

Campaign for Better Nutrition

Revolutions in Nutrition Research Debunking Old Advice
and Empowering Individuals to Health

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Why do we need better nutrition?

- The current generation of children is the first to have shorter life expectancy than their parents, largely due to poor diet and inactivity.
- Increases in diet-related chronic disease mean that overweight people are living more sickly lives and living under medication management.
- Nutrition is key to cognitive development and maintenance of brain health as we age.
- 50% of all children in the US will be on Food Stamps (SNAP) at some point.
- Over 30 million children in public school eat federal lunches, over half of whom are from low-income households (under \$30,000 for a family of four).

How Unhealthy Are We?

- Average adult 25 lbs. weight gain in last 25 years.
- 63 lbs. of High Fructose Corn Syrup
- Tobacco 1st leading cause of death
- Eating Habits/Lack of Exercise 2nd leading cause of death

Tobacco, Poor Diet, Inactivity

- 80% of heart disease, stroke & type 2 diabetes
- 40% cancer cases

Modern Chronic Diseases not seen in traditional cultures

- Stroke
- Diabetes
- Heart disease and hypertension
- Cancer
- Asthma
- Depression
- Dementia
- IBD
- Autoimmune diseases

Real Food is Amazingly Complex

- Phytonutrients—over 100,000 organic compounds in plants that protect them and interact with each other
 - Antioxidants
 - Carotenoids
 - Flavonoids

Phytonutrients

- Over 100,000 phytonutrients in fruit and vegetables
- Serve as antioxidants
- Enhance immune response
- Convert to vitamin A
- cause cancer cells to die
- Repair DNA damage from tobacco & toxic exposures
- Detoxify carcinogens

Vitamin Supplements Disappoint

- Clinical trials on vitamin supplements continually show that isolated nutrients do not perform same benefit as food.
 - Isolate a vitamin
 - Associate with a disease
 - Create a supplement
 - Clinical trials yield disappointing results with no, little, or harmful effects
 - Foods provide other compounds that interact with vitamins and make them accessible and increase their benefits.

Vitamin of the Year

Vitamin D deficiency is common.

- Associated with hypertension, heart disease, depression, back pain, cancer, insulin resistance, impaired immunity and more.
- 129% more likely to be obese
- 98% more likely to be diabetic

Is the answer to take a supplement?

- Best way to get Vit. D is through sun exposure—being active/exercising outside. These associated diseases are helped with exercise.
- Vit. D most prevalent in meat fat and fat consumptions down dramatically in past 20 years.
- Cholesterol is used to synthesize Vit. D—result of low-chol. diets?
- Will clinical trials on Vit. D supplements also be disappointing?
- **Cholesterol is used to synthesize Vit. D.**

Traditional Cultures

- Lots of fruit and vegetables
- Slow release carbohydrates
- Less meat, more fish
- Fermented foods
- Active Lifestyles

