

LIVING WELL: NUTRITION ESSENTIALS FOR A HEALTHY LIFESTYLE

HEALTH*MATTERS

Spring 2013

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OVERVIEW

- ◉ Diet & Health
- ◉ Building a Healthy Plate
 - Vegetables
 - Grains & Starches
 - Proteins
 - Fats & Oils
 - Seasonings & Spices
- ◉ Healthy Eating Top 10
- ◉ Resources

DIET & HEALTH: WHY CARE?


- ◎ Poor diet and physical inactivity are risk factors for the top three leading causes of death
- ◎ Unhealthy habits affect quality of life
 - Physical Function
 - Social Activities
 - Mental Health
 - Chronic Disease
- ◎ It's a factor that YOU CONTROL

DIET & HEALTH: WHAT WE EAT

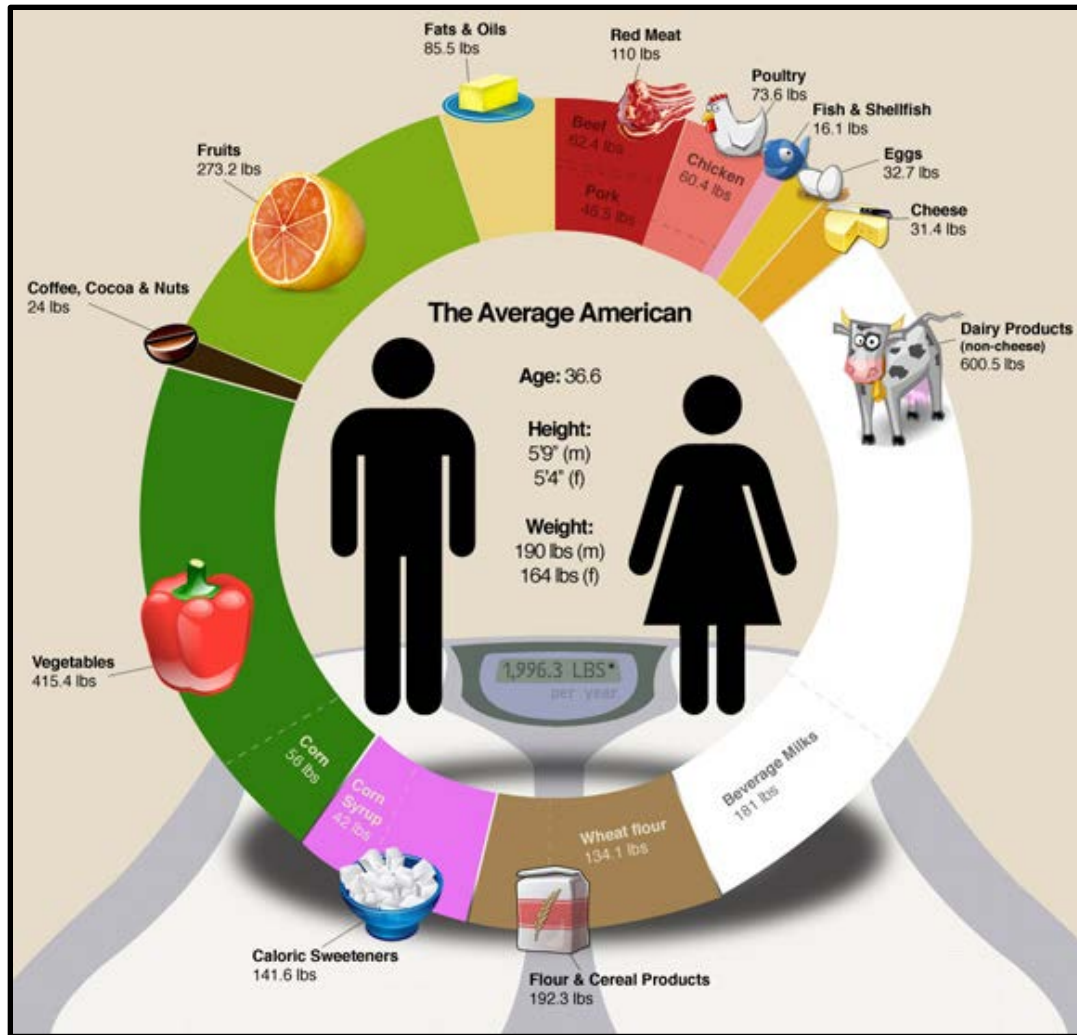
French Fries
29 lbs




Pizza
23 lbs




Soda
53 gallons
(about a gallon/week)

