



## **Objectives**

- Explain the history behind our current nutritional recommendations and the medical consequences
- Summarize the current knowledge on nutrition and how it has impacted health and fitness and costs
- Add a quickie on cholesterol and exercise

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- Board Certified, Occupational and Environmental Medicine



### Fat doesn't make you fat





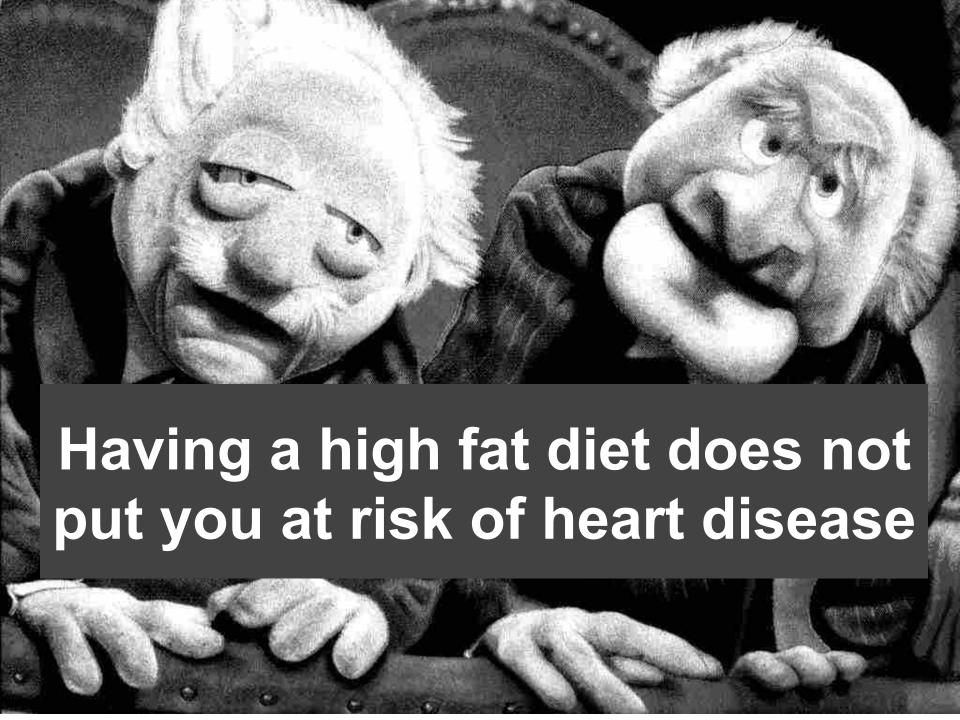


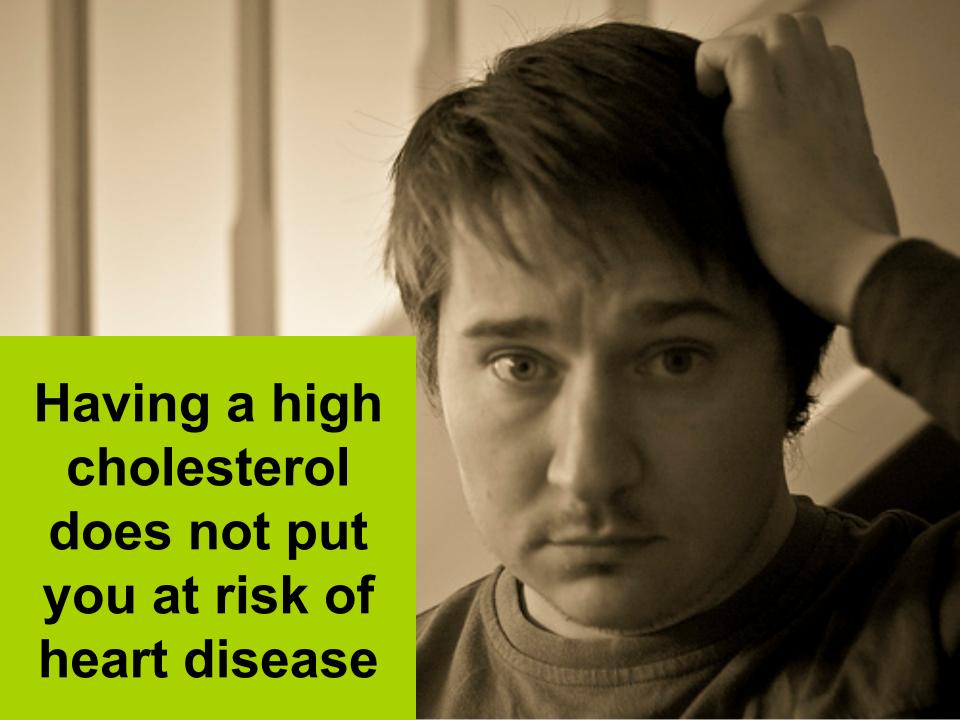




Eating red meat does not increase your risk of a heart attack





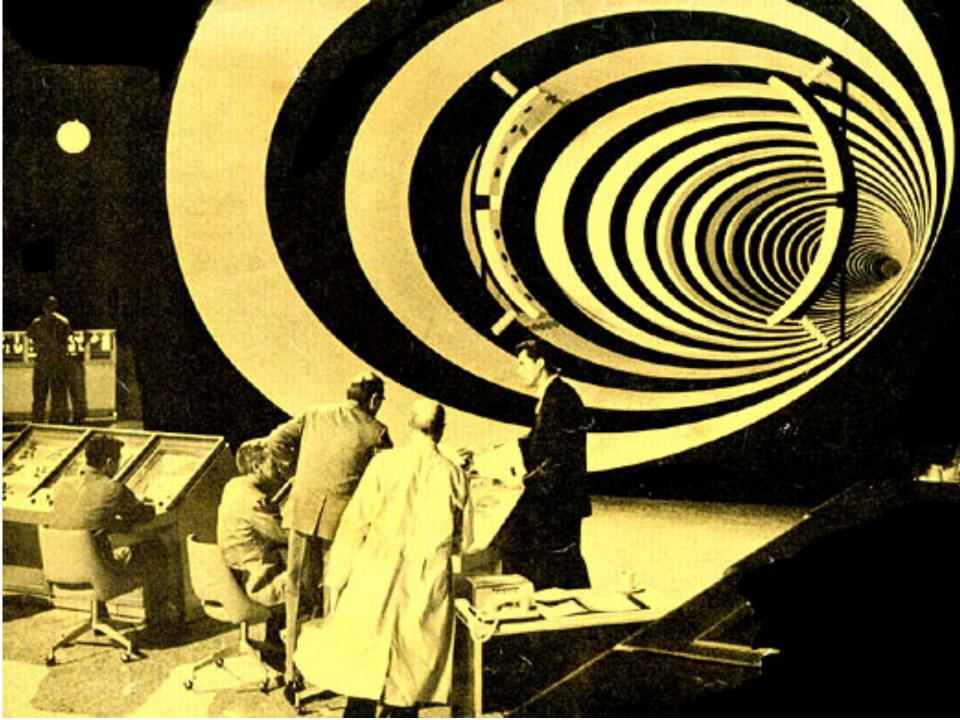


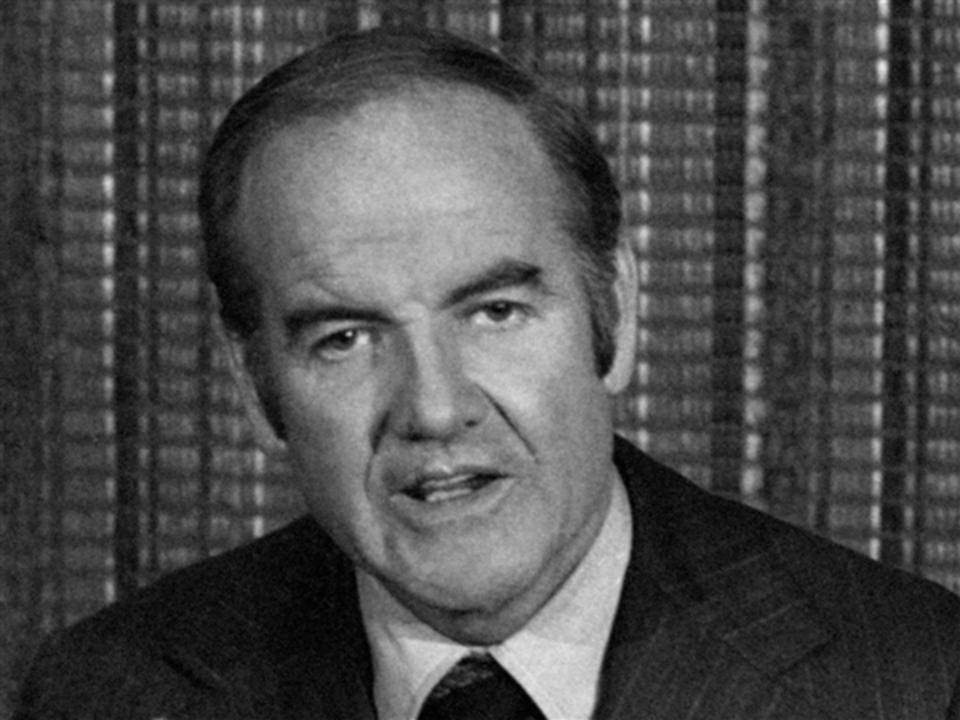
# Carbohydrates cause heart attacks



And other bad things . . .

