

Introduction to Weight Management

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(A concise, easy-to-read guide)

1. What Is Weight Management?

Aspect	Description
Definition	Ongoing process of achieving and maintaining a body weight that supports health, functional ability, and personal goals.
Goal	Balance energy intake (food & drink) with energy expenditure (basal metabolism, physical activity, thermic effect of food).
Scope	Nutrition, physical activity, behavior change, medical/psychological factors, and environmental influences.

2. Energy Balance – The Core Principle

Component	Explanation
Energy Intake	Calories consumed from macronutrients (carbohydrates, proteins, fats) and alcohol.
Energy Expenditure	Basal Metabolic Rate (BMR) – calories needed at rest. Thermic Effect of Food (TEF) – energy used to digest, absorb, and store nutrients (~10% of intake). Physical Activity Energy Expenditure (PAEE) – calories burned during all movement, from walking to structured exercise.
Weight Change	Positive balance (intake > expenditure) → weight gain. Negative balance (intake < expenditure) → weight loss. Neutral balance (intake = expenditure) → weight maintenance.

Rule of thumb: ~3,500 kcal ≈ 1 lb (0.45 kg) of body fat. A daily deficit of 500 kcal typically yields ~1 lb loss per week.

3. Key Factors Influencing Weight

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Category	Examples
Biological	Genetics, hormones (insulin, leptin, ghrelin), gut microbiota, metabolic rate.
Behavioral	Eating patterns, portion sizes, snacking habits, sedentary time.
Environmental	Food availability, marketing, socioeconomic status, built environment (walkability).
Psychological	Stress, mood, body image, eating disorders, motivation.
Medical	Medications (e.g., steroids, antipsychotics), chronic diseases (hypothyroidism, PCOS).

4. Nutrition Foundations

Concept	Practical Tips
Calorie Density	Choose low-density foods (vegetables, fruits, broth-based soups) to feel full with fewer calories.
Macronutrient Balance	• Protein: 15-30% of total calories (helps preserve lean mass). • Carbohydrates: 45-55% (focus on complex carbs, fiber). • Fats: 20-35% (prefer unsaturated fats).
Portion Control	Use hand-size guides: • Palm = protein portion. • Fist = vegetables or carbs. • Thumb = fats.
Meal Timing	Regular meals & snacks prevent extreme hunger; consider individualized timing (e.g., intermittent fasting if appropriate).
Hydration	1.5-2L water/day; sometimes thirst is mistaken for hunger.

5. Physical Activity Guidelines

Activity Type	Recommended Dose
Aerobic (cardio)	150 min/week moderate intensity or 75 min/week vigorous