Ice Cream
24 lbs



Artificial Sweeteners
24 lbs

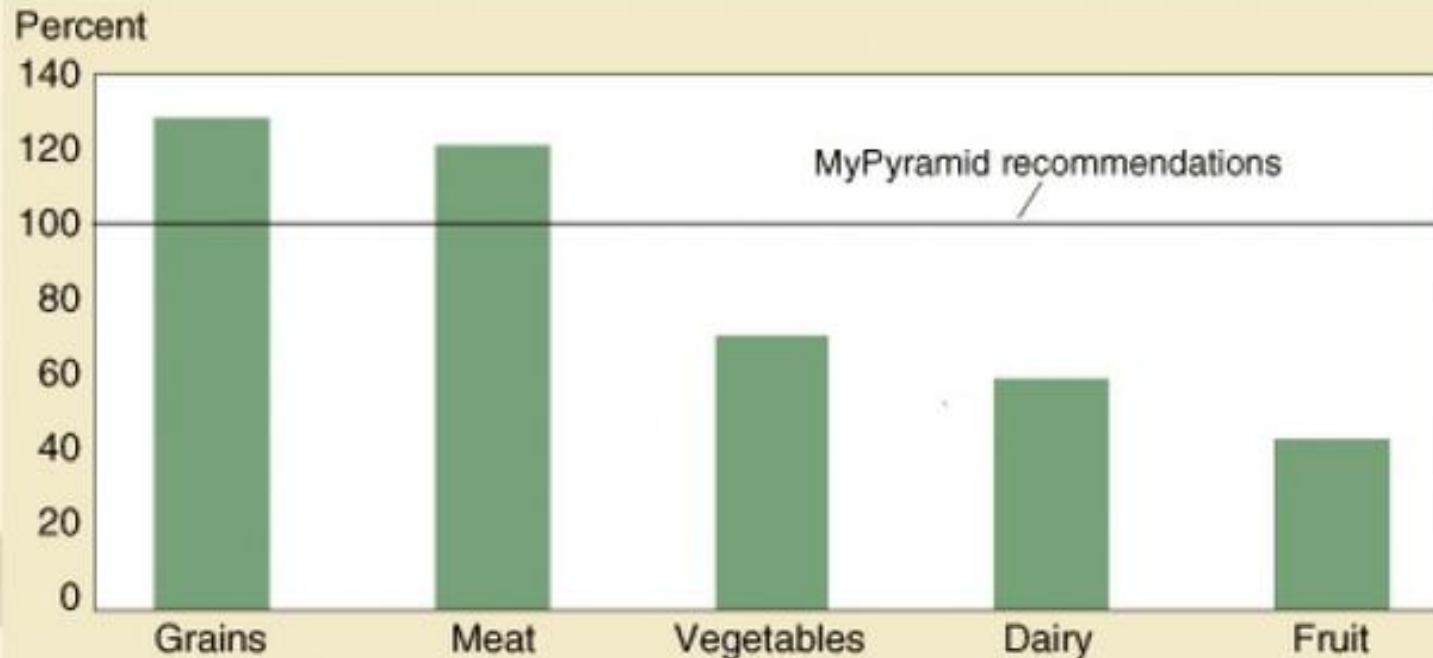


Caffeine
0.2 lbs
(90,700 mg)



DIET & HEALTH: WHAT'S MISSING

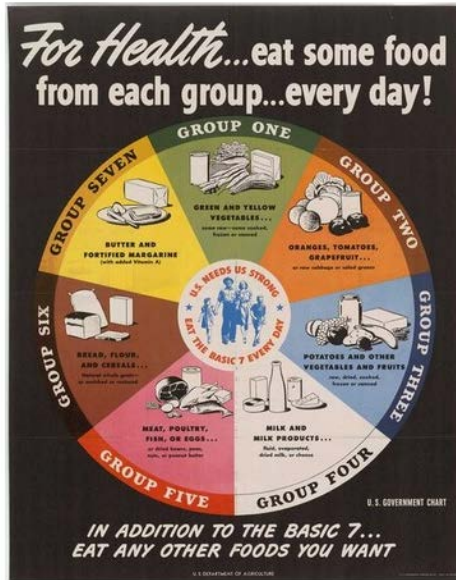
Loss-adjusted per capita food availability was out of balance with dietary recommendations in 2008



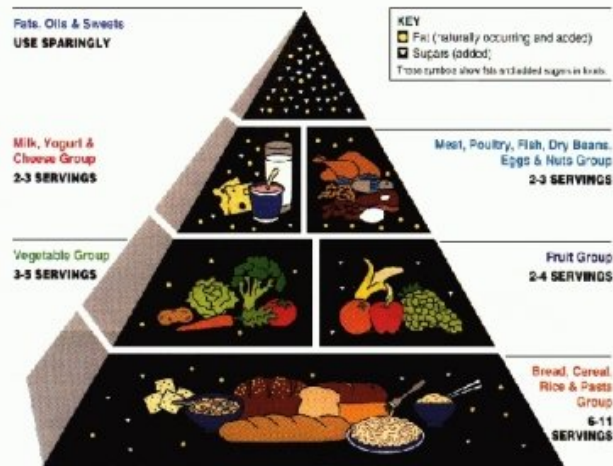
Based on a 2,000-calorie diet. Loss-adjusted food availability data are a proxy for consumption.

Source: USDA, Economic Research Service, Food Availability (Per Capita) Data System.