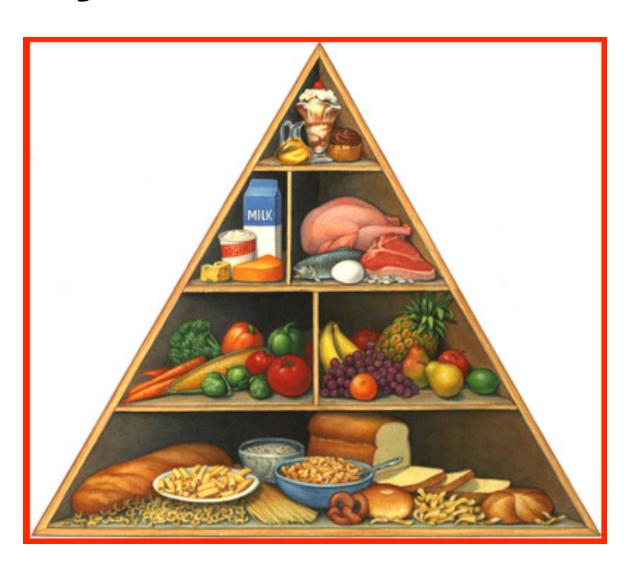




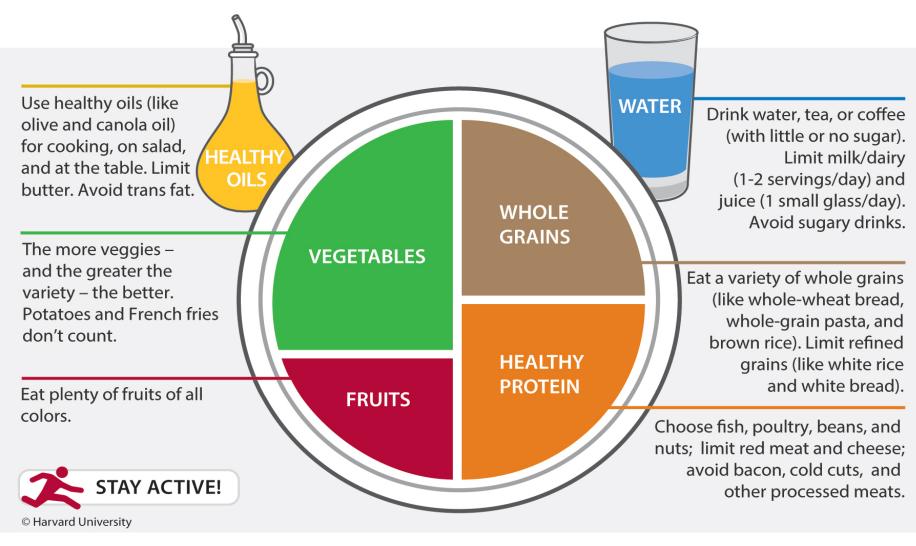




### Dietary Goals for the US 1977



### **HEALTHY EATING PLATE**





Harvard Medical School Harvard Health Publications www.health.harvard.edu



