

# FOOD MATH 101

*(My graduation day commencement speech)*

*Why the numbers behind what we're eating are not adding up—and how You can help fix it*

J. Morris Hicks

March 3, 2013 --- New York, NY



"WHAT'S GOOD FOR YOU IS ALSO GOOD FOR OUR PLANET. HEART DISEASE AND DIABETES ARE COMPLETELY PREVENTABLE AND EVEN REVERSIBLE FOR MOST PEOPLE TODAY BY CHANGING DIET AND LIFESTYLE. THIS BOOK SHOWS YOU HOW."

—**DEAN ORNISH, M.D.**, CLINICAL PROFESSOR OF MEDICINE, UC SAN FRANCISCO, AUTHOR, *THE SPECTRUM* AND *DR. DEAN ORNISH'S PROGRAM FOR REVERSING HEART DISEASE*

# HEALTHY EATING HEALTHY WORLD

UNLEASHING THE POWER OF PLANT-BASED NUTRITION

**J. MORRIS HICKS**  
WITH J. STANFIELD HICKS



FOREWORD BY  
**T. COLIN CAMPBELL, PHD**  
(*THE CHINA STUDY*)  
**AND NELSON CAMPBELL**

Health  
Hope  
Harmony

# “Big Picture”

- 4.6 billion years
- 4 billion years
- 200,000 years

What percent of that time have we been here?



# Putting the “Big Picture” in Perspective

- ▶ Imagine: 4 billion years is ONE year
- ▶ How long would 200,000 years be?
- ▶ Would you believe 26 minutes?
- ▶ 2 minutes (From 1 million in 10,000 BC until today)
- ▶ 20 seconds (since time of Christ; 200 million pop.)
- ▶ 2 seconds (Since 1800; grew from one to seven billion)
- ▶ ½ of one second (50 years; most of the damage)

# “HARMONY” & OTHER SPECIES

- ▶ Multiple millions of species on Earth
- ▶ 50,000 vertebrates
- ▶ 5500 mammals
- ▶ A million named species of insects
- ▶ Millions more that are un-named
- ▶ Everything is connected...
- ▶ One species out of millions...





## OTHER SPECIES--- BAD NEWS

- ▶ Health of ecosystem is critical
- ▶ Rate of extinction 1000 times faster
- ▶ 80% of fisheries are in trouble
- ▶ The horrors of shrimp
- ▶ Forests being destroyed by farming
- ▶ Deadly trend must be reversed

# E.O. WILSON ON BIODIVERSITY

*The one process now going on that will take millions of years to correct is the loss of genetic and species diversity by the destruction of natural habitats. This is the folly our descendants are least likely to forgive us.*

*If all mankind were to disappear, the world would regenerate back to the rich state of equilibrium that existed ten thousand years ago.*

*If insects were to vanish, the environment would collapse into chaos.*

*We should preserve every scrap of biodiversity as priceless while we learn to use it and come to understand what it means to humanity.*



# LAND --- FOOD & S.A.D.

- ▶ 8 billion acres of arable land
- ▶ 7 billion humans
- ▶ 1+ acre per human
- ▶ 3.25 acres per human for S.A.D.
- ▶ 21 billion acres needed
- ▶ Need almost three planet Earths

# ARABLE LAND --- EATING PLANTS

- ▶ Acres needed for plant-eaters
- ▶  $1/6^{\text{th}}$  of one acre
- ▶ 7 billion humans
- ▶ How much land is needed?
- ▶ Slightly over 1 billion acres

# ARABLE LAND --- WORLD HUNGER

- ▶ How many S.A.D. eaters are possible?
- ▶ Divide 8 billion by 3.25 = 2.5 billion
- ▶ 7.0 minus 2.5 = 4.5
- ▶ What about the other 4.5 billion?

The other 4.5 billion people...



# It Gets Worse!

## Population Growing



## Land Eroding



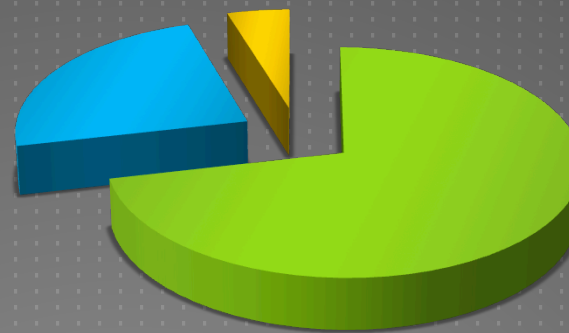
Land and water...