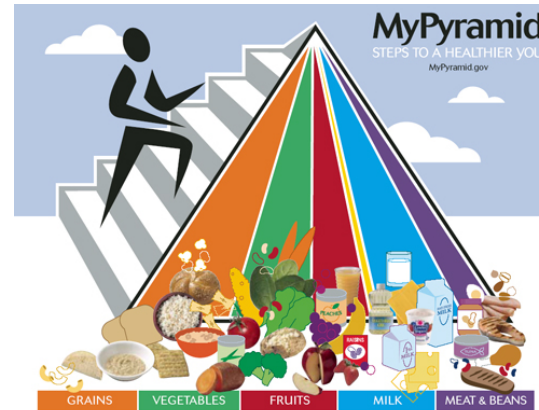
DIET & HEALTH: RECOMMENDATIONS



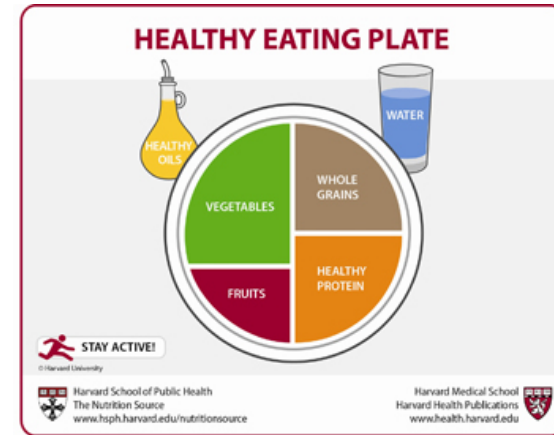
1943



1992



2005

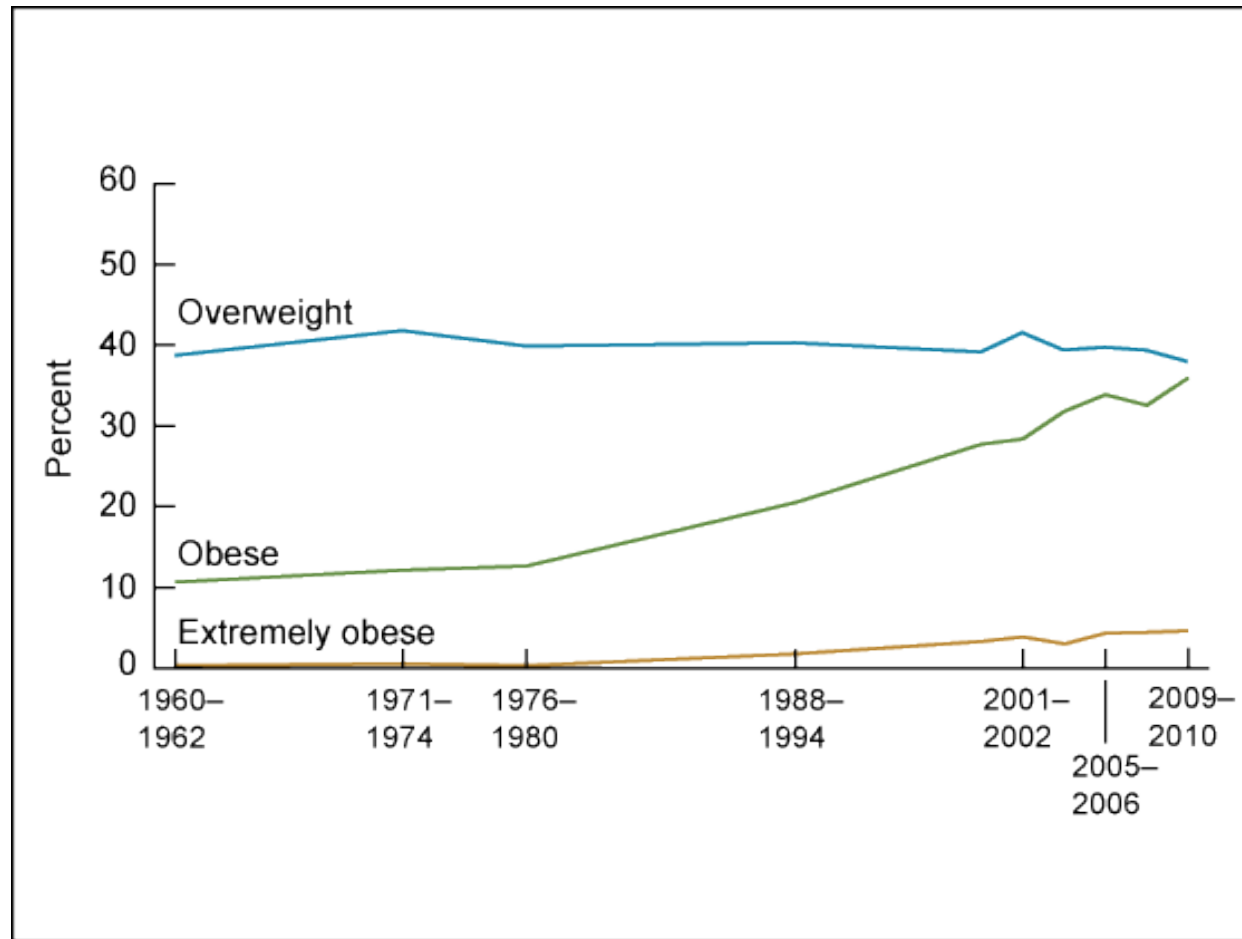


2011



2010

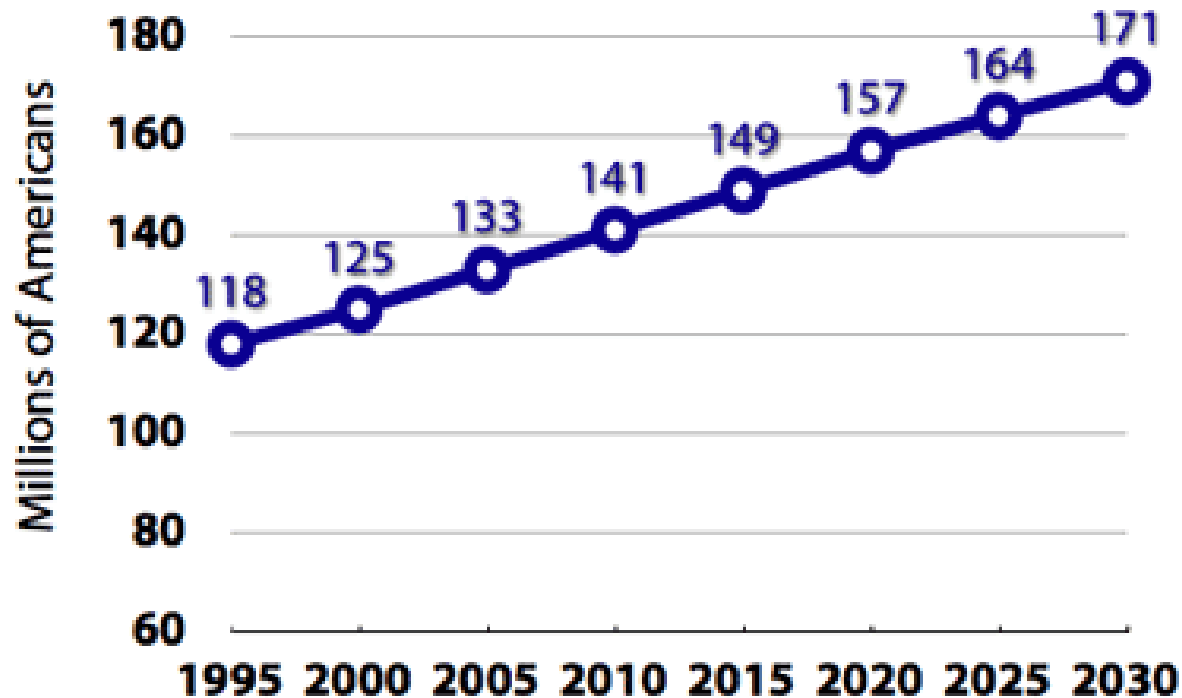
DIET & HEALTH: CONSEQUENCES



Source: Centers for Disease Control

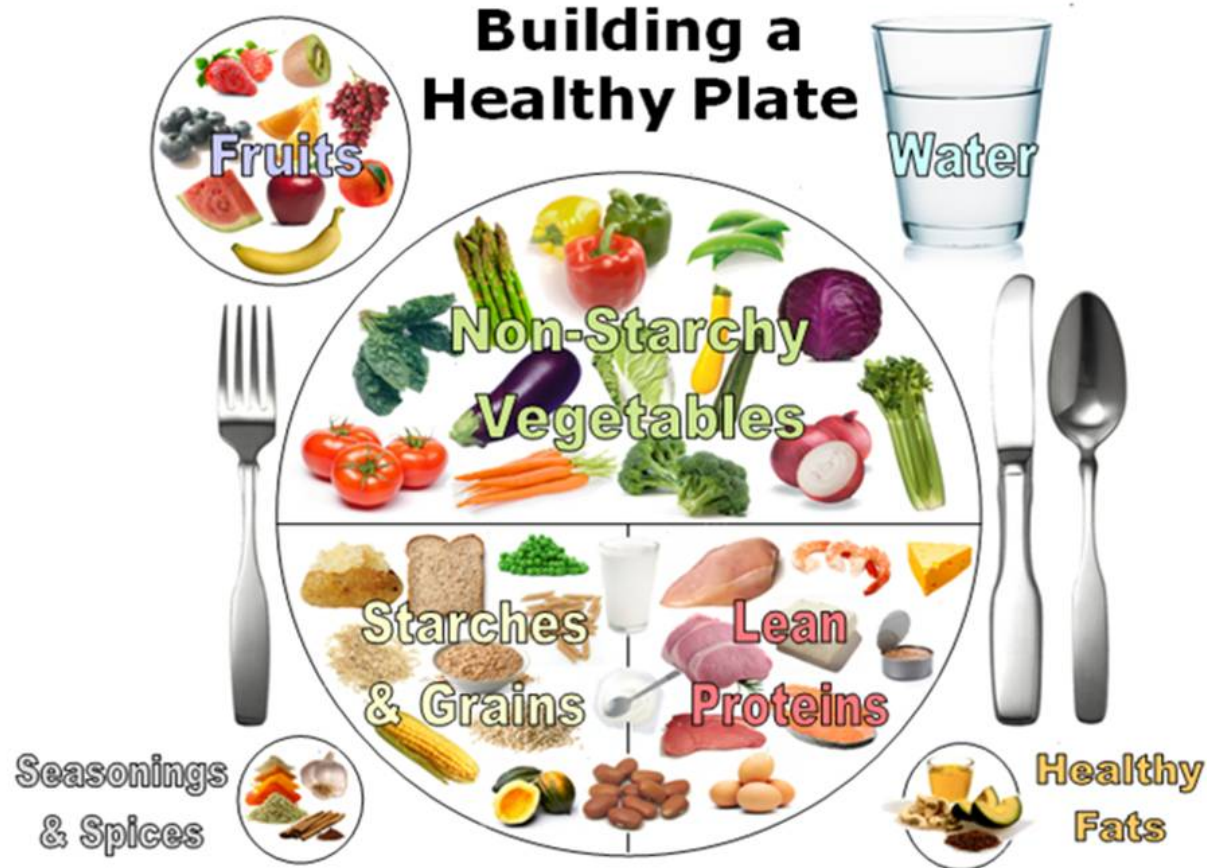
DIET & HEALTH: CONSEQUENCES

Prevalence of Chronic Disease in the U.S.



Source: Wu, Shin-Yi *et al.* 2000. Projection of Chronic Illness Prevalence and Cost Inflation. RAND Corporation.

BUILDING A HEALTHY PLATE



VEGETABLES

◎ Functions

- Provide fiber (bulk) and water
- Low in calories
- Essential source of nutrients
 - Vitamins & Minerals
 - Antioxidants
 - Phytochemicals

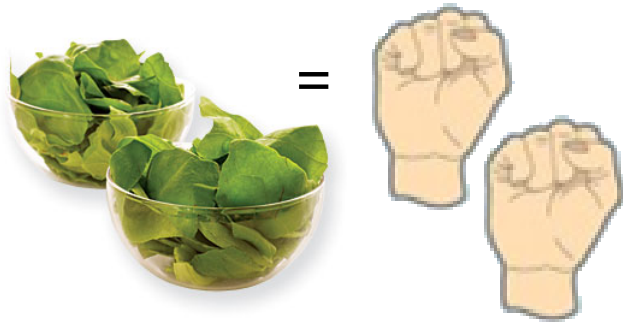
◎ Good Choices

- Eat a variety of vegetables in many different colors



VEGETABLES

◉ What's a Serving?



2 cups leafy greens



½ cup cooked or raw
veggies

*Chopped veggies in an
omelet = 1 serving*



*Salad for lunch
with greens &
assorted veggies
= 3 servings*

*Veggies &
hummus for a
snack
= 1 serving*



*Tossing vegetables
into your favorite
stir-fry
= 2 servings*

STARCHES & GRAINS



◎ Functions

- Contain Carbohydrate: the body's primary energy source
 - Protein sparing effect
- Helps metabolize fat
- Cell function
- Nourish beneficial bacteria in the gut

◎ Good Choices

- Whole grains, starchy vegetables
- Beans/lentils and low-fat dairy products also contain good carbohydrate

◎ Poor Choices

- Products made with white flour, white rice, processed foods (i.e. chips), sweets, candy, baked goods

STARCHES & GRAINS

◉ What's a Serving?