# The shift to a low fat diet was one of the most dangerous conceptual shifts in public health in American history

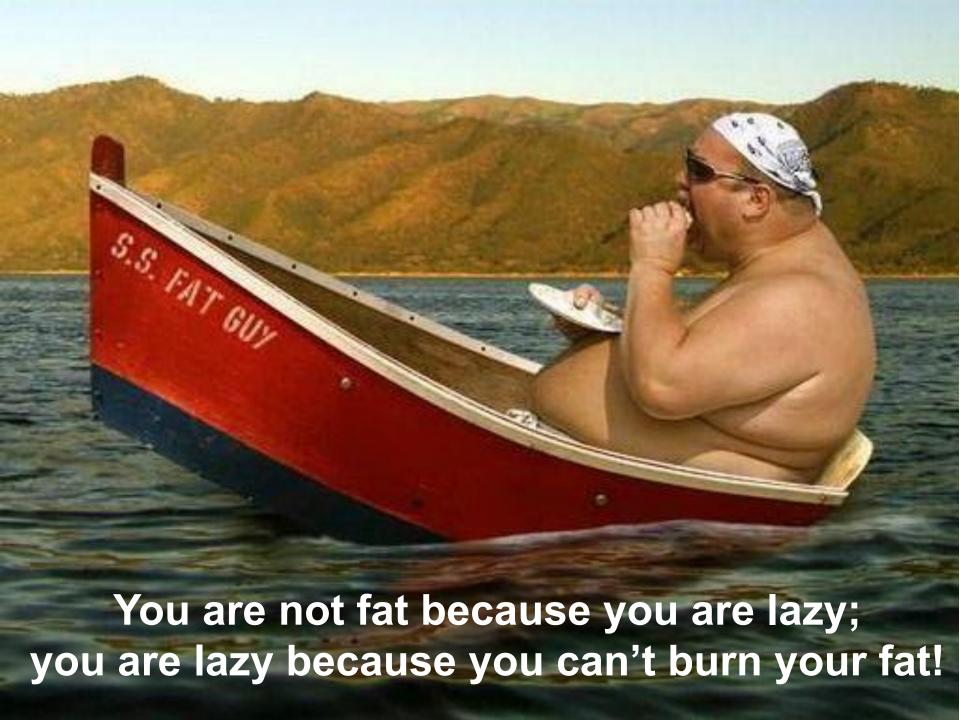
Gary Taubes

Good Calories, Bad Calories



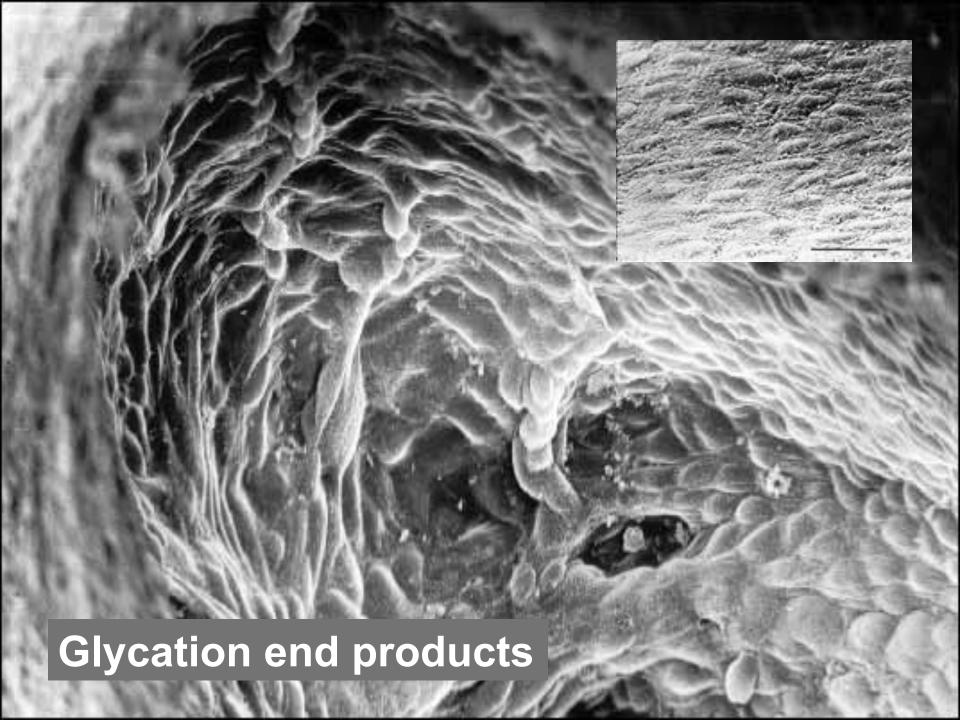
### Low fat diets:

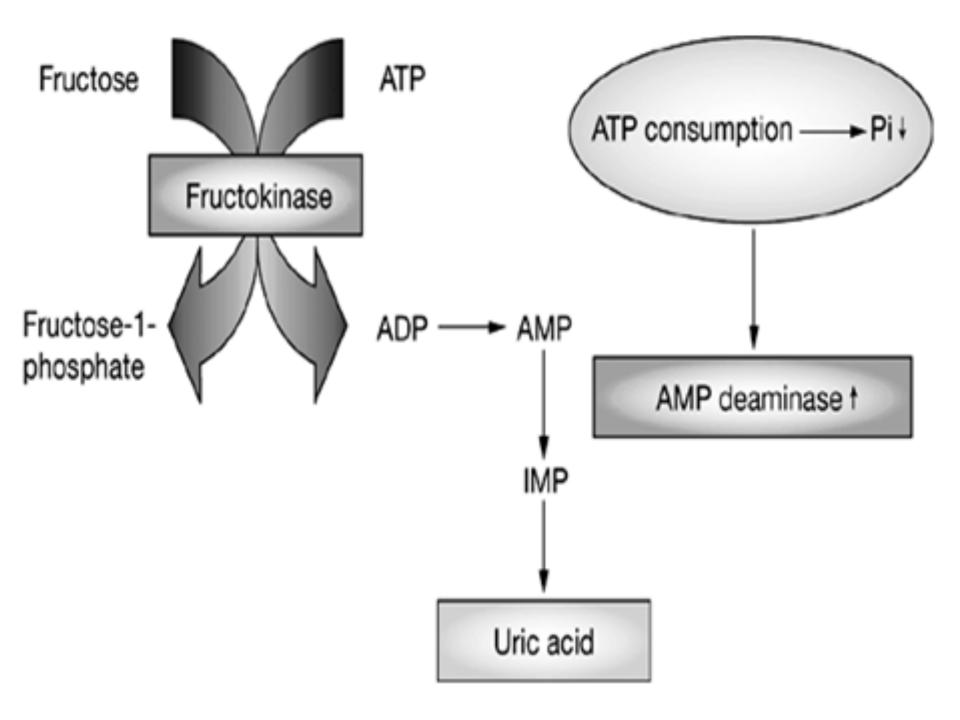
- High in grains and sugars
- Grains cause GI damage and disease
- Sugars and carbs trigger high insulin levels
- Insulin causes:
  - –Fat deposition and stops fat burning
  - –Energy conservation
  - -Food addiction



### Sugars and Carbs cause:

- -Vascular disease like Mls kes
- -Fatigue and Chronic
- -Arthritis
- -Dementia
- -Catar
- -De
- -Automune diseases
- -Irritable Bowel syndrome







Rust in the mitochondrial furnace



Mitochondria can't create energy; causes fatigue

### Mitochondrial Repair

#### **Patient Handout**

Heart and Energy "Cocktail"

Following is recipe for dramatically improving cardiac function and energy production. Try this for 6 to 12 weeks to see the optimal effects, then use as needed.

**Ribose:** Take 5 g 3x/day for 6 weeks, then 5 g 2x/day for 6 more weeks. This nutrient is outstanding for heart disease.

Coenzyme Q10: Take 400 mg/day for 6 weeks, then 200 mg/day for 6 more weeks. This nutrient is especially critical for anyone on cholesterol-lowering medications, even if there are no heart problems, as these medications cause Co-Q10 deficiency (a nutrient critical for energy production).

Magnesium: Take 200 mg/day for 12 weeks.

**Vitamin B complex:** Take 50+ mg/day for 12 weeks.

Acetyl-L-carnitine: Take 500 mg 2x day for 6 weeks, then 500 mg/day for 6 weeks (and it can often simply be stopped after the first 6 weeks).









