

Feet, Forks, and *the FATE of our Families*

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Author, *Disease Proof*

The Blind Men and the Elephant
-John Godfrey Saxe

Out of the Woods-

- The Elephant in the Room
- The Peril, Promise, & Problem
 - ...and the other problem
- A Fork in the Road
- The Right Metaphor
- Sandbagging
- Not Just Waitin' on the World to Change
- The Big Spoon
- The Fork in the Road, Revisited
- The Forest through the Trees

Death, in the dark wood...

- McGinnis JM, Foege WH. **Actual causes of death** in the United States. *JAMA*. 1993;270:2207-12
- Mokdad AH, Marks JS, Stroup DF, Gerberding JL. **Actual causes of death** in the United States, 2000. *JAMA*. 2004;291:1238-45

The People in Potsdam-

- Ford ES, Bergmann MM, Kröger J, Schienkiewitz A, Weikert C, Boeing H. **Healthy living is the best revenge: findings from the European Prospective Investigation Into Cancer and Nutrition-Potsdam study**. *Arch Intern Med*. 2009 Aug 10;169(15):1355-62
- **Or the UK:**
 - Kvaavik E, Batty GD, Ursin G, Huxley R, Gale CR. **Influence of individual and combined health behaviors on total and cause-specific mortality in men and women: the United Kingdom health and lifestyle survey**. *Arch Intern Med*. 2010;170:711-8
- **Or the US**
 - McCullough ML, Patel AV, Kushi LH, Patel R, Willett WC, Doyle C, Thun MJ, Gapstur SM. **Following cancer prevention guidelines reduces risk of cancer, cardiovascular disease, and all-cause mortality**. *Cancer Epidemiol Biomarkers Prev*. 2011;20:1089-97

Fresher still-

- Akesson A, Larsson SC, Discacciati A, Wolk A. **Low-Risk Diet and Lifestyle Habits in the Primary Prevention of Myocardial Infarction in Men: A Population-Based Prospective Cohort Study**. *J Am Coll Cardiol*. 2014 Sep 30;64(13):1299-306

Fresher-er...

- Aleksandrova K, et al. **Combined impact of healthy lifestyle factors on colorectal cancer: a large European cohort study.** *BMC Med.* 2014 Oct 10;12(1):168. [Epub ahead of print]

Fresher-er-er...

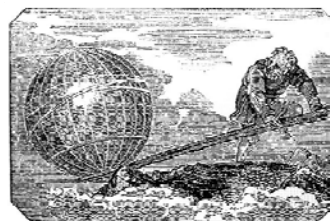
- Chomistek AK, Chiuve SE, Eliassen AH, Mukamal KJ, Willett WC, Rimm EB. **Healthy lifestyle in the primordial prevention of cardiovascular disease among young women.** *J Am Coll Cardiol.* 2015 Jan 6;65(1):43-51

rePercussions...

- ...to our pith and marrow; the case for nurturing nature:
- Ornish D, Magbanua MJ, Weidner G, Weinberg V, Kemp C, Green C, Mattie MD, Marlin R, Simko J, Shinohara K, Haqq CM, Carroll PR. **Changes in prostate gene expression in men undergoing an intensive nutrition and lifestyle intervention.** *Proc Natl Acad Sci U S A.* 2008 Jun 17;105(24):8369-74
 - Hietaniemi M, Jokela M, Rantala M, Ukkola O, Vuoristo JT, Ilves M, Rysä J, Kesäniemi Y. **The effect of a short-term hypocaloric diet on liver gene expression and metabolic risk factors in obese women.** *Nutr Metab Cardiovasc Dis.* 2009 Mar;19(3):177-83
 - Freedland SJ, Aronson WJ. **Dietary intervention strategies to modulate prostate cancer risk and prognosis.** *Curr Opin Urol.* 2009 May;19(3):263-7
 - Ujvari U, Hulchiy M, Calaby A, Nybacka Å, Byström B, Hirschberg AL. **Lifestyle intervention up-regulates gene and protein levels of molecules involved in insulin signaling in the endometrium of overweight/obese women with polycystic ovary syndrome.** *Hum Reprod.* 2014 Jul;29(7):1526-35