1 slice of bread or 6-inch
tortilla



½ cup cooked pasta or rice



1 cup dry cereal or cooked
oatmeal



1 small potato or sweet
potato

TYPES OF CARBOHYDRATE

- ◎ Refined Carbohydrate (Simple Sugar/Carb)
 - Broken down and digested very easily
 - Most have few essential vitamins and minerals
 - Can increase triglycerides and contribute to elevated blood sugar levels
 - Examples: Any sugar, fruit juice, chips, white flour
- ◎ Complex Carbohydrate
 - Take longer to digest
 - Packed with fiber, vitamins, minerals
 - Examples: Whole grains, legumes, vegetables
- ◎ Make the majority of your carbohydrates complex

TYPES OF CARBOHYDRATE



◎ What about Fruits?

- Provide essential nutrients, antioxidants and fiber
- *High in sugar* - consume in moderation if you have issues with blood sugar, diabetes, weight management or high triglycerides
- 2-3 servings daily appropriate for most people

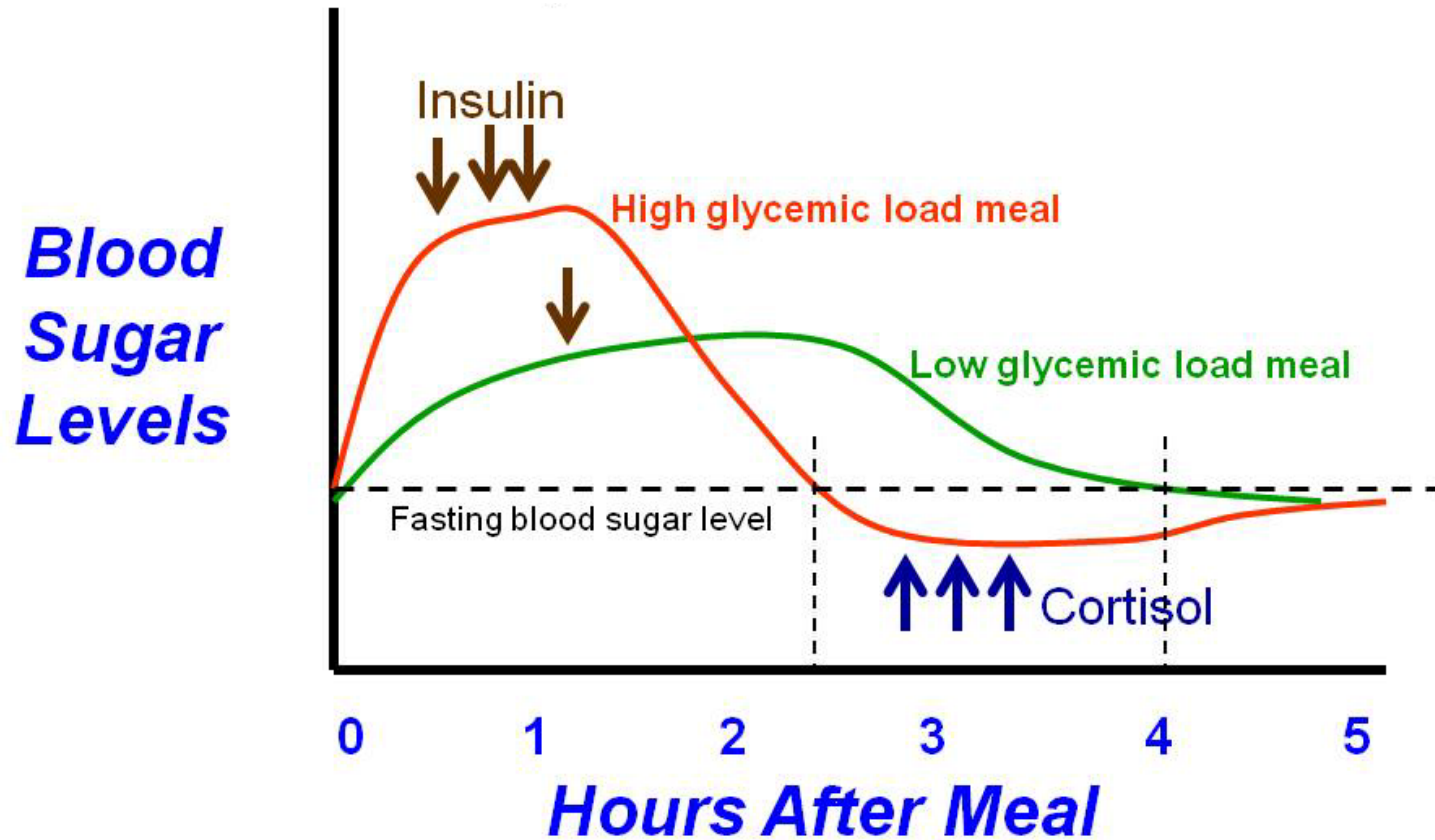
◎ Good choices

- Whole fruits with skin on

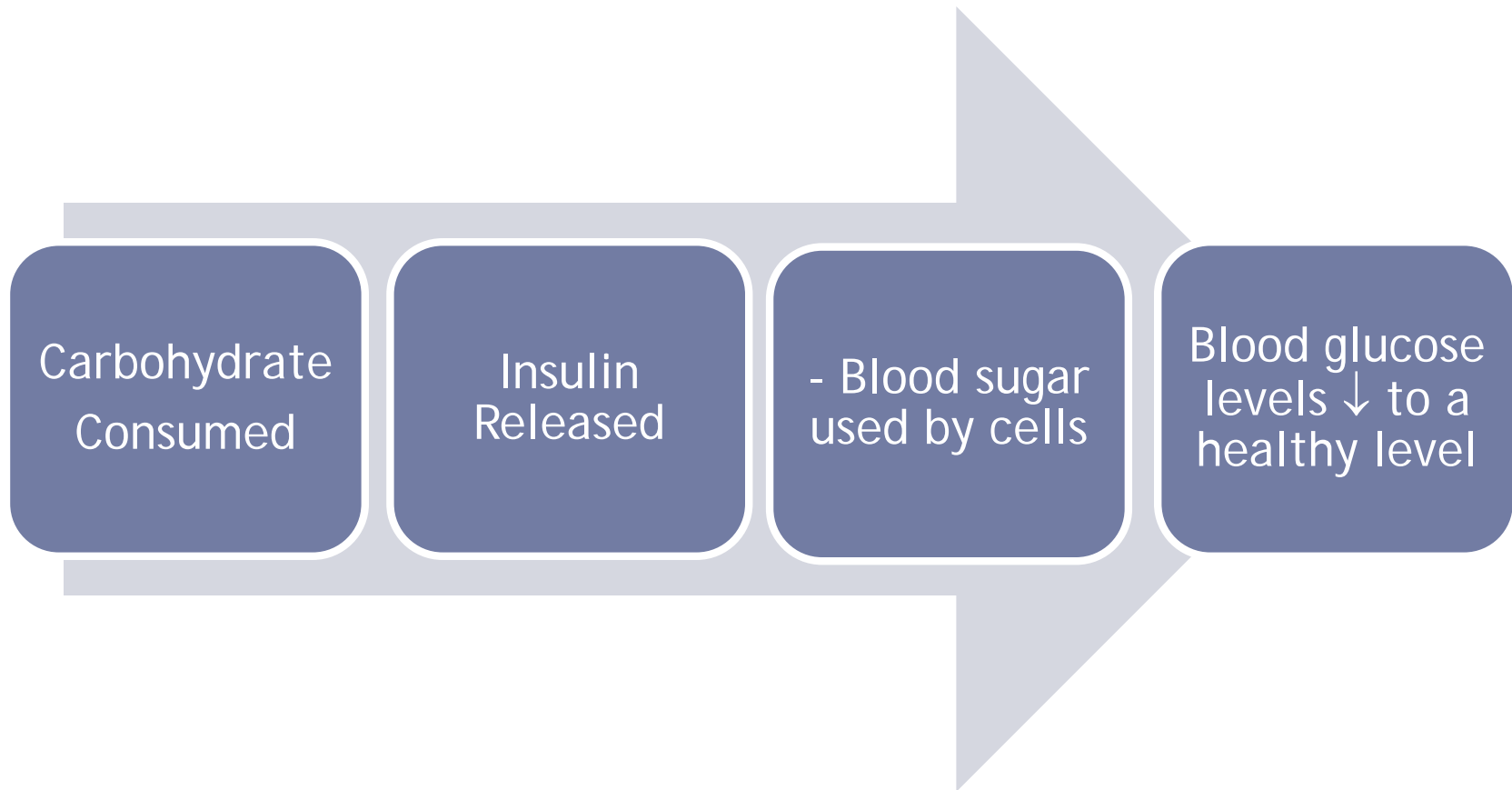
◎ Poor choices

- Fruit juices, fruit-flavored beverages, dried fruit

BLOOD GLUCOSE METABOLISM



NORMAL BLOOD GLUCOSE METABOLISM



BLOOD GLUCOSE & TYPE II DIABETES

Carbohydrate
Consumed

Insulin
released, but
cells are
resistant to
effects

Blood glucose
remains ↑