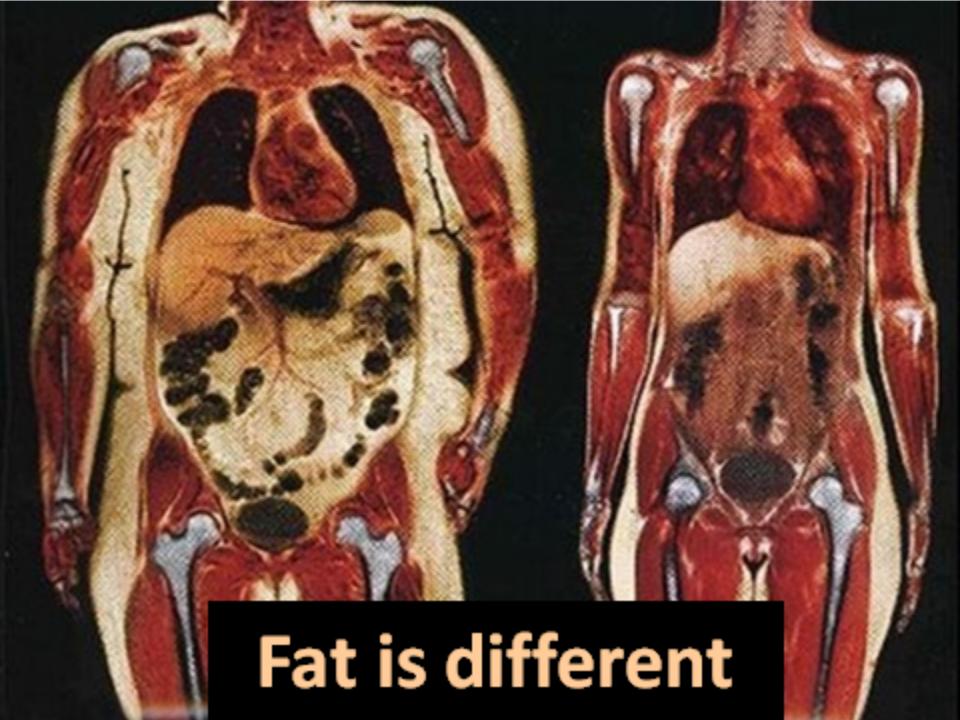


**EVERYONE IS UNIQUE** 

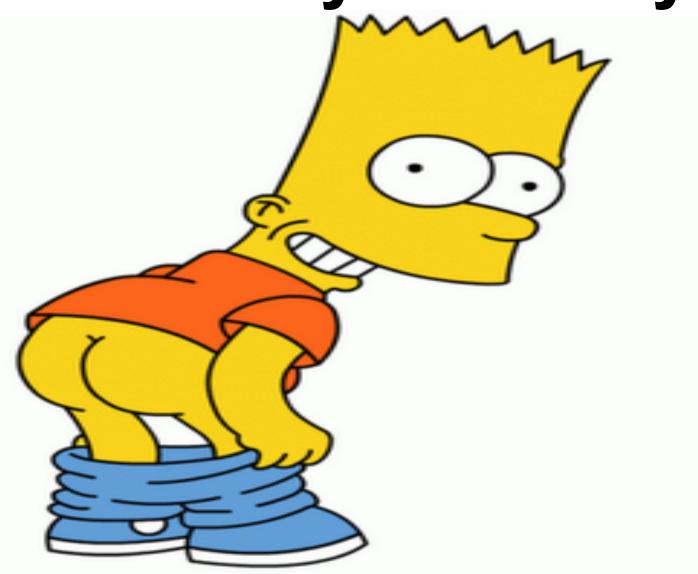


40% of skinny people are metabolically ill

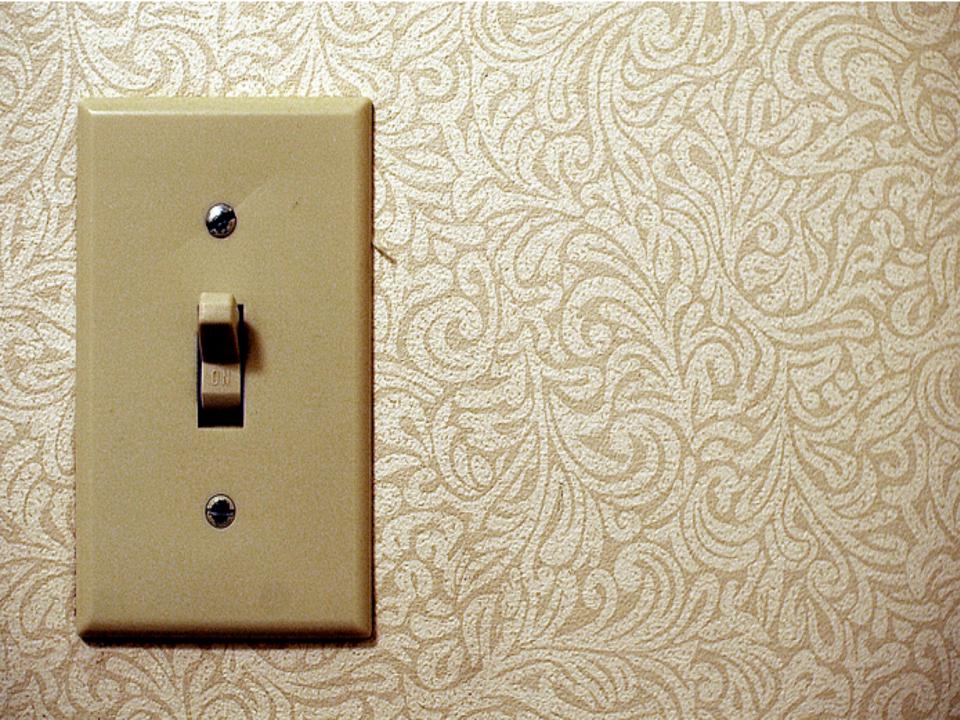




#### It's not about your booty





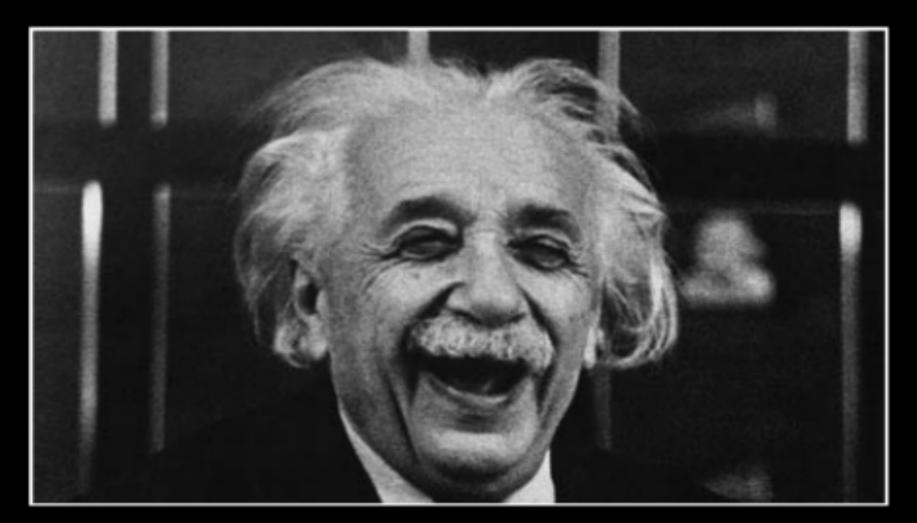


#### Fat Deposition Switch ON

- Fructose
  - -table sugar, fruit juices, pop
- Honey
- BEER
- High fructose corn syrup
- Carbohydrates
- Eating throughout the day

#### Fat Deposit Switch OFF

- Exercise BUT . . .
- Mitochondrial energy cocktail
- Avoid sugars