# FINITE AMOUNT OF WATER



**Bathroom**  
**Lawns**  
**Car washing**



■ Agriculture  
■ Industry  
■ Domestic

# WATER --- IRRIGATION

- ▶ 40% of world grain from irrigation
- ▶ Aquifers are running out of water
- ▶ 18 countries (over-pumping aquifers)
- ▶ Over half the world's population

(From “Full Planets, Empty Plates” by Lester Brown)

# WATER --- CONSUMPTION

- ▶ Meat, dairy and eggs waste water
- ▶ One kilo of potatoes – 100 liters
- ▶ One kilo of beef – 13,000 liters
- ▶ Per calorie. 20 times more water

(From our book, “Healthy Eating, Healthy World”)



# WATER --- POLLUTION

- ▶ 87,000 pounds per second
- ▶ 130 times the human excrement
- ▶ 1.37 billion tons in just the USA
- ▶ How much is your share?
- ▶ 9,000 pounds --- need a visual?

What if your annual share arrived in your driveway?



# HOW BIG IS YOUR DRIVEWAY?



Got a family of 4?

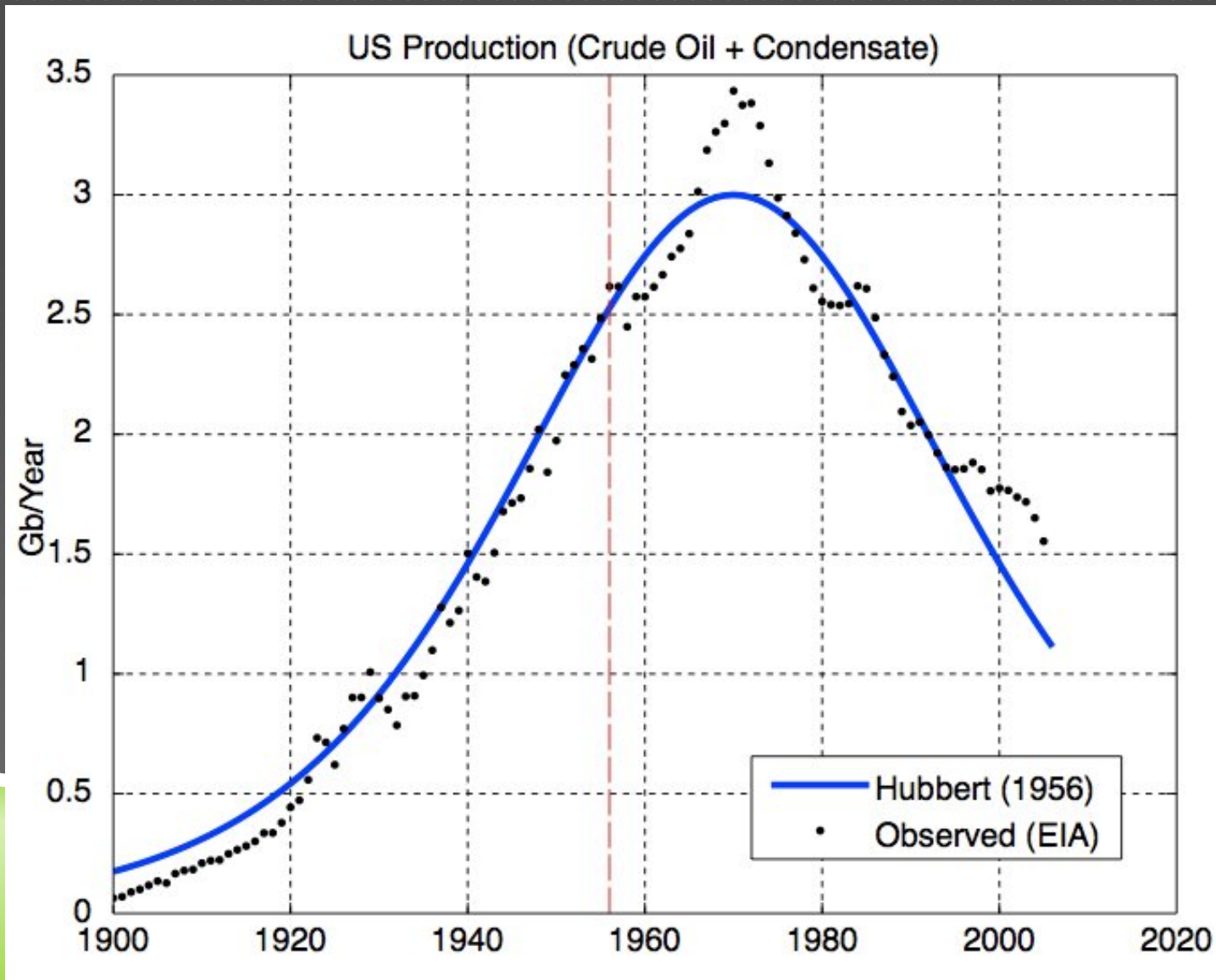
YOU BETTER HAVE A BIG DRIVEWAY!