- Pancreas
overworked
- Insulin
effect
impaired

PROTEINS



○ Functions

- Not a primary source of energy
- Building/repairing tissue
- Enzymes, hormones, immune molecules
- Essential body processes
 - Water balance, nutrient transport
- Hair, nails, skin

○ Aim for a balance of lean proteins

- Animal Sources: Lean meat, fish, poultry, dairy products, eggs
- Plant Sources: beans, legumes, nuts, seeds, whole grains

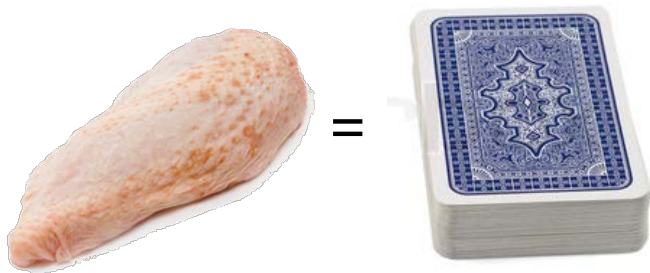
PROTEIN- AM I GETTING ENOUGH?

- General Recommendation: 0.37g/lb/day
 - Average: About 65g/day
 - 4oz meat contains 28g protein
 - 2 Tbs peanut butter contains 8g protein
- Most Americans are obtaining much more protein than needed
- Excess protein will not help build muscle

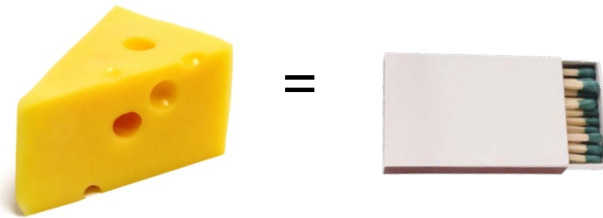


PROTEINS

◉ What's a Serving?



3 ounces cooked meat,
poultry or fish



1 ounce cheese



½ cup beans, lentils or tofu



8 ounces milk or yogurt

FATS & OILS

◎ Functions

- Concentrated source of energy
- Cell membrane structure
- Hormone development
- Absorption of fat soluble vitamins
- Protective cushion

◎ Good Choices

- Lean meats, fish, vegetable or nut oils, nuts, seeds, avocado

◎ Poor Choices

- Fatty meats, whole-milk dairy, fried foods, processed foods



FATS & OILS

◉ What's a Serving?



