changes effective for weight loss
- Physical activity changes effective for weight loss maintenance
- “All activity is physical activity”
- Nutritional labels, serving sizes, measuring food
- Education on “hidden calories”



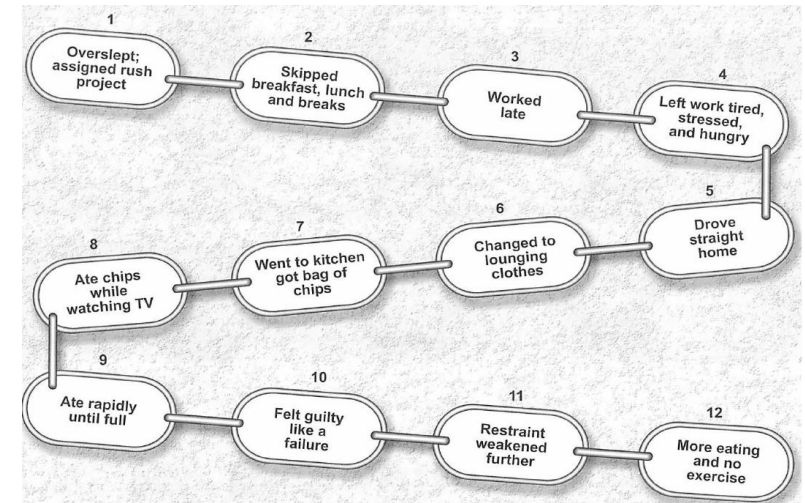
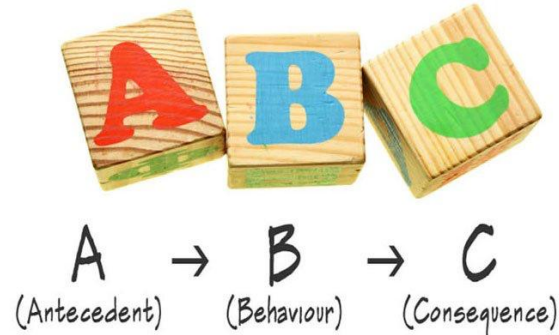
Goal Setting

- Identifying realistic weight loss goals
 - 5% - 10% of current total body weight
 - 6 – 12 months
 - ~1–2 lb/week
 - Reduction of 500 kcal per day
- S.M.A.R.T. Goals
 - Specific
 - Measurable
 - Achievable
 - Realistic
 - Timely (weekly, month, end-of-treatment)
- Goals may be adjusted along the way (shaping)
- Positive reinforcement (contingency management)



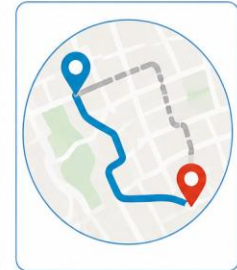
Behavior Modification

- Changing eating behaviors
 - Slowing eating pace
 - Cravings vs. hunger
 - Meal planning/prepping
- Changing physical activity
 - Count ALL physical activity
 - Increase physical activity as a part of lifestyle
- Functional analysis and behavior chains
- Reframing slips and relapses
- Shifts focus beyond weight loss
 - Progress is measured by behavior change



Stimulus Control

- Reducing exposure to highly palatable foods
- Keeping nutrition-dense foods in the home
- Taking a different route home or to work
- Eating in designated locations
- Placing sneakers by front door
- Deleting restaurant apps
- Buying pre-portioned foods and snacks
- Having snacks available at home or wor



Does BWL work?

- Successful weight loss is 5-10% total body weight over 6 -12 months
- However, only 60 – 65% of individuals lose 5% or more
- Effective for reducing obesity-related comorbidities
 - Lowering risk of CVD
 - Reduces cholesterol and hypertension
 - Reduces A1C
- **What makes BWL effective?**
 - Self-monitoring, goal setting, individualized treatment, regular provider contact, behavior change, long-term support
- National Weight Control Registry: Factors associated with successful weight loss and maintenance:
 - Greater physical activity, lower fat intake, greater reliance of several dietary strategies

Chao A.M. et al. *Int J Obes* 2025.

