

Healthy Living, Your Links to Personal and Professional Success

Presented at 2012 Wellness in Your Workplace Symposium

Todd Withthorne:

- Works for Cooper Aerobic Center in Dallas: largest exercise database in world
- Dr. Kenneth Cooper coined the word “aerobics” in book *Aerobics* (1968)
 - Quantified the value of being fit

Squaring off the Curve:

- 93-97% of Americans live on red curve of high risk lifestyle
- As we get older, lose functional capacity, then pass away
 - Deficient Survival- last years of life on red curve, can't perform daily functions
- Green Curve: Low Risk Lifestyle- live 6-9 years longer
 - Reach peak, live long and healthy life, then drop off curve suddenly
 - Compression of morbidity: compress sickness into a short period
- Exceptional survival, push back the onset of disability by 10-13 years

Habits Influence:

- 30% of health genetic
- 70% of health is habit and environment
- Physical activity is often optional. 2 of 10 Americans jobs require caloric expenditure

What's Preventable:

- “It's easier and less expensive to maintain good health than it is to regain it once it's lost,” - Dr. Cooper
- #1 killer in U.S. is heart disease; #1 symptom is a fatal heart attack
- Preventable diseases that account for 74% of health care costs:
 - 80% of CVD & diabetes, 60% of cancers, 90% of obesity

U.S. Obesity and Overweight:

- 68% of Americans are overweight or obese ¹
- 34% overweight; 34% obese in U.S.
 - Continue at these rates by 2020 75% of Americans will be overweight or obese. By 2030, 86%

Metabolic Syndrome:

- Individually conditions not that big of a deal. Collectively become a problem
 1. Wait circumference: (men: >40 inches; women: >35 inches)
 2. Triglycerides (>150 mg/dL)
 3. Blood sugar (>100 mg/dL)
 4. Blood pressure (> 130/85 mmHg)

5. HDL cholesterol- good cholesterol (men: <40 mg/dL; women: <50 mg/dL- women naturally have higher levels) ²

The Worsening Landscape of Cardiovascular Disease:

- Conditions we are suffering from are starting earlier due to lifestyle
 - 18.4% of 4 year olds are obese. >20% of Hispanic and African American children ³
 - Diagnosis of Type II diabetes before age 14 shortens lifespan by 17- 27 years
 - 90% of diabetes is Type II, which is preventable

Rate of Diabetes:

- 2010: 26 million diabetics: 10 % of the U.S.; 79 million pre-diabetics
 - By 2050, 1 out of 3 of Americans will be diabetic ⁴

Eating Ourselves to Death:

- Most people not getting enough vitamins in diet, what are we eating?
- *The End of Overeating* by David Kessler
 - Nucleus accumbens or hedonic hotspot lights up with fat, salt, sugar
 - Increases 'cravality' because releases dopamine to brain
- Business of fast food, as consumers, we have to understand what is going on

Carbohydrates and Sugar

- Brain needs carbs, but big difference in good versus highly processed carbs
 - Amount of sugar in one soda:
 - In 1882 it took us 5 days to consume that amount of sugar
 - Today it takes about 7 hours

Lowering Metabolic Syndrome:

- DASH: Dietary Approach to Stopping Hypertension
 - 4-5 servings of both fruit and vegetables every day
 - Lowers cholesterol, blood pressure and risk of stroke, osteoporosis, heart failure, cancer, and kidney stones
- Government Effort: Healthy people 2010
 - Goal: Get Americans to consume 2 servings of fruit and 3 servings of vegetables per day
 - Today:
 - 32.5% eat 2 servings of fruit
 - 26.35% eat 3 servings of vegetables ⁵

How to get People to Change:

- Easier and less expensive to eat poorly, so make it cool to be healthy
 - Education, policy, and personal responsibility

Exercise and the Brain:

- 3 hours a week of brisk walking:
 - Increases production of new brain cells, connectivity, plasticity
- Book: *Spark*: Exercise and effect on brain growth:
 - Improves memory, learning, focus, attention, mood, and emotion ⁶

Illuminate your Brain:

- After exercise kids:
 - Improve ability to filter out unnecessary information
 - Attend to relevant cues and improve complex memory

Exercise, You Schedule You:

- 150 minutes/week
- 30 minutes a day/5 days a week
 - Or intense cardio 20 minutes a day/3 days a week. And 8-10 strength-training exercises with 8 to 12 repetitions/2 days a week ⁷

Changing Gears:

- Nutritional supplements: Not replacements for anything
- **Omega-3 benefits, shown in numerous studies**
 - Beneficial trends in:

Blood Pressure	Depression	Resting Heart Rate	ADD/ADHD
Risk of Arrhythmia	Dry eyes	Sudden Death	Periodontal Disease
Triglycerides	Autoimmune diseases	LDL/HDL Cholesterol	Fetal Development
- **Vitamin D deficiency can contribute to:** ⁸

Arthritis	Osteoporosis	Decreased Immunity	CV Disease	Hypertension
Depression	Pain	Diabetes	Decreased Lung Function	
A.M.D.	Periodontal Disease	Cancer		
- **If Vitamin D levels between 30-60 ng/ml, lower risk by:** ⁹
 - 80% Breast Cancer 60% Colon Cancer
 - 49% Fracture 72% Falls
 - 13% Blood Pressure 77% Influenza

Todd's Take Away:

- Walk the dog, Wear sunglasses!
- ZZZZ!/ Wake up hungry!/ Floss!
- H₂O, H₂O, H₂O!
- 5 is Fine, but 9 is Divine
- Eat Fish!, not Hotdogs!
- Vitamins and Cheeseburgers, don't mix!
- GAP! Know your numbers!

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- ¹ (Johns Hopkins University, *Obesity* 2008)
 - ² (AHA/ATP III)
 - ³ (Archives of Pediatrics & Adolescent Medicine, April, 2009)
 - ⁴ (CDC)
 - ⁵ (Morbidity and Mortality Report, September 2010)
 - ⁶ (Harvard Psychiatrist John J Ratey)
 - ⁷ (ACSM and AHA, 2007)
 - ⁸ (N Eng J Med 357;3, July 19,2007)
 - ⁹ (Harvard Medical School, 2010)