1 teaspoon butter,
margarine or mayo



1 tablespoon peanut or
other nut butter



1 teaspoon oil



¼ cup nuts



2 tablespoons of light
dressing

SATURATED AND TRANS FATS

Unhealthy Fats: Increase LDL (bad) cholesterol and triglyceride levels in the blood

- ↑ Risk of heart attack and stroke

◎ **Saturated Fat- MODERATION**

- Naturally occurring animal fats (meat/dairy), coconut, and palm oils

◎ **Trans Fat (partially hydrogenated oil)- ELIMINATE**

- Primarily man-made and found in processed foods such as margarine and cookies, cakes, chips, crackers, etc.
- AB97: Good start to eliminating TF from restaurants

CHOLESTEROL

- ◉ We make all of the cholesterol we need
- ◉ Dietary cholesterol is found in animal products (meat, dairy, eggs)
- ◉ Although it is important to pay attention to your dietary cholesterol intake, research indicates only some people are sensitive to dietary cholesterol
 - One egg per day is fine for most



UNSATURATED FATS

Healthy Fats: Have a negligible effect on LDL (bad) cholesterol or triglycerides and can help increase HDL (good) cholesterol levels

- Prevent heart disease and provide other benefits

◎ Monounsaturated

- Sources: Olive, canola, & peanut oils; avocados, nut butters and many nuts & seeds

◎ Polyunsaturated

- Sources: Soybean, corn, & safflower oils, fatty fish, walnuts, sunflower seeds



UNSATURATED FATS



Essential Fatty Acids: Fats the body cannot make and therefore must be obtained from the diet.

- Play a critical role in inflammatory processes

◎ Omega-6s

- Pro-inflammatory
- Sources: vegetable oils (primary source), grain-fed meat & poultry, grains & cereals, nuts/seeds

◎ Omega-3s

- Anti-inflammatory
- Sources: fatty fish (salmon, sardines, halibut, herring, tuna), flaxseed, walnuts

SEASONINGS & SPICES



◎ Functions

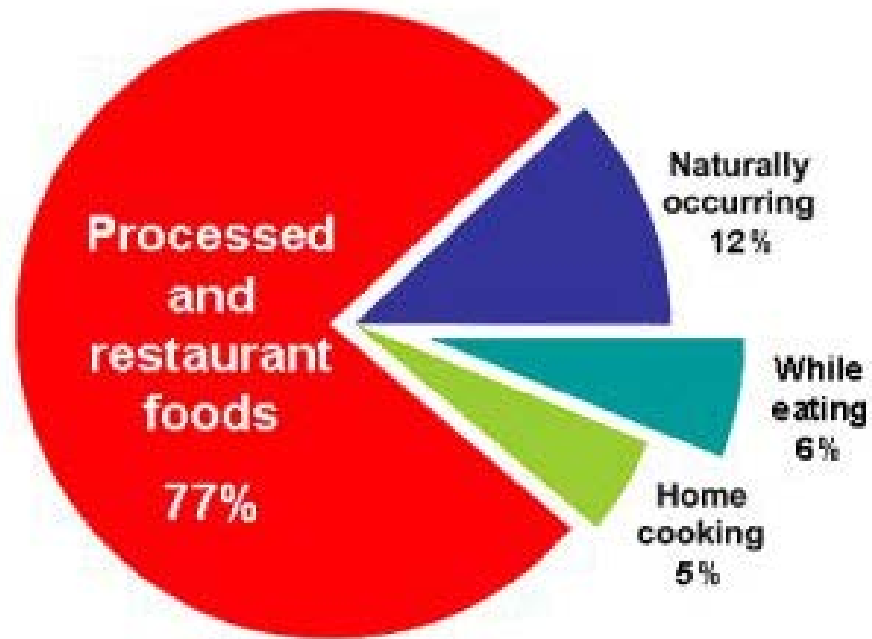
- Contain disease-fighting antioxidants
- Have been used for centuries as treatments for common ailments

◎ Good Choices

- Cinnamon (heart health, blood sugar)
- Turmeric (cancer prevention, anti-inflammatory)
- Rosemary (heart health)
- Garlic (cancer prevention, anti-bacterial/viral)
- Ginger (digestive health, cancer prevention)
- Oregano (highest antioxidant activity of all herbs)

SODIUM

Sources of Dietary Sodium in the US



Source: Mattes, RD, Donnelly, D. Relative contributions of dietary sodium sources. *Journal of the American College of Nutrition*. 1991 Aug;10(4):383-393.

SODIUM

- ◎ Body needs a very small amount of sodium to function; most Americans are consuming salt far in excess of what is good for them
- ◎ Recommended consumption of salt: 6 grams
 - Men = 10.4 grams
 - Women = 7.3 grams
- ◎ In susceptible individuals, excess sodium can lead to high blood pressure and kidney issues
- ◎ Cut your intake:
 - Flavor foods with herbs & spices
 - Limit processed and restaurant foods
 - Choose low-sodium versions of your favorite foods
 - Rinse canned vegetables and beans before eating

BEVERAGES

- ◎ Water is your healthiest bet when it comes to beverages!
 - Aim for 64+ ounces of water a day
- ◎ Avoid drinking your calories
 - Limit/Avoid:
 - Soda
 - Sports drinks
 - Juices & other fruit-flavored beverages
 - Smoothies
 - Sweetened coffee beverages



EATING WELL TOP 10



1. Eat more vegetables

- Add more veggies to dishes you already love
- Embellish your favorite soups with added veggies
- Create a colorful salad
- Incorporate veggies into snacks
- Keep a stash of frozen mixed vegetables in your freezer for easy meal prep
- Cut up and package your vegetables as soon as you get them home from the store
- Visit your local farmer's market
- Sign up for a CSA (Community Supported Agriculture) box to get fresh vegetables delivered

EATING WELL TOP 10



2. Choose whole grains

- Watch out for deceptive packaging: if a product is made from whole grain, it will say so explicitly in the ingredients list (ex: 100% whole wheat flour)
 - Common imposters: “multi-grain”, “made with whole grain” and “wheat” products
- Cook whole grains in bulk (brown rice, quinoa, buckwheat, etc.) and incorporate into meals throughout the week
 - Most whole grains can be cooked similar to rice using a 3 or 4:1 ratio with boiling water for 30-40 minutes
- Start your day off with a whole grain breakfast like oatmeal with fresh fruit and milk

EATING WELL TOP TEN

3. Prepare your own food

- Dedicate time to plan, shop, prepare
 - Spend 1-2 hours on the weekend preparing large batches of healthy foods to eat throughout the week:
 - Salads
 - Soups
 - Whole-Grains (quinoa, brown rice, oatmeal)
 - Chopped fruits & veggies
- Know what goes into your food
- Have fun!