- Cut down on wheat (bread and pasta)
- Avoid BEER
- Avoid "industrial" vegetable oils



#### INSANITY

Doing the same thing over and over again expecting different results.

# Change

## The average serum cholesterol in acute MI patients is 104 mg/dl



# Those with a cholesterol of 220-240 live the longest

Low cholesterol is linked with stroke, cancer, depression, suicide

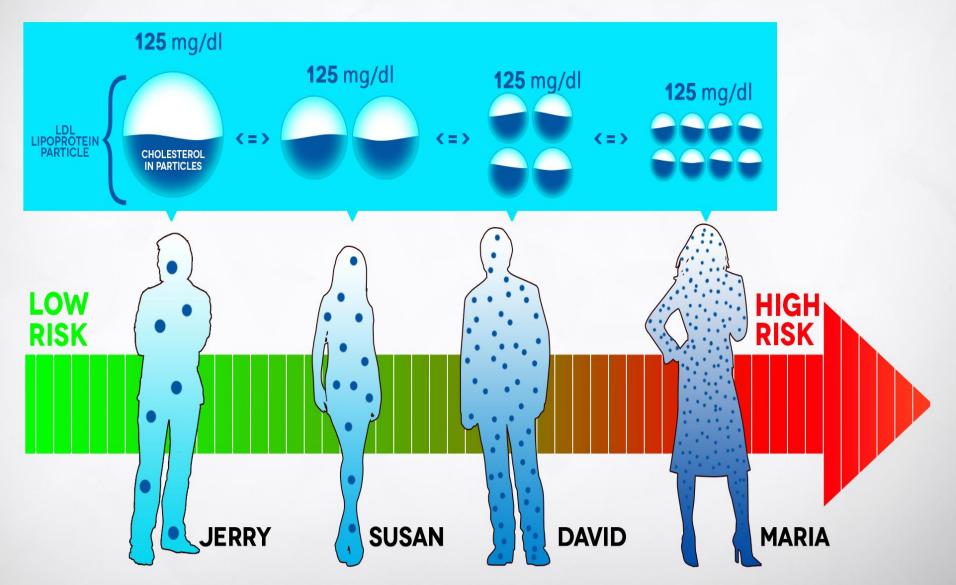


# It's the size of the LDL "bad" cholesterol particles that counts

Yes, size does count! Bigger IS better!