The Master Levers of Destiny-

- Feet
- Forks



- Fingers



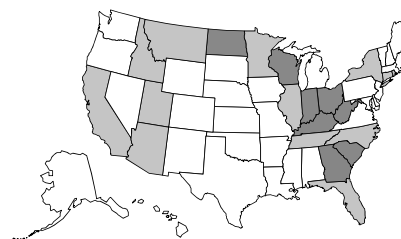
But....

Lost in translation...

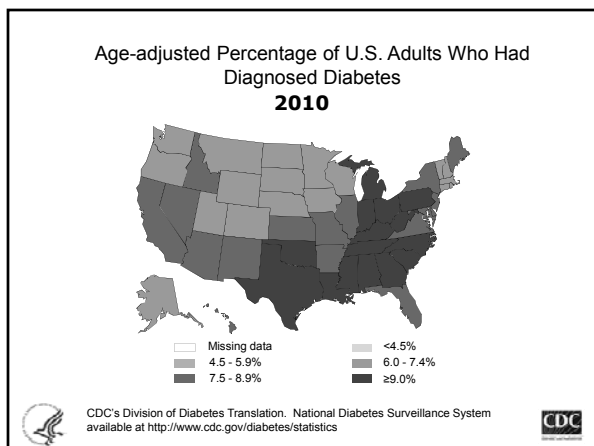
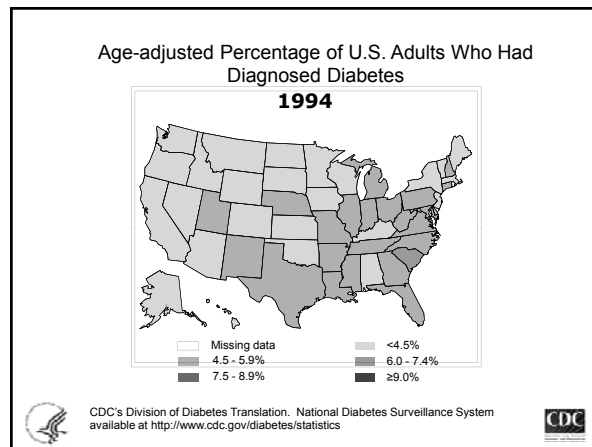
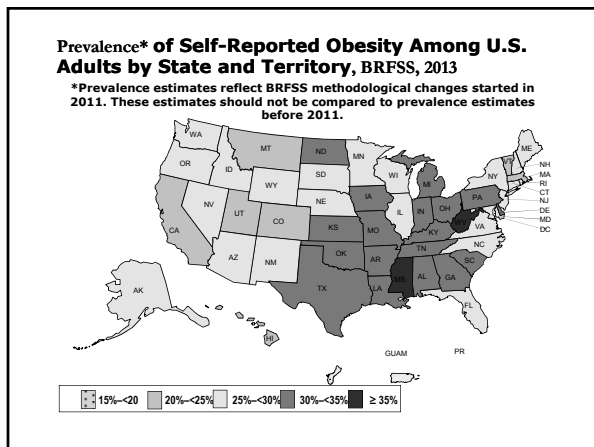
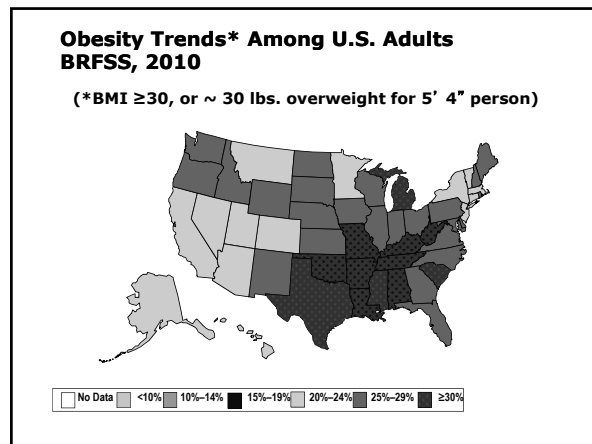
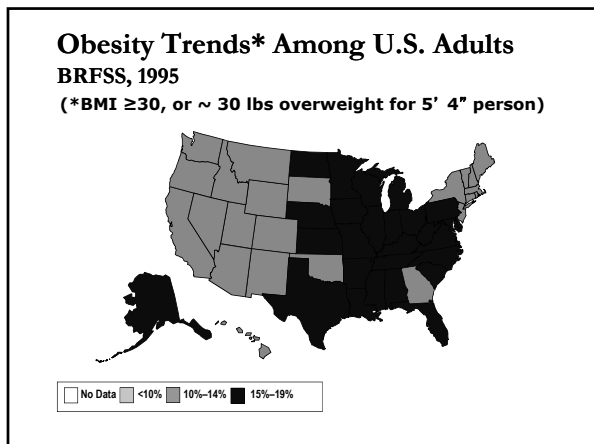
- Knowledge, alas, isn't power...
 - Katz DL. **Life and death, knowledge and power: why knowing what matters isn't what's the matter.** *Arch Intern Med.* 2009 Aug 10;169(15):1362-3