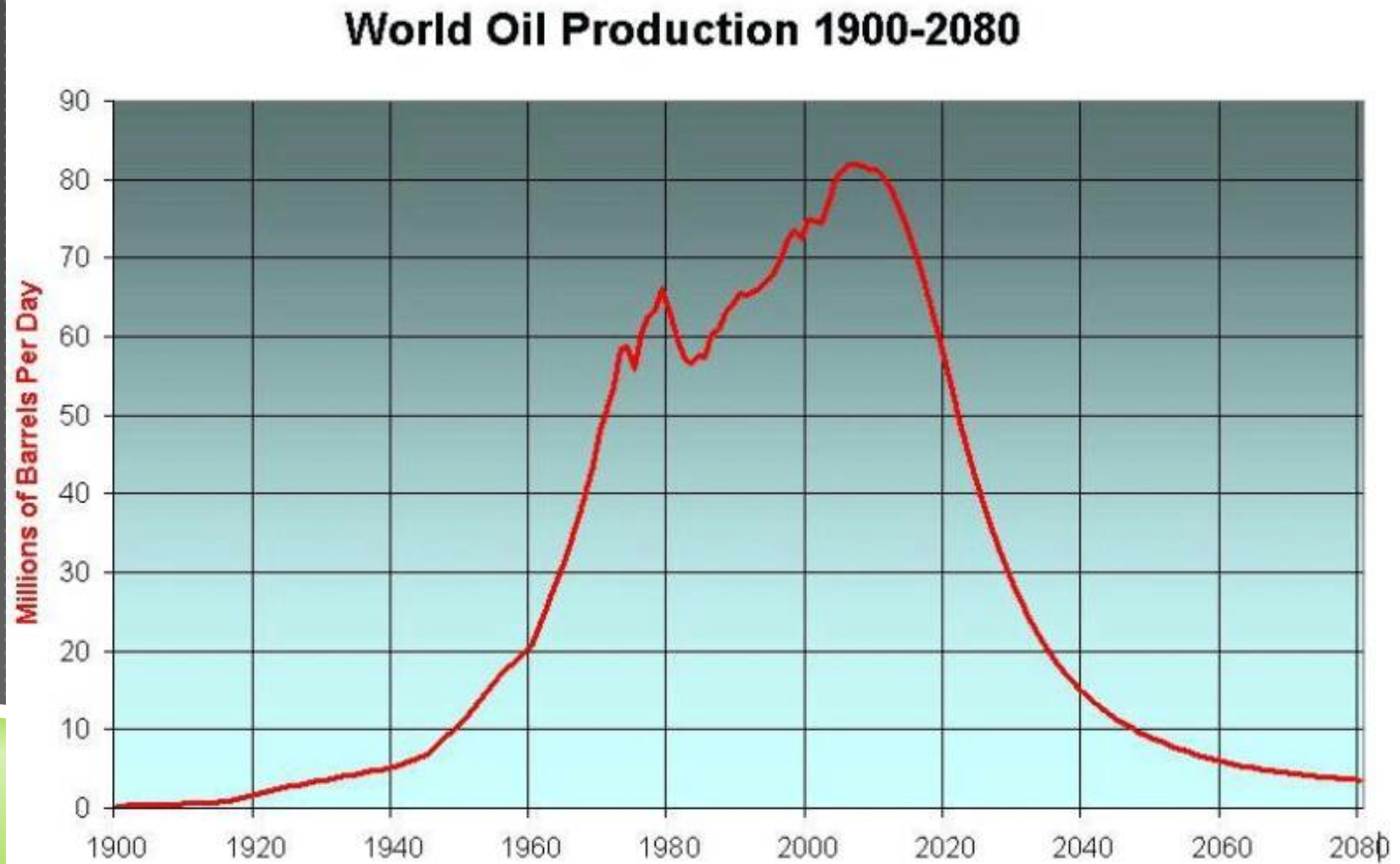
# FINITE SUPPLY OF FOSSIL FUELS



# USA HISTORICAL OIL PRODUCTION



# WORLD PRODUCTION – PEAK OIL





# ENERGY --- SUMMARY

- ▶ 90 million barrels a day (2010 BP Oil Spill)
- ▶ Meat, dairy & eggs are energy pigs
- ▶ 1/3<sup>rd</sup> of fossil fuels ---animal food industry
- ▶ Per calorie – 20 times more energy
- ▶ Best chance to save energy
- ▶ Best chance to delay “peak oil”
- ▶ What about nuclear & renewables?
- ▶ By 2020, a total of 8% (5 nuclear, 3 solar, wind, tide, etc.)

(From our book, “Healthy Eating, Healthy World”)

# HARMONY

*“Whether we and our politicians know it or not, Nature is party to all our deals and decisions...*