#### LIPOPROTEIN PARTICLES VS. CHOLESTEROL

EACH PATIENT SHOWN HAS THE SAME LDL CHOLESTEROL OF 125 mg/dL (3.25 mmol/L) MARIA HAS THE HIGHEST RISK BECAUSE HER LDL PARTICLES ARE SMALLEST AND SHE HAS A LOT OF THEM



### You can have a perfectly normal total cholesterol

and still have a high LDL particle count

### You may be on a cholesterol pill and not need it.

You may have a perfectly normal blood lipid panel and be at high risk of a heart attack

## There's a blood test to determine real risk: LDL particle count



### POOR MAN'S LDL-P = Triglyceride/HDL

Indicates carbohydrate sensitivity Indicates risk for vascular disease

#### Trig/HDL ratio

- POOR MAN'S LDL PARTICLE COUNT
- You want it to be as small as possible
- 1 is excellent
- More than 3 is concerning
- More than 5 is damaging
- More than 7 is dangerous

## What will make your LDL particles fatter and your Trig/HDL better?

- Low-carbohydrate diet
- Omega 3 fatty acids (fish oil)
- Exercise\*\*\*
- Niacin
- Statin cholesterol medication . . . sorta

# Change



#### Weight lifting causes weight loss







### A healthy sodium intake is 4-6 gm daily

Not 1.5-2.0 gm



Five foods to never eat









#### **Summary!**

- There's a reason wellness doesn't work!
- Nutritional recommendations should be individualized and based on Triglyeride/HDL and Uric Acid levels.
- Eat real food
- Avoid industrial oils
- Limit sugar (eat Stevia) because it damages your liver, your mitochondria, and causes fatigue
- Limit wheat/gluten because it causes inflammation and autoimmune conditions
- Limit soy because it damages sex and thyroid hormones

#### WE WE GET FAT

AND WHAT TO DO ABOUT IT



**GARY TAUBES** 

AUTHOR OF GOOD CALORIES, BAD CALORIES

"A vitally important book, destined to change the way we think about food."

—MICHAEL POLLAN, AUTHOR OF IN DEFENSE OF FOOD

"Gary Taubes is a brave and bold science journalist who does not accept conventional wisdom." —THE NEW YORK TIMES

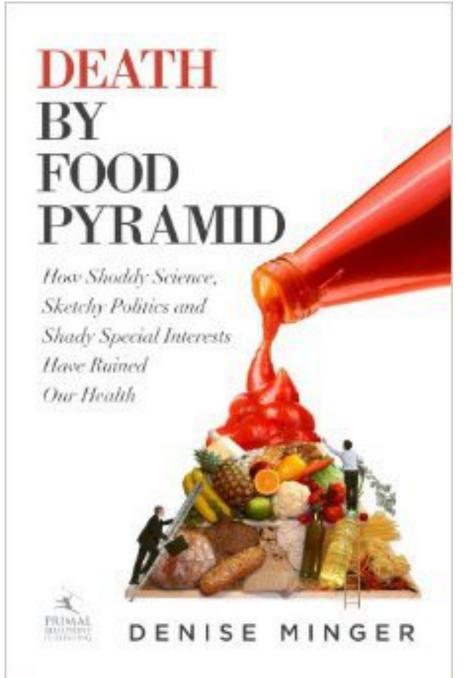
#### GOOD CALORIES,

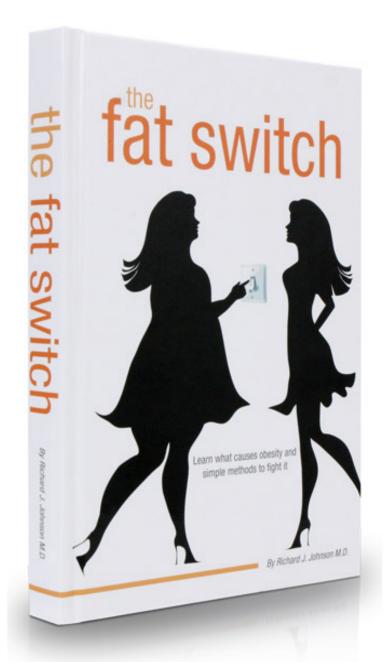


### BAD

FATS, CARBS, AND THE CONTROVERSIAL SCIENCE OF DIET AND HEALTH

GARY TAUBES





New York Eimes BESTSELLER



### THE BIG

Why Butter, Meat & Cheese Belong in a Healthy Diet

NINA TEICHOLZ

## http://www.fhit.org/ Sugarscience.org

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