Obesity Trends* Among U.S. Adults BRFSS, 1985

(*BMI ≥30, or ~ 30 lbs overweight for 5' 4" person)



□ No Data □ <10% □ 10%-14%



Cooked?

HealthDay
News for Healthier Living

- **40 Percent of Americans Will Develop Diabetes, CDC Projects**
 - Rates for black women and Hispanics even higher at 50 percent
 - **By Dennis Thompson**
HealthDay Reporter
 - TUESDAY, Aug. 12, 2014 (HealthDay News) –
- Aug. 13, 2014, *The Lancet Diabetes & Endocrinology*, online

The Writing is on the Wall-

The New York Times
nytimes.com

- November 12, 2008
- Child Obesity Seen as Warning of Heart Disease
- By PAM BELLUCK
- February 10, 2011, 2:27 pm
- Stroke Rising Among Young People
- By TARA PARKER-POPE

The Promise of Public Health, in Private Parts-

What lifestyle can do...

- 80% reduction in heart disease
- 90% reduction in diabetes
- 60% reduction in cancer
- and so on...
- 4 Healthy lifestyle factors help ward off chronic disease. Diet, exercise, low body mass index and not smoking can reduce the incidence of heart disease, diabetes, stroke and cancer. *Duke Med Health News*. 2009;15:4-5
- Knuops KT, de Groot LC, Kromhout D, Perrin AE, Moreiras-Varela O, Menotti A, van Staveren WA. Mediterranean diet, lifestyle factors, and 10-year mortality in elderly European men and women: the HALE project. *JAMA*. 2004;292:1433-9

The Public-

■ *in private parts...*

- Katz DL. Facing the facelessness of public health: what's the public got to do with it? *Am J Health Promotion*. 2011 Jul-Aug;25(6):361-2

The Problem-

When clear where "there" is-

(Can We Say What Diet Is "Best"? David L. Katz; Huffington Post, 9/7/11)
http://www.huffingtonpost.com/david-katz-md/best-diets_b_950672.html

-it may still seem...

- you can't get *there* from *here*:



...& the other problem:


- Is it clear where “there” is?