*...and she has more votes, a longer memory, and a sterner sense of justice than we do.”* —Wendell Berry

MOVING >>>>> HARMONY...







# SAVING THE PLANET? OR...

- ▶ Preserving her ability to sustain our species.
- ▶ Land, food, water, energy, ecosystem
- ▶ **What can we do?**
- ▶ 1. Reduce population
- ▶ 2. Change how we live
- ▶ 3. Change how we eat

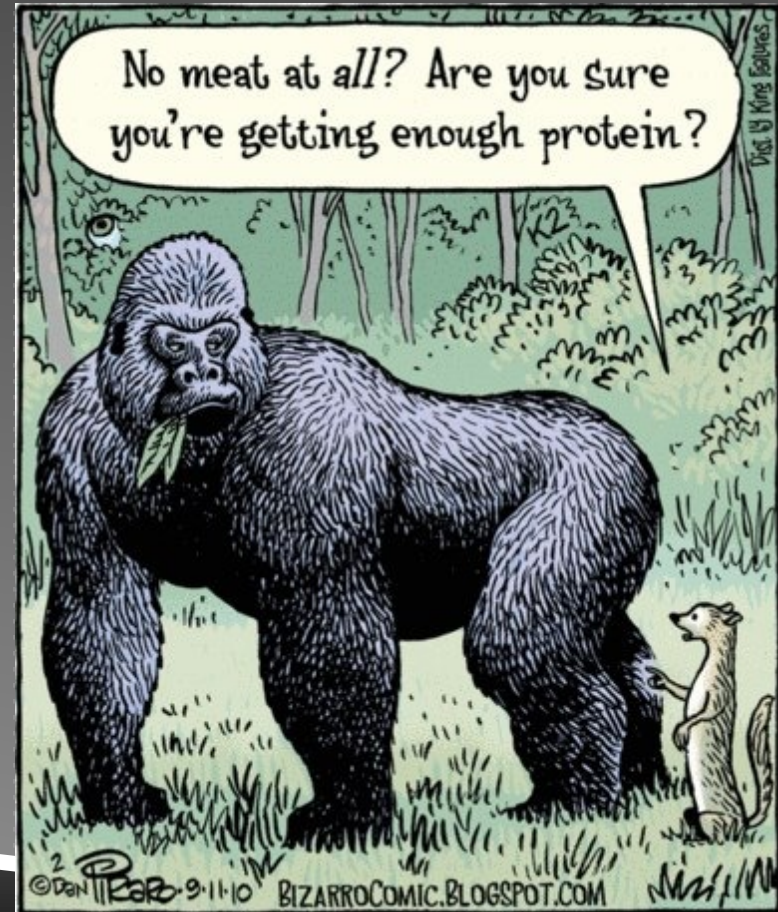
## Prominent western diets

- ▶ Standard American Diet
- ▶ Paleo diet
- ▶ Ovo-Lacto Vegetarian
- ▶ Lacto-Ovo-Pesco Vegetarian
- ▶ High Protein, Low Carb
- ▶ **NONE ARE SUSTAINABLE.**