Formula for Nutrition

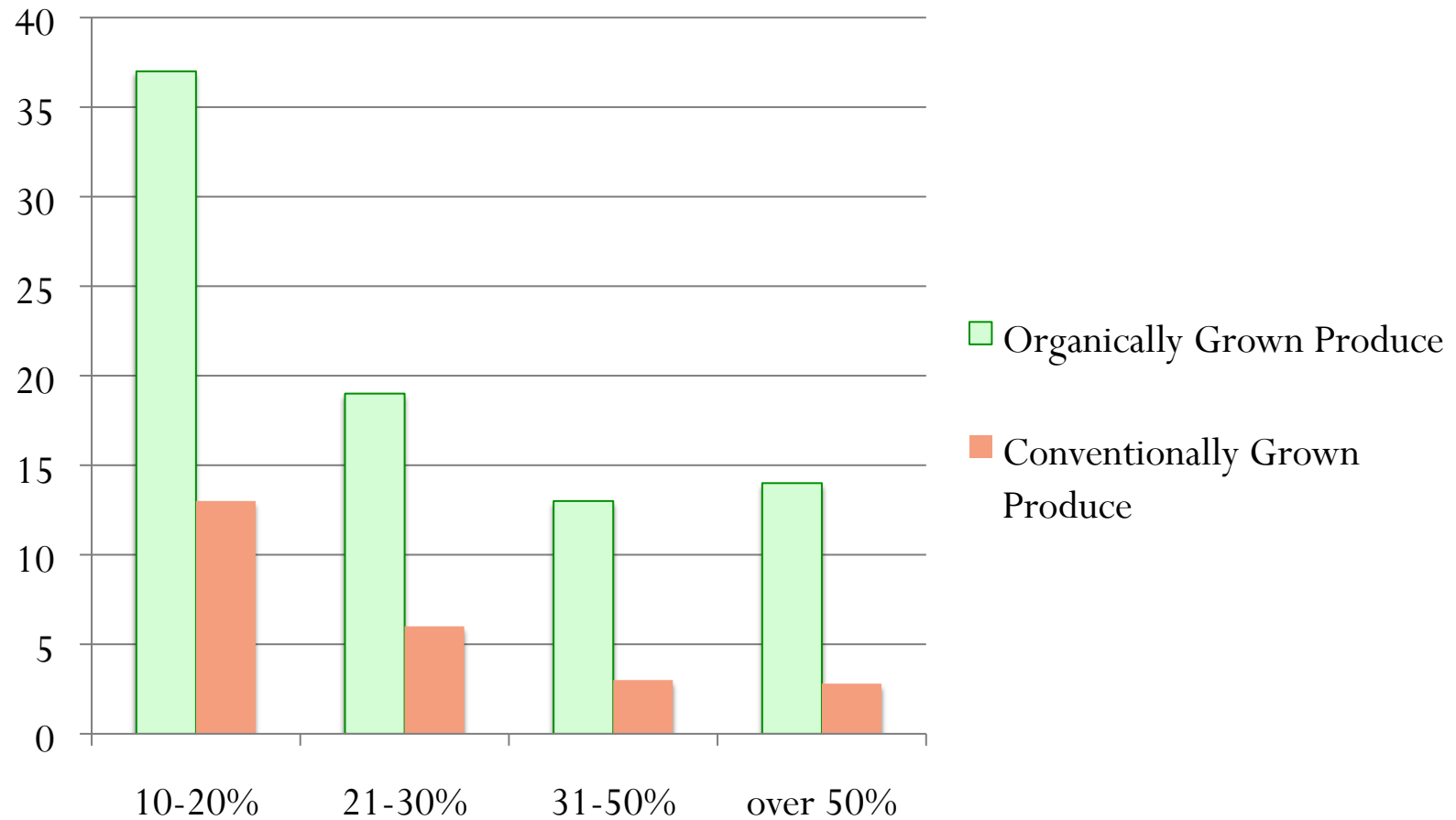
(You are what you eat eats) – (what it lost in transit)

- Quality of soil
- Quality of seed
- Type of fertilizer
- Pesticides
- Storage and treatment
- Shipping
- Storage and treatment
- Processing
- Shelf Life
- Refrigerator Life

Real Food v. Commercial Food

- Nutrient Decline in natural foods documented 1963-2000 (USDA)
- Apples -35% Vit. C
- Collards -62% C, -84% Magnesium, -29% Potassium
- Corn -42% Vit. C, -30% Vit. A, -33% calcium
- Organic eggs have 10x more Omega 3 fats (healthy) and 19x less Omega 6 fats (unhealthy in large quantities) than commercial eggs
- Organic beef has less fat and saturated but more Omega 3 fats (healthy) than commercial beef

Magnitude of Differences in Nutrient Content of 189 Organic and Conventionally Grown Foods



The Organic Center, State of Science Review: Nutritional Superiority of Organic Foods, March 2008

SUGAR

- Leptin and Gherlin sense satiety and tell us to stop eating.
- Your body wants to quickly store triglycerides, not burn them for energy.
- Sugar and fructose create large quantities of VLDL
- Metabolically, HFCS=sugar=juice=soda=alcohol
- Sugar consumption masks Gherlin and interferes with Leptin production so you think you are still hungry.
- Fructose eaten as part of a piece of fruit does not have same negative effect.
- Omega 3 fats help correct leptin problem so feel full
- Exercise detoxifies fructose

When God Made the Poison, She Packaged It with the Antidote: Fiber

- Reduces carbohydrate absorption
- Reduces insulin response
- Increases speed at which you feel full
- Inhibits absorption of some fatty acids in colon
- When studies reported linking fat to obesity, the real issue turned out to be lack of fiber in diet, not prevalence of fat.
- High fat diets are correlated with low fiber diets.