Health Diet/Nutrition

Low-Carb Diet Beats Low-Fat for Weight Loss

•Mandy Oaklander @mandyoaklander
Sept. 1, 2014

Bird's (Katz'?) eye view-

- Katz DL et al. Can we say what diet is best for health? *Annu Rev Public Health*. 2014 Mar 18; 35:83-103
- Science Compared Every Diet, and the Winner Is Real Food
 - Researchers asked if one diet could be crowned best in terms of health outcomes. If diet is a set of rigid principles, the answer is a decisive no. In terms of broader guidelines, it's a decisive yes.
 - James Hamblin Mar 24 2014, 1:14 PM ET 
- Katz DL et al. **Nutrition in Clinical Practice, 3rd Edition.** Wolters Kluwer/Lippincott Williams & Wilkins. September, 2014

Other eyes, on the same prize -

- Mann J et al. **Low carbohydrate diets: going against the grain.** *Lancet*. 2014 Oct 25;384;1479-80
- Ley SH, Hamdy O, Mohan V, Hu FB. **Prevention and management of type 2 diabetes: dietary components and nutritional strategies.** *Lancet*. 2014 Jun 7;383:1999-2007
- Katz DL, Hu F. Knowing what to eat, refusing to swallow it. *Huffington Post*. 7/2/14

Macronutrients, Misrepresentations, and Mayhem-

- Chowdhury R et al. **Association of Dietary, Circulating, and Supplement Fatty Acids With Coronary Risk: A Systematic Review and Meta-analysis.** *Ann Intern Med*. 2014;160:398-406
- Bazzano LA et al. **Effects of low-carbohydrate and low-fat diets: a randomized trial.** *Ann Intern Med*. 2014;161:309-318

“Eat food, not too much, mostly plants.”

-Michael Pollan

Much the same, in 572 pages...

■ Scientific Report of the 2015 Dietary Guidelines Advisory Committee

<http://www.health.gov/dietaryguidelines/2015-scientific-report/>



Mostly plants? *Fuggedaboutit!...*

- Blanck HM, Gillespie C, Kimmons JE, Seymour JD, Serdula MK. Trends in fruit and vegetable consumption among U.S. men and women, 1994-2005. *Prev Chronic Dis.* 2008 Apr;5(2):A35. Epub 2008 Mar 15
- Kimmons J, Gillespie C, Seymour J, Serdula M, Blanck HM. Fruit and vegetable intake among adolescents and adults in the United States: percentage meeting individualized recommendations. *Medscape J Med.* 2009;11(1):26. Epub 2009 Jan 26
- Katz DL. Plant foods in the American diet? As we sow... *Medscape J Med.* 2009;11(1):25. Epub 2009 Jan 26

EVEN when clear where “there” is-

(Can We Say What Diet Is "Best"? David L. Katz; Huffington Post, 9/7/11: http://www.huffingtonpost.com/david-katz-md/best-diets_b_950672.html)

-it may seem...

- you can't get *there* from *here*:



A sandbagger...

and proud of it!

No Child Left (*on their*) Behind-Square Peg, Round Hole?

- As easy as “ABC” for Fitness-

Activity **B**ursts in the **C**lassroom

No Child Left (*on their*) Behind-Square Peg, Round Hole?

Katz DL, Cushman D, Reynolds J, Njike V, Treu JA, Walker J, Smith E, Katz C. Putting physical activity where it fits in the school day: preliminary results of the ABC (Activity Bursts in the Classroom) for fitness program. *Prev Chronic Dis.* 2010 Jul;7(4):A82. Epub 2010 Jun 15

Katz DL, Katz CS, Treu JA, Reynolds J, Njike V, Walker J, Smith E, Michael J. Teaching healthful food choices to elementary school students and their parents: the Nutrition Detectives™ program. *J Sch Health*. 2011 Jan;81(1):21-8

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The ONQI Algorithm-

Numerator	Denominator
Fiber	Saturated fat
Folate	Trans fat
Vitamin A	Sodium
Vitamin C	Sugar
Vitamin D	Cholesterol
Vitamin E	
Vitamin B12	
Vitamin B6	
Potassium	
Calcium	
Zinc	
Omega-3 fatty acids	
Total bioflavonoids	
Total carotenoids	
Magnesium	
Iron	

•Macronutrient Adjustors

Fat quality
Protein quality
Glycemic load
Energy density

•Trajectory Scores

•Weighting Coefficients

Categorical stipulations

- Pure foods vs. processed
- Intrinsic vs. added sugars
- Artificial sweeteners
- Etc.