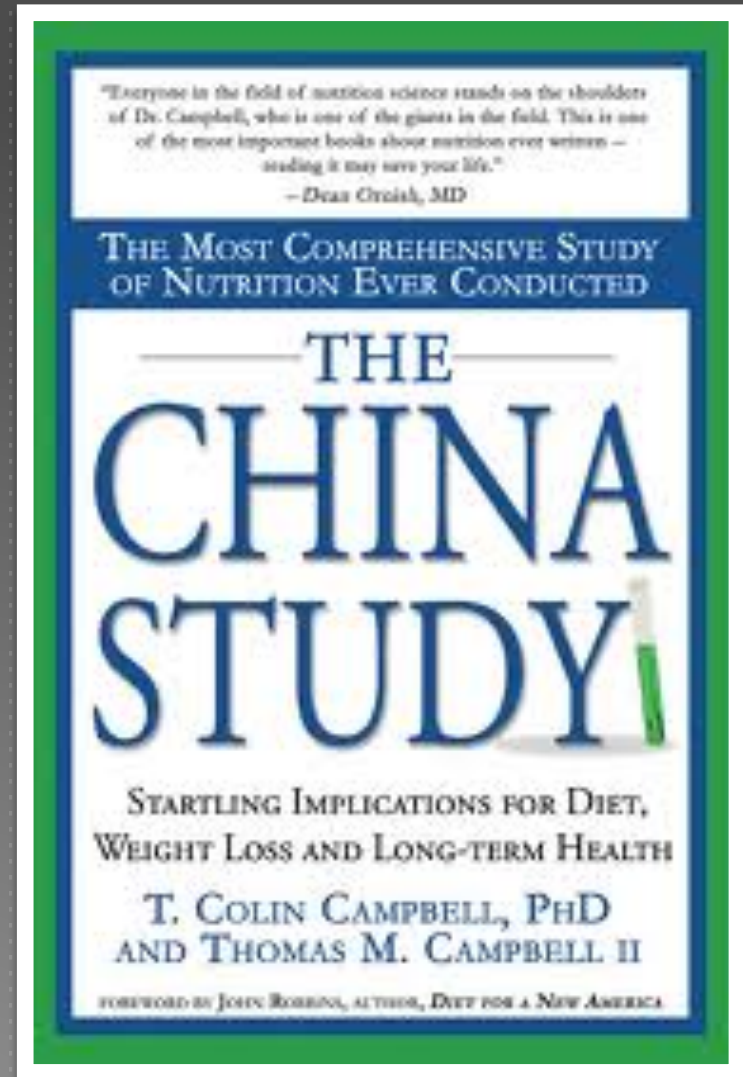
# What should we be eating? For our own health?

1. Gorilla DNA
2. Plant-Eating Cultures
3. Migration Studies
4. Disease Reversal
5. Scientific Proof



# SCIENCE

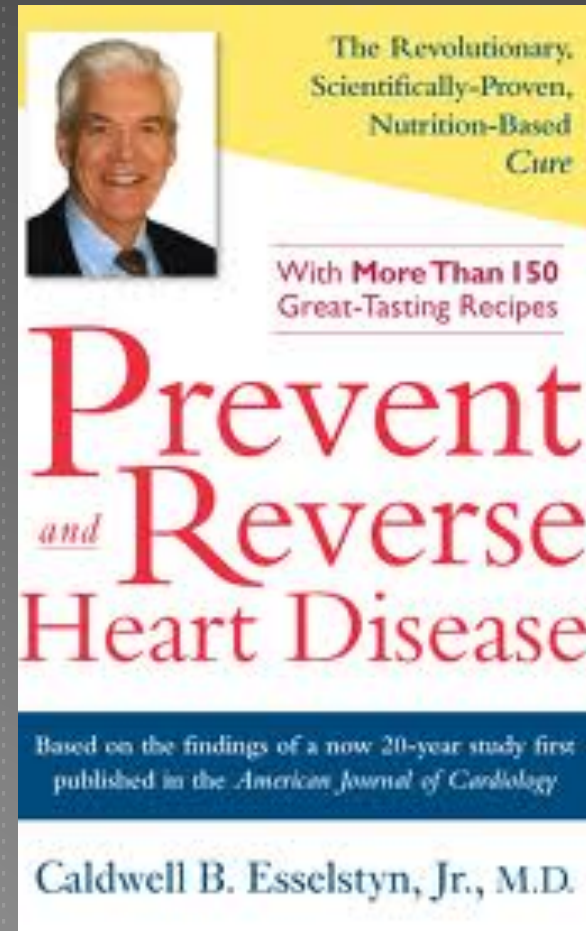
T. Colin Campbell, PhD  
Cornell University