EATING WELL TOP TEN

4. Snack smart

- More likely to eat what is readily available
- Include protein and fiber to keep you satisfied
- Pre-portion your snacks, try not to eat right out of the original package
- Be prepared with your own healthy “grab-n-go”
 - Fruits and vegetables ready to eat
 - Nuts
 - Yogurt
 - Hard boiled eggs
 - Whole grain crackers & low-fat cheese



EATING WELL TOP TEN

5. Be strategic when eating out

- Portion control
 - Put half of your meal in a to-go box before you even start to eat!
- Healthy choices
 - Add a salad or vegetable soup to your meal
 - Order foods that are steamed, broiled, grilled, stir-fried, or roasted
- Be your own advocate
 - Don't be afraid to ask to have something prepared in a healthier manner - the worst they can say is no!



EATING WELL TOP TEN

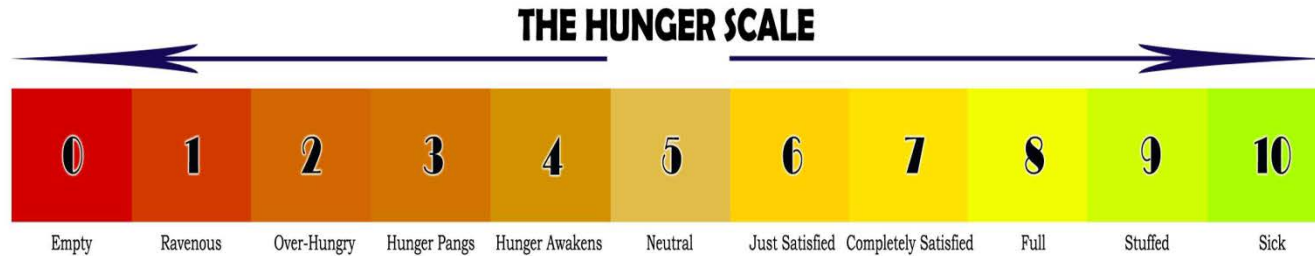
6. Drink more water

- Weaning yourself off of sugar-based beverages is a healthy, quick, and easy way to decrease caloric intake
- Refilling a reusable water bottle with tap water throughout the day is a cheap, eco-friendly and convenient option



EATING WELL TOP TEN

7. Stay in the neutral zone



- Ideally, you should never be too hungry or too full
 - Using the scale above, stay between 3 and 7
 - Typically, this can be achieved by eating a small meal every 3-4 hours
- Ask yourself before you eat how hungry you are.
 - Avoid the hunger red zone as it can lead to overeating
- Eat until you are satisfied but not full
 - Remember that it takes 20 minutes for the brain to register that you are full so eat slowly

EATING WELL TOP TEN

8. Practice mindful eating

- Eat sitting down, at a table
- Avoid distractions (TV, newspaper, computer) while eating
- Chew your food thoroughly before swallowing
- Set your fork/spoon on the table between bites
- Savor all the sensations of your food - smells, texture, sight and taste
- Go for quality not quantity - enjoy smaller amounts of the best food you can afford



EATING WELL TOP TEN

9. Tame cravings

- Most common food cravings are sugar, fat, and salt
- Cravings are part of our biology
 - For most of human history sugar, fat and salt were rare in nature - cravings were an evolutionary necessity
 - Due to evolutions in our food system these foods are plentiful, available constantly and heavily marketed - biology is now working against us
- Outsmart your biology
 - Avoid your triggers
 - Remove temptation
 - Distract yourself
 - Indulge with limits
 - Explore motivations for eating beyond hunger

EATING WELL TOP TEN

10. Make healthy eating a lifestyle

- Diets don't work long term
 - There are no quick fixes!
- Start small
 - Don't expect to revamp your entire diet overnight
 - Take small steps (like adding a salad at dinner) - as your changes become habit, take another healthy step
 - Healthy eating takes planning and dedication
- Recruit support
 - Support is essential to carrying out successful lifestyle change - get those around you on board with your efforts to live healthier
- Plan ahead
 - Don't let setbacks discourage you, plan ahead for how you will address barriers to carrying out your new lifestyle

EATING WELL TOP TEN

BONUS - Lead an ACTIVE LIFESTYLE!

- Exercise is ESSENTIAL to health
- Incorporate activity wherever you can
 - Take the stairs
 - Park farther away
 - Walk to work/at lunch/break
 - Stretch at your desk, while watching TV
- Plan activity into your day
 - Hiking, biking, running, walking
 - Gym: Classes, machines



HEALTH*MATTERS PROGRAMS

- ◉ Nutrition to Kitchen Workshops
 - Try new foods and recipes prepared in quick, healthy & delicious ways
 - Spring Veggies Made Easy (3/20)
 - Strategies for Eating “Carb-Smart” (4/10)
- ◉ Programs
 - I CAN! Commitment to Activity & Nutrition
 - Begins tomorrow, register by the end of today!
 - The Amazing Walk 2 (Coming Fall 2013)
 - Maintain Don't Gain (Coming Fall 2013)
- ◉ Other Healthy Living Webinars
 - Strategies for Successful Lifestyle Change
 - Fitness to Fit Your Lifestyle
 - Digital Tools to Support Your Wellness Goals
- ◉ New for 2013!
 - Ask the Dietitian
 - uhs.berkeley.edu/facstaff/healthmatters/nutrition.shtml
 - Eat Well @ Work
 - Uhs.berkeley.edu/facstaff/healthmatters/eatwellatwork.shtml

Sign up today!
Tinyurl.com/ucblms