

Weight Management for Women

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Recommended Readings:

Gender Differences in Fat Metabolism (Len's WEB site)

The Remarkable Calorie (Len's WEB site)

The LEARN Program for Weight Control (10th Edition): www.learneducation.com

- I. The obesity epidemic
 - a. 61% prevalence overweight & obese
 - b. BMI \geq 25 for overweight and \geq 30 for obese
 - c. Associated risk factors: hypertension, hyperlipidemia, type 2 diabetes, CVD, colon/rectal cancer
 - d. Single most important predictor of Diabetes: overweight/obesity
 - e. 1995 economic costs: 99.2 billion
- II. Is there an "Ideal" body weight?
- III. Modest weight loss works: 5% - 10% loss of initial body weight
 - a. Lowers blood pressure (if high)
 - b. Improves glucose metabolism, lipid profiles, and mood states
- IV. What is the genetic link?
 - a. Heritability of body fatness: 20%, 40% and 80%
 - b. Environmental factors, social factors, cultural factors, genes, leptin
 - c. Over the course of a decade, a typical adult consumes how many calories?
- V. Does dieting make you fat?
 - a. Analysis of 9 data-based studies (predominantly female subjects)
 - b. 1992 to 2003; studies 1 to 6 years in length
 - c. Weight gain range: 0 to 5 kg
 - d. BMR suppressed up to 20%, very-low-calorie diets suppress most
 - e. Physical exercise has a protective effect on metabolic rate
 - f. Post-dieting weight gain rebound from dietary restraint of the diet is concern
- VI. Behavioral treatment of obesity for women
 - a. Behavior techniques
 - b. Cognitive strategies
 - c. Social support

- d. Nutrition education
 - e. Exercise
- VII. Behavioral techniques and cognitive strategies
- a. Short-term realistic goals
 - b. Medium-term realistic goals
 - c. Long-term realistic goals
 - d. Self-monitoring: weight, dietary intake, exercise habits; Why track?
 1. Awareness of the amount and quality of food
 2. Look for eating or food triggers
 3. Look for high-risk situations that trigger eating
 4. Search for any patterns
 - e. Problem solving/planning ahead
 - f. Stress management
 - g. Improve self-efficacy
- VIII. Social support: family, friends, colleagues
- “Social support from spouse, partner, friends or family is an overwhelming predictor of exercise ‘success’ across all groups of women.”
- a. Things the family can do: keep positive attitude, discuss openly with other family members, keep the home and family relaxed, forgive lapses, tell the family things they can do to help, develop new interests away from food with the family
 - b. Working with a partner: Are you ready for the partnership? Tell your partner how to help, make specific requests, state your requests positively, and reward your partner.
 - c. What are things the fitness professional can do?
- IX. Nutrition education
- a. Adoption of healthy food choices
 - b. Clear understanding of how to individualize dietary (life) style
 - c. New eating behaviors: smaller plates, slow eating, ambience, eating for health, remove serving dishes from table, leave table after eating (or remove food), eat portions of food “one at a time”, follow the “five-minute rule”, avoid being the full-time food dispenser

- X. Exercise: Foremost predictor of weight loss success!
 - a. Caution for overweight and obese women
 - b. Barriers: lack of time, lack of facilities, lack of money, lack of workout partners
 - c. “Unspoken” correlates of physical inactivity for women
- XI. Women’s weight management strategies
 - a. Short-term tactics: eat regular, start to exercise, reduce high calorie foods
 - b. Long-term tactics
 - c. Create realistic personal weight norms
 - d. De-emphasize the stress of being overweight
 - e. Prepare for action
 - f. Implement weight management plan
 - g. Reframe what is normal weight
- XII. Self-efficacy for weight management
 - a. Performance accomplishments
 - b. Vicarious experiences
 - c. Verbal persuasion
 - d. Emotional arousal
- XIII. Predictors of weight loss success
 - a. Physically active
 - b. Limit dietary intake
 - c. Many count calories
 - d. Weigh themselves at least once per week
- XIV. Gender differences in fuel utilization
 - a. Current studies show that low-to-moderate exercise women have lower RER
 - b. Studies hypothesize that women may be more sensitive to lipolytic actions of epinephrine: metabolizing fat more effectively
- XV. Designing aerobic programs to enhance fat metabolism
 - a. Incorporate low-intensity, long-duration (or accumulated time) workouts
 - b. Incorporate some high-intensity, short duration workouts (interval and fast continuous)
 - c. Include multi-mode training

- d. Sample cardio design: 20% should be interval or fast continuous, 80% should be long slow duration (or accumulated time at a low-to-moderate intensity)
 - e. Paradigm shift in exercise: “Accumulated time”
- XVI. Female training advantage: fatigue resistance
- a. Declines as intensity increases
 - b. No difference at > 80% of 1RM
 - c. Why: Lower absolute muscle mass, lower muscle oxygen demand, enhanced extraction and waste clearance, estrogen enhances blood flow into muscle
 - d. Training implications
 - e. Gender differences in fat distribution in males and females
 - f. Cell: epinephrine receptors (alpha=inhibit; beta=stimulate)
 - g. Women have more alpha receptors in hips/thighs
 - h. Women have more lipoprotein lipase in hips/thighs
- XVII. New ideas for training: Mixed Methods System
- a. Day to day variation
 - b. Weekly variation
 - c. Bi-weekly variation
 - d. Monthly
 - e. Rep Zones: 3-5 reps, 8-10 reps, 12-15 reps
 - f. Variation of: exercises, order of exercises, rest between sets, equipment, timing of reps (2 second concentric, 4 second eccentric)
 - g. Any practical recommendations?