*Provided the scientific legitimacy for the pioneering medical doctors*

# MEDICINE

Dr. Caldwell Esselstyn, Jr.  
The Cleveland Clinic





# MEDICINE

Dr. Dean Ornish  
USCF San Francisco

- 1993 White House
- 1999 Newsweek
- HD & Type 2 Diabetes...95%
- Bill Clinton?



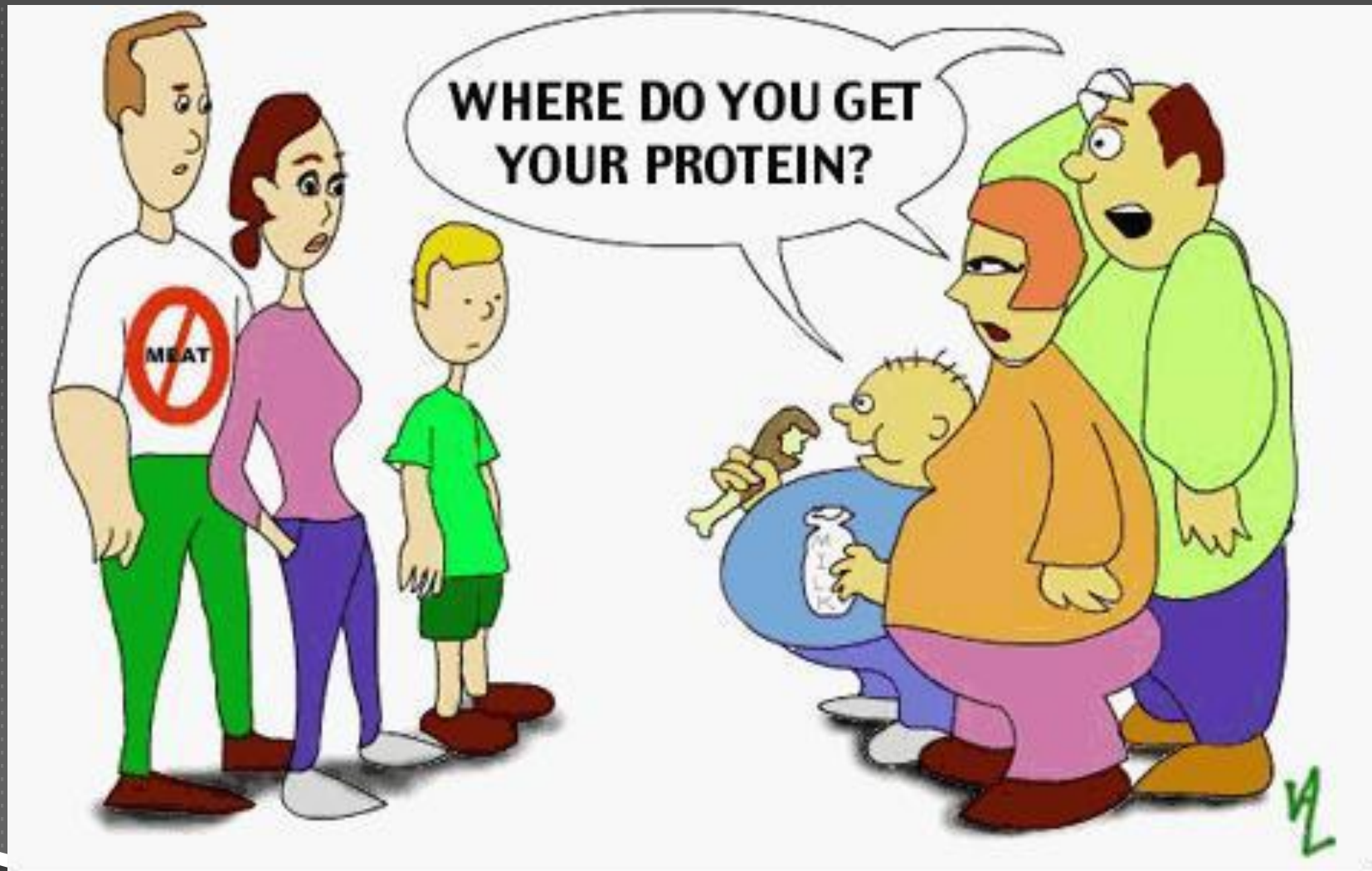
# PRESIDENT CLINTON



Clinton's weight loss secret: Plants

Source: CNN

PROTEIN?



Latest studies: A third of Americans are overweight, and an additional quarter are obese.



# Eating the S.A.D. for \$342/week



How did we get into this mess?

*People are fed by the food industry,  
which pays no attention to health...*

*...and are treated by the health  
industry which pays no attention to  
food.*

---Wendell Berry

# WHAT ARE THE CHANCES OF EVERYONE BECOMING VEGAN? SLIM AND NONE

- ▶ My problem with vegan/vegetarian terms
- ▶ They don't describe what you ARE eating