Katz DL, Ayoob KT, Decker EA, Frank GC, Jenkins DA, Reeves RS, Charnel P. The ONQI Is Not a Black Box. *Am J Prev Med*. 2011 Sep;41(3):e15-6

Chiuve S, Sampson L, Willett WC. **The association between a nutritional quality index and risk of chronic disease.** *Am J Prev Med*. 2011;40(5):505-13

Katz DL, Njike VY, Rhee LQ, Reingold A, Ayoob KT. Performance characteristics of NuVal and the Overall Nutritional Quality Index (ONQI). *Am J Clin Nutr*. 2010;91:1102S-1108S

Katz DL, Njike VY, Faridi Z, Rhee LQ, Reeves RS, Jenkins DJ, Ayoob KT. The stratification of foods on the basis of overall nutritional quality: the overall nutritional quality index. *Am J Health Promot*. 2009;24:133-43

Jacobson MF. An important new way to rate the nutritional quality of foods. *Am J Health Promot*. 2009;24:144-5

Measuring what matters...

- RR of all-cause mortality, top vs. bottom quintile of NuVal scores
 - NHS: RR = 0.88; p<0.001 (n ~ = 70,000)
 - HPFS: RR = 0.87; p = 0.001 (n ~ = 40,000)
 - Chiuve S, Willett WC et al. **Harvard School of Public Health**
 - Abstract presented: *Experimental Biology 2010; Anaheim, CA*
 - *Am J Prev Med* 2011 May;40(5):505-13

NuVal Mom of the Month for January, 2012: Sally Galvin of Olathe, KS



NuVal *con tempo*

- >100,000 foods scored and audited
- In >2000 supermarkets in 33 states, coast to coast
- Reaching ~40 million shoppers every week

Sandbags...

on the assembly line:

- <http://www.yalegriffinprc.org/>
- www.turnthetidefoundation.org

Not just waitin' on the world to change...

Katz DL, Shuval K, Comerford BP, Faridi Z, Njike VY. **Impact of an educational intervention on internal medicine residents' physical activity counselling: the Pressure System Model.** *J Eval Clin Pract.* 2008 Apr;14(2):294-9

Katz DL. **Behavior modification in primary care: the pressure system model.** *Prev Med.* 2001 Jan;32(1):66-72

O'Connell M, Comerford BP, Wall HK, Yanchou, Njike V, Faridi Z, Katz DL. **Impediment profiling for smoking cessation: application in the workplace.** *Health Promot.* 2006 Nov-Dec;21(8):97-100

Katz DL, Boukhalil J, Lucan SC, Shah D, Chan W, Yeh MC. **Impediment profiling for smoking cessation. Preliminary experience.** *Behav Modif.* 2003 Sep;27(4):524-37

O'Connell M, Lucan SC, Yeh MC, Rodriguez E, Shah D, Chan W, Katz DL. **Impediment profiling for smoking cessation: results of a pilot study.** *Am J Health Promot.* 2003 May-Jun;17(5):300-3

GLiMMER: Vision

- The Earth is both a beautiful Blue Planet, and a universal Blue Zone



LiM

- Global coalition of lifestyle medicine organizations; ACLM as convener
- Development, Refinement, Dissemination of best practice models
- Contributions to medical education (all levels)
- Engagement of payers and policy makers to advance reimbursement models
- Participant in the True Health Coalition (*aid, out*)
- Able to leverage cultural supports (*aid, in*)

LaM



The True Health Coalition

- Designed to advance the #UseWhatWeKnow principle



Ship & Sail, Wind & Wave

- Project components are “ship & sail,” specific to a given destination
- The True Health Coalition generates a wind to fill all sails by establishing consensus, repudiating distractions and discord



Join us -

■ True Health Coalition

- One Voice, United
 - A global voice devoted to disseminating and applying what we know for sure about health promotion and disease prevention.

Sign up today to become a member of the True Health Coalition. Your voice matters!

- sign me up!
 - <http://glimmerinitiative.org/#coalition>

Thank you!

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