Soda

Regular Soda

- Reward system responds to sweet taste so you drink and eat more
- Salt+diuretic +sugar=constant circle of craving and thirst
- Calories and VLDL production=weight gain, increase disease risk

Diet Soda

- Reward system responds to sweet taste so you drink and eat more
- salt+diuretic+sugary taste=constant circle of craving and thirst
- Increases insulin response, causing you to eat sugar*

Exercise

- More important to be fit than thin!
- Increases health of heart and lungs
- Decreases risk of heart disease, high blood pressure, diabetes, depression, osteoporosis, some cancers, abdominal fat, dementia, mortality
- Increases cognition, psychological well-being
- Helps detoxify effect of sugar intake

Diets

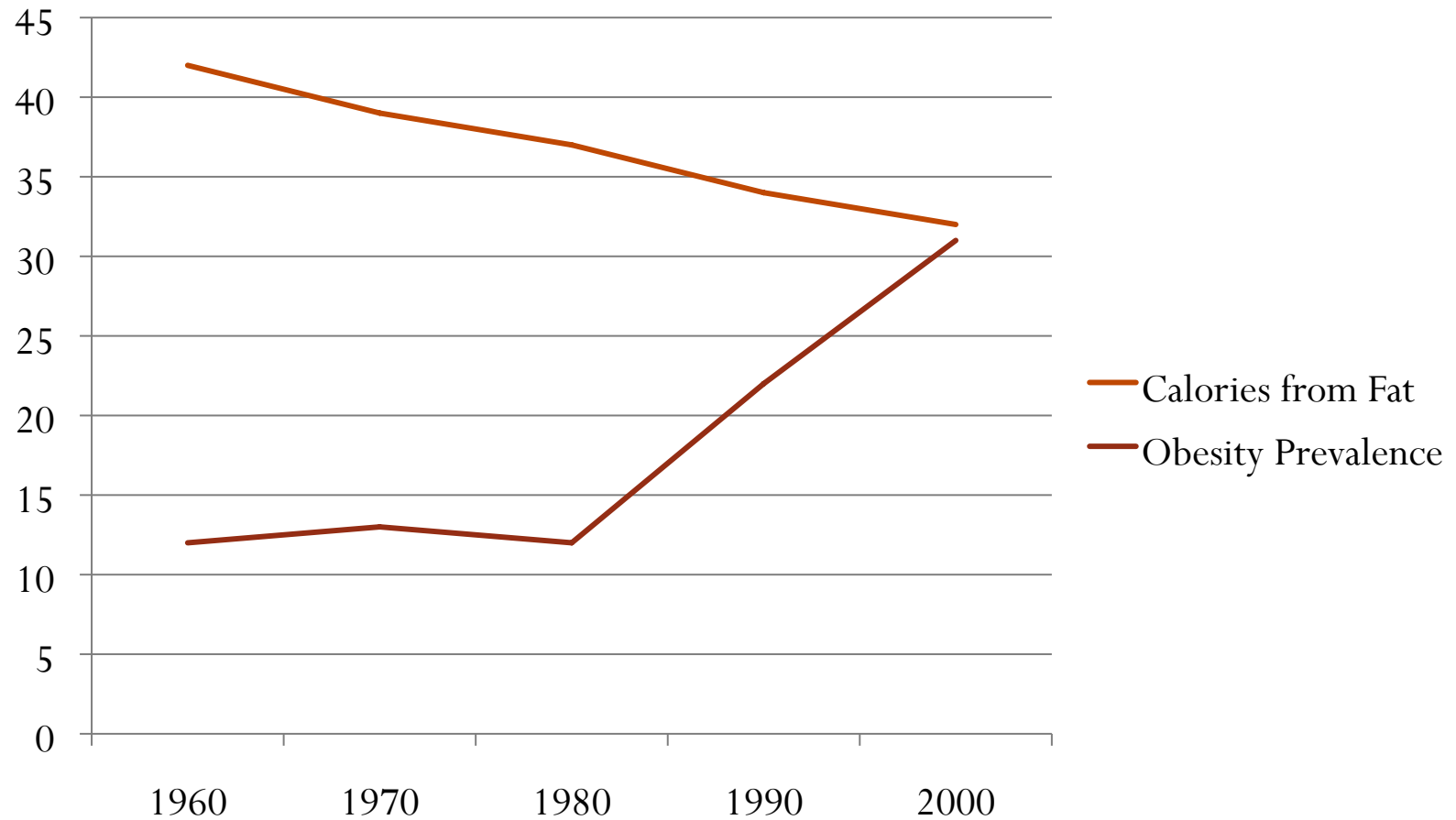
FACTS

- LOW FAT DIETS DO NOT WORK
- LOW FAT DIARY PRODUCTS DO NOT HELP YOU CONTROL YOUR WEIGHT

WHY?