Hawkins, L.K. et al., *Obes Rev.* 2024

Klem M.L. et al. *Am J Clin Nutr.* 1997

BWL is not associated with disordered eating or weight stigma

- BWL is associated with:
 - Improved uncontrolled eating, external eating, susceptibility to hunger, cognitive restraint, and intuitive eating
- Little to no evidence for reducing:
 - Emotional eating, disinhibition, and hedonic hunger
 - CBT may be better suited to address some of these concerns
- Does BWL contribute to weight stigma?
 - Contrary to concerns that weight-focused treatment may increase stigma, BWL was associated with significant reductions in internalized weight bias in a RCT
- Does BWL contribute to ED-psychopathology?
 - No evidence that BWL increases restrictive eating; dietary restraint often improves
 - Associated with reductions in eating disorder psychopathology
 - Studies show either reduced risk or no increase in eating disorder onset
 - Potential risks remain: calorie restriction, weight-loss focus, and intensive self-monitoring

Jebeile et al. *Lancet Child Adolesc Health*. 2023

Kudlek L, et al. *Obes Rev*. 2025

Marshall et al. *Int J Eat Disord*. 2022

BWL vs. CBT

Cognitive Behavioral Therapy	Behavioral Weight Loss
 Targets unhelpful thinking patterns and changing behavioral patterns, measures changes in symptoms	 Targets unhelpful assumptions about eating and weight and changing behavioral patterns, measures changes in behaviors and weight
 Goals: changing thinking patterns and behavior to improve emotional functioning and coping	 Goals: change unhelpful assumptions and behavioral patterns to improve health-related quality of life
 Structured, goal-oriented, agenda setting	 Structured, goal-oriented, agenda setting
 S.M.A.R.T. goals	 S.M.A.R.T. goals
 Interventions: behavioral activation, alternative activities, functional analysis, stimulus control, identifying automatic thoughts, intermediate thoughts, and core beliefs, cognitive restructuring, relapse prevention	 Interventions: behavior modification and stimulus control, functional analysis, behavior chaining and shaping, contingency management, reframing imperative language, relapse prevention
 Time-limited treatment (up to 20 sessions)	 Time-limited but longer-term treatment (6 months - 1 year, or 1 - 2 years)
 CBT for eating disorders: self-monitoring, regular weighing (challenges assumptions about weight gain or +weight gain), behavioral challenges, regular eating pattern, balanced meals, regular physical activity	 Self-monitoring (+tracking calories), regular weighing (+tracking weight loss), behavioral challenges, regular eating pattern, balanced meals, regular physical activity

Qualitative Study

- **1) BWL did not perpetuate weight stigma**
 - “I don’t think treatment of this kind or many others is the stigma-causing event. I think it’s society that causes stigma, and getting help for it when people don’t know much about it, and the whole ‘It’s just you have no self—control or no will’ is misleading.”
- **2) Calorie and weight loss goals do not exacerbate participant’s binge eating**
 - “No [it was not overly restrictive], actually I was so pleased that the [calorie] range for my weight was higher than other diet that I ever started.”
- **3) Patients should have the right to pursue any treatment that aligns with their personal goals**
 - “I was at an unhealthy weight for so long. If you had told me that I would have to deal with binge eating per se, and not pursue a goal of weight loss, I don’t know that I would have actually considered the program at all.”
- **4) BWL can improve participant’s overall health**
 - “[The treatment helped with] feeling better about myself regardless of how I looked.”

Sonnenblick et al. *Int J Eat Disord.* 2024

CBT and BWL for BED + Obesity

Evidence from Meta-Analyses

- **CBT remains the preferred first-line treatment** for BED and produces greater short-term reductions in binge eating than BWL.
 - Hilbert A. *Behav Res Ther.* 2019
- **CBT and BWL show comparable outcomes** for BED remission, binge-eating frequency, and weight loss.
 - Hilbert A. *Int J Eat Disord.* 2020

Evidence from Randomized Controlled Trials

- **HAPIFED vs. CBT-E:** No significant differences in weight loss, binge eating, or quality of life.
 - Palavras MA. *Int J Eat Disord.* 2020
- **BWL within stepped care:** No significant differences in weight loss or binge-eating outcomes compared with CBT-based stepped care.
 - Grilo CM. *Int J Eat Disord.* 2020
- **Digital intervention for higher-weight adults with BED:** Both groups demonstrated significant improvements in binge eating and eating disorder psychopathology, with no differences in weight change.
 - Grammer AC, et al. *Eat Behav.* 2023

Conclusions and Future Directions of BWL in the Age of Pharmacotherapy

- BWL is recommended with pharmacotherapy for obesity
- Limited research on how BWL can enhance anti-obesity medications (AOMs)
- Intensity and duration of BWL is quite variable including across treatment trials
- How can they work together?
 - AOMs may help to reduce biological and environmental barriers
 - BWL teaches sustainable lifestyle behaviors that may complement the biological effects of anti-obesity medications.

Chao A.M., Moore M., Wadden T.A. *Int J Obes* 2025.

Murphy E, Finucane FM. *Int J Obes*. 2024

Wadden TA, Chao AM, Moore M, Tronieri JS, Gilden A, Amaro A, Leonard S, Jakicic JM. *Curr Obes Rep*. 2023