NUTRITION LIBRARY WEIGHT MANAGEMENT



WHY IS WEIGHT CONTROL SO HARD?

It is estimated that Americans spend more than \$40 billion dollars on weight loss products and programs annually; yet the prevalence of obesity is at an all-time high. According to the most recent data from the National Health and Nutrition Examination Survey (NHANES 2007-2008), 68% of adults (>20 years of age) are overweight while 34% are obese. This data begs the question, why is weight control so hard?

Unfortunately, there is no simple answer, largely because it is a difficult subject to study experimentally. In fact, scientists have a much better understanding of the factors that lead to obesity than of what it takes to actually lose weight permanently. Nonetheless, obesity experts agree that at least part of the problem lies in the difficulty that Americans have in monitoring and managing the calories they consume relative to the calories they "burn," particularly in an environment where high calorie foods are so plentiful and



MANAGING BODY WEIGHT-IT'S A BALANCING ACT

opportunities for physical activity may be limited.²

Body weight is determined by what nutritional scientists refer to as energy balance. Basically, energy balance is the relationship between the calories you consume (energy intake) and the calories you expend (energy output) over days, weeks and months. If energy intake is greater than energy output you will gain weight. Conversely, if energy intake is less than energy output you will lose weight.

Energy Intake:

A calorie is a measure of heat energy. In foods, calories come from the macronutrients—carbohydrates, proteins, fats and alcohol. The caloric values of each of these macronutrients are list in the table provided.

SOURCE (1 GRAM)	CALORIES
Carbohydrate	4
Protein	4
Alcohol	7
Fat	9

It has been suggested that calories from certain macronutrients (namely carbohydrates) are more "fattening" than others (namely protein).³ In fact, a calorie is a calorie (although

it may be easier to overconsume calories from carbohydrate and fats vs proteins). And, since one gram of fat has more than twice the calories of a gram of carbohydrate or protein, it makes sense that reducing dietary fat can lead to the consumption of fewer calories and, perhaps, weight loss. And that's precisely why moderate or low-fat diets are often recommended for weight loss or weight maintenance.⁴

Energy Output:

Many people mistakenly believe that they only "burn calories" when they exercise. In fact, your body is burning calories all of the time (yes, even when sleeping!). The calories that

you expend in a day (total daily energy expenditure) can be divided into three parts:

- Basal Metabolic Rate (BMR): This is the energy expended just to keep your basic body functions going (breathing, heart beating, liver and kidneys functioning, etc.) and accounts for the greatest amount (about 60%) of total daily energy expenditure.
- Thermic Effect of Food (TEF): This is the energy expended to digest and metabolize the foods you eat. It generally accounts for 6-10% of your total daily energy expenditure.
- 3. Thermic Effect of Activity (TEA): This is the energy expended when doing any form of physical activity, programmed exercise as well as house work, gardening, etc., and generally accounts for 30% of total daily energy expenditure.

Exactly how many calories a given individual needs varies, depending on such factors as gender, current body size, activity level and body weight goals (i.e., to maintain, lose or gain weight). There are a number of websites that can aid in calculating daily energy requirements, such as www. chosemyplate.gov and http://bwsimulator.niddk.nih.gov/.

MAKING CALORIES COUNT

Leading nutrition experts agree that we gain weight when we eat more calories than we expend, regardless of where those calories come from (carbohydrates, protein or fat).⁵ Similarly numerous studies have shown that the composition of the diet is not important when it comes to weight loss, so long as calories are reduced.⁵⁻⁷ In fact, the scientific evidence supporting calorie balance is so strong that it was translated

into one of the four key recommendations of the 2010 Dietary Guidelines (i.e., "balance calories to maintain weight"). The recommendation was based on the 2010 Dietary Guidelines Committee concluding statement that "evidence shows that the critical issue is not the relative proportion of macronutrients in the diet [rather it is] the total number of calories consumed is the essential dietary factor relevant to body weight."

The 2010 Dietary Guidelines suggest that maintaining "calorie balance" is easier with a diet that is rich in a variety of fruits and vegetables as these foods tend to be very low in calorie content yet high in essential nutrients (in other words, they have a high "nutrient density"). Moreover, fruits and vegetables are high in dietary fiber, which promotes a sense of fullness without adding calories.

Take the potato, for example. A medium-sized, 5.3-ounce potato contains zero fat and cholesterol for only 100 calories, but is rich in vitamin C and potassium and a good source of fiber.

Research conducted by leading scientists from the University of California, Davis and the National Center for Food Safety and Technology, Illinois Institute of Technology demonstrates that potatoes can be part of a weight loss regimen. In this study subjects were randomly assigned to three groups; two of which were instructed to reduce their daily energy intake by 500 calories/d. All three groups were instructed to consume 5-7 servings of potatoes per week. The results indicated that all three groups lost weight and there was no significant difference in weight lost between groups.⁸⁻⁹

Clearly, limiting vegetables, like potatoes, is not a wise choice to achieve a healthy weight. When trying to lose weight or hold steady at a desired one, small changes to your diet and exercise routine can make a big difference. Eating 100 calories fewer or expending 100 calories more in a day add up to a loss of 10 pounds in a year. Substituting 1/2 cup of salsa for a tablespoon of butter on a baked potato saves about 100

calories. And taking a brisk, 30-minute walk burns 100 calories. Do both to shed about 1/2 pound per week. Some additional tips for reducing calories include:

Use measuring cups and spoons when preparing food at home.

Portion out food according to the number of servings specified in a recipe yield.

Compare the amount of foods you eat to serving sizes listed on food labels

When dining out, select restaurants that offer lower-calorie and reasonably-sized entrees.

Avoid buffet-style restaurants, all-you-can-eat specials, second helpings and "free" refills.

Share a meal with a friend, or take the second half home for another meal.

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MEDITERRANEAN SUN-KISSED SAVORY SALAD

PREP TIME: 10 minutes COOK TIME: 12 minutes total

INGREDIENTS

- 3 lbs Yukon Gold potatoes or potato type of your choice (try russet, red, white, fingerling, or purple/blue gems)
- · 4 sun-dried tomatoes in oil, drained and chopped
- 1/4 cup crumbled feta cheese
- 5 cups spinach or lettuce of your choice
- 2 tablespoons balsamic vinegar
- 1/4 cup olive oil
- 1 teaspoon of salt
- Pepper to taste

DIRECTIONS

Place potatoes in a saucepan. Cover with water to 2 inches above potatoes; bring to a boil. Reduce heat and simmer 20 minutes or until tender. Drain. Or place potatoes in a large microwave-safe bowl and cover. Microwave on high for 10 to 12 minutes or until potatoes are tender. Refrigerate until cool. Cut potatoes into quarters. Place potatoes in a large bowl. Accounter the counter of the coun

quarters. Place potatoes in a large bowl. Add feta cheese, sun-dried tomatoes and spinach/lettuce. Combine balsamic vinegar, olive oil, and salt and pepper; mix well and add to salad mix. Makes 8 servings.

NUTRITIONAL ANALYSIS PER SERVING WITH SKINS: Calories: 230, Fat: 8g, Saturated Fat: 4g, Trans Fat: 2g, Cholesterol: 5mg, Sodium: 390mg, Potassium: 57mg, Carbohydrates: 33g, Fiber: 3g, Sugar: 1g, Protein: 5g, Vitamin A: 10%, Vitamin C: 70%, Calcium: 4%, Iron: 10%