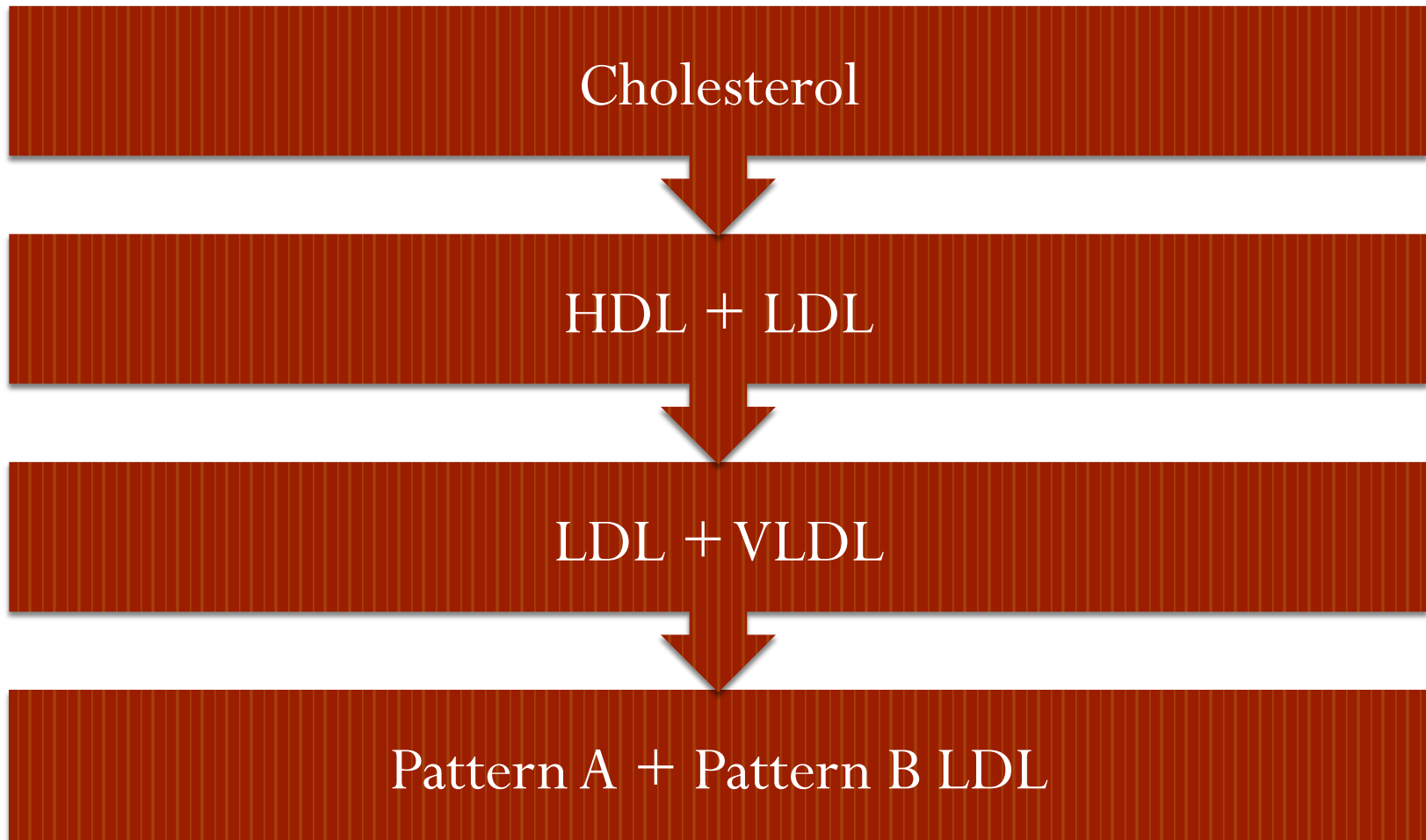
- Data analysis missed that low fat diets correlated with low fiber diets
- Dietary fat makes no difference in heart disease and some fats protect against it (Omega 3s)

Prevalence of Obesity Compared to Fat Consumption 1960-2000



Sugar: The Bitter Truth, Robert Lustig, MD, UCSF, 2009

Cholesterol



Key to Health

- Current research shows that to maintain a healthy weight and a healthy body:
 - Eliminate refined sugar, keep sweet foods to a minimum.
 - Eliminate refined grains.
 - Maximize vegetables and fruit.
 - Combine foods at meals to have adequate fiber and fats so you feel full longer.
 - Keep an eye on total calories.
 - Exercise and be active every day.
 - If you do not eat meat, ensure you are getting adequate B and D vitamins.

TIPS

- Never go to bed without knowing when you will exercise the next day.
- Have at least 3 fresh vegetables for dinner.
- Have ingredients for 2-3 quick inexpensive meals each week to help curtail eating out. Start a soup night.
- Minimize sugar and refined grains.
- Consider taking fish oil supplements
- Plate =
 - 1/2 vegetables and fruit
 - + 1/4 protein
 - + 1/4 slow release carbohydrates