The Art & Science Of Weight Management

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SCD 2015
History Trends and Fads and facts
Weight Control is based on the balance of calories in and calories out.

What is a calorie?
Actually, we are referring to a kilocalorie (kilojoule) kilo means 1000 kilocalories. The unit of heat required to raise the temperature of 1 kilogram of water by 1°C at 1 atmosphere pressure.

It is a unit of energy.
Nutrients

- Proteins
- Fats
- Carbohydrates
- Vitamins
- Minerals
- Water

Protein and fats provide calories, while vitamins, minerals, and water do not.
How do these nutrients help us?

Protein: building & repair

Important for children’s growth, post trauma, post surgery, repair and maintenance of tissues
**CARBOHYDRATE**: Immediate source of energy needed for daily tasks; muscle glycogen used for exercise

**FAT**: Protects organs, is energy storage system. Provides essential fatty acids, satiety
CALORIES PER GRAM

Carbohydrates and Protein:
4 kcal/gram

Fat: 9 kcal/gram

Thus, a gram of fat is a more concentrated source of calories
Some Misconceptions

Salt: needed for hydration management. 2200 mg. is recommended per day, taste

Gluten: protein in wheat, rye and barley – foods that contain gluten contain other important vitamins and minerals. Less than 10% of the population has a sensitivity to gluten or Celiac Disease.
What Doesn’t Work?

grapefruit, high fat, low fat, diet pills, South Beach, Atkins etc etc ad infinitum ad nauseum!

they are temporary sometimes leave out nutrients or are not balanced
What Works?

Portion Size
Balance (MyPlate)
Accountability
Behavior Modification
Exercise
Portion Distortion
PORTION HELP!

Read food labels

Picture this: Protein portion the size of deck of cards

Carbohydrate portion no more than a cup

Fruits and Veggies as much as you want (without sauce or dressing)

Go light on fruit juices

Fats around 1 tbsp

Dessert *not at every meal and small!*
Accountability

Write it Down

Weight Watchers
Behavior Modification

Find Your Weak Spot

Time of Day
Routine
Types of Foods
Dinner Out
APP Alert

Figwee

Lose It, My Fitness Pal
CALORIES ARE BURNED BY EVERYTHING FROM SLEEPING TO MOUNTAIN CLIMBING! HOW ACTIVE ARE YOU EACH DAY? WEIGHT LOSS IS ACHIEVED BY INCREASING YOUR BURN OVER YOUR INTAKE OF CALORIES.
HOW MANY CALORIES BURNED DOES IT TAKE TO........

LOSE A POUND?

3500!!
SO, LET’S LOOK AT HOW WE TYPICALLY BURN CALORIES THROUGH DAILY TASKS AND EXERCISE

ALL ARE MEASURED PER HOUR:

HOUSE WORK: 130
BICYCLING: 460 @ 12 MPH
GOLF: 150
SWIMMING: 600
WALKING: 300
YARD WORK: 200
YOGA: 100
WEIGHT LIFTING: 350
DANCING: 450
FISHING: 160
HORSEBACK RIDING: 300
PILATES: 130
CROSS COUNTRY SKIING: 400
JOGGING/RUNNING: 600 @ 10 MIN/MILE PACE
WI FIT AEROBICS: 200
TO LOSE ONE POUND, YOU MUST

SWIM OR RUN FOR NEARLY 6 HOURS!
IT ALL COMES BACK TO

PORTION CONTROL & PHYSICAL ACTIVITY
BENEFITS OF PHYSICAL ACTIVITY

Aside from our discussion of weight loss, physical activity serves other purposes for both physical and mental health.

• Aerobic capacity, strong lungs and heart muscle are evident in a fit, active people. Cardiac re-hab is heavy on the cardiovascular exercise.

• Lower blood sugar and LDL cholesterol keeps blood chemistry balanced and healthy

• Aids in preventing type 2 Diabetes, high blood pressure, and cardiovascular disease

• Endorphins, which are hormonal mood elevators, are a by-product of aerobic exercise. This is a natural anti-depressant.

• Exercise is a natural anti-ager. Aerobic exercise delivers large amounts of water and oxygen to your skin to keep it youthful!
MUSCLE VS. FAT

Muscle is a very dense and vascular. It is heavier, yet volume-wise smaller, than fat. It also has a higher metabolic rate. The more muscular you are, the more calories you will burn.

Fat cells are formed up to age twenty, and expand as one ingests and doesn’t burn fat. They grow larger and take up more and more room on your body as you gain weight. This is why it is crucial to control childhood obesity; an overweight child is building fat cells that will remain with them for life.

Don’t worry so much about the number on the scale!

• Pay attention to how your clothes fit
• Blood chemistry numbers are the most important indicator of your physical health
FITT PRINCIPLE

F = Frequency
I = Intensity
T = Time
T = Type
FREQUENCY

How often do you exercise? To achieve results it must be a minimum of three times per week.
INTENSITY

How hard are you working?

• Is your heart rate elevated?
• Are you sweating?

Interval training produces the best results, varying resistance and speed.
TIME

Every little bit of time devoted to elevating your heart rate helps, but you should look to work up to a quality workout of at least one hour. Combine aerobic activity with weight training and stretching.
What is in your workout?

Quality Workout must haves:

• 30 minutes minimum cardiovascular exercise. The longer your c/v exercise, the more calories you burn.

• Weight training alternating days with lower body and upper body. Small amount of weights are just fine to start!

• Stretching at the end of your workout
BENEFITS OF WEIGHT TRAINING

Don’t shy away from it! It can help you in the following ways:

• Burn more calories
• Reverse metabolic decline
• Build stronger bones
• Reduce risk for heart disease
• Combat back pain
• Boost mood and help with depression
• Relieve stress
• Increase energy levels
SIMPLE SUGGESTIONS TO HELP YOU EVERYDAY

• Drink lots of water.
• Avoid sugary sodas and fruit juices, water them down!
• Alcohol is empty calories – 1 drink, glass of wine, or beer is approximately 150 calories. No nutritional value whatsoever!
• Record everything for a few weeks to see how you balance activity and caloric intake.
• Take it slowly. Don’t expect to lose more than a 1-2 pounds per week.
• Find a way to be active at least an hour a day. Calories are burned most by aerobic activity. Do it in spurts if needed.
• Consult a wellness coach, join weight watchers, work with a personal trainer to tweak your exercise routine.
• YOU CAN DO IT, JUST TAKE IT SLOW!!!
WELLNESS COACHES

In our school district we have many staff that are personal trainers and wellness coaches. Listed below are the health and physical education staff members who have been certified as Wellness Coaches by the Cooper Institute for Aerobics Research in Dallas, TX.

Richard Becker - HMX
Kathleen Degnan – MHS
Scott Gilberti – HMX, Chats
Danielle Panaro – MHS
Julie Santoiemma – HMX
Joe Toombs – MHS
Erin Byron – MHS
Kathleen Dwyer - Murray
Renee Glickman – Chats
Robert Rainaldi – MHS
John Savage – Central

They are here to help you!