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
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

The Average American

Age: 36.6
Height: 5'9" (m) 5'4" (f)
Weight: 190 lbs (m) 164 lbs (f)

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)

Fats & Oils 85.5 lbs
Red Meat 110 lbs
Poultry 73.6 lbs
Fish & Shellfish 16.1 lbs
Eggs 32.7 lbs
Cheese 31.4 lbs

Beverage Milks 11.9 lbs
Wheat Flour 154.1 lbs
Flour & Cereal Products 192.3 lbs
Caloric Sweeteners 141.6 lbs
Corn Syrup 42.2 lbs
Corn 58 lbs
Vegetables 415.4 lbs
Coffee, Cocoa & Nuts 24 lbs

Dairy Products (non-cheese) 600.5 lbs
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

For Health... eat some food from each group... every day!

1992

1992

2005

MyPyramid

healthy eating plate

2011

Choose MyPlate.gov

2010
Source: Centers for Disease Control
Prevalence of Chronic Disease in the U.S.

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
What’s a Serving?

2 cups leafy greens = 1 serving

½ cup cooked or raw veggies = 1 serving

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
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
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**
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
NORMAL BLOOD GLUCOSE METABOLISM

Carbohydrate Consumed

Insulin Released

- Blood sugar used by cells

Blood glucose levels $\downarrow$ to a healthy level
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
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
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
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
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
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.
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
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)
Sources of Dietary Sodium in the US

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
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
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
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!
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
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!
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
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
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
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
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