- ▶ Only describe what you're NOT eating
- ▶ Tiny percentage of us are vegetarians...
- ▶ Need a better way to “market”
- ▶ Something positive, flexible & easy
- ▶ We created a new “user friendly” system.

Based on the “common ground” wisdom of  
T. Colin Campbell and five pioneering MD’s

“The closer we get to  
consuming a diet of  
whole plant-based foods  
the better off we will  
be.”---T. Colin Campbell

Also based on the  
simple, positive advice  
from your mother...



# Better than S.A.D.

But not good enough  
to provide much  
protection.



20%---40%---60%---80%      Baby Steps or Rapid Change?



# 4Leaf Level is Near-optimal

- Trim bodies
- Vibrant health
- Lots of energy
- Take no medications
- Rarely get sick
- Long & healthy life
- **NO** nursing home



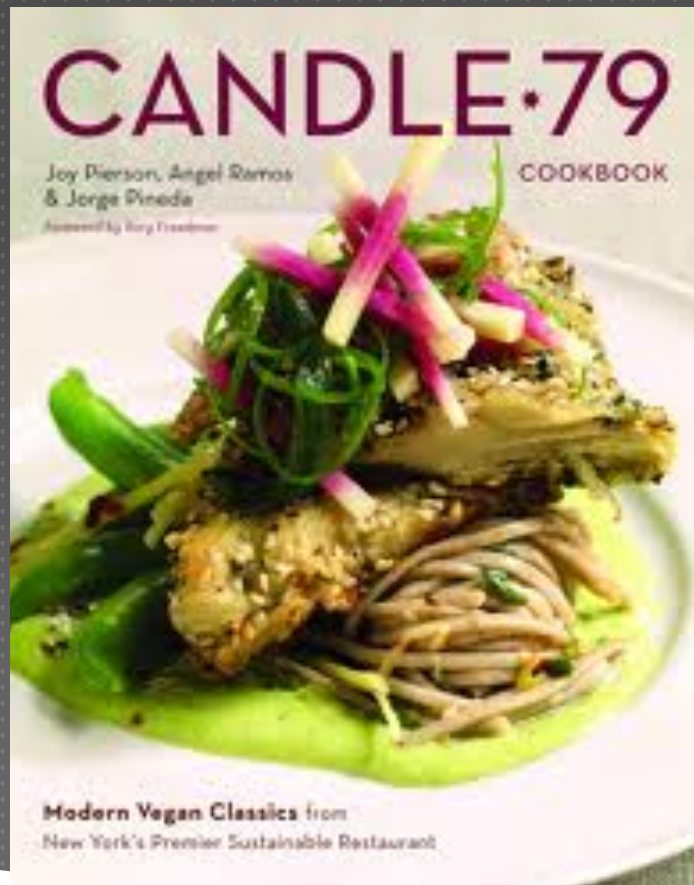
Not necessarily vegan or vegetarian...



# Eating 4Leaf for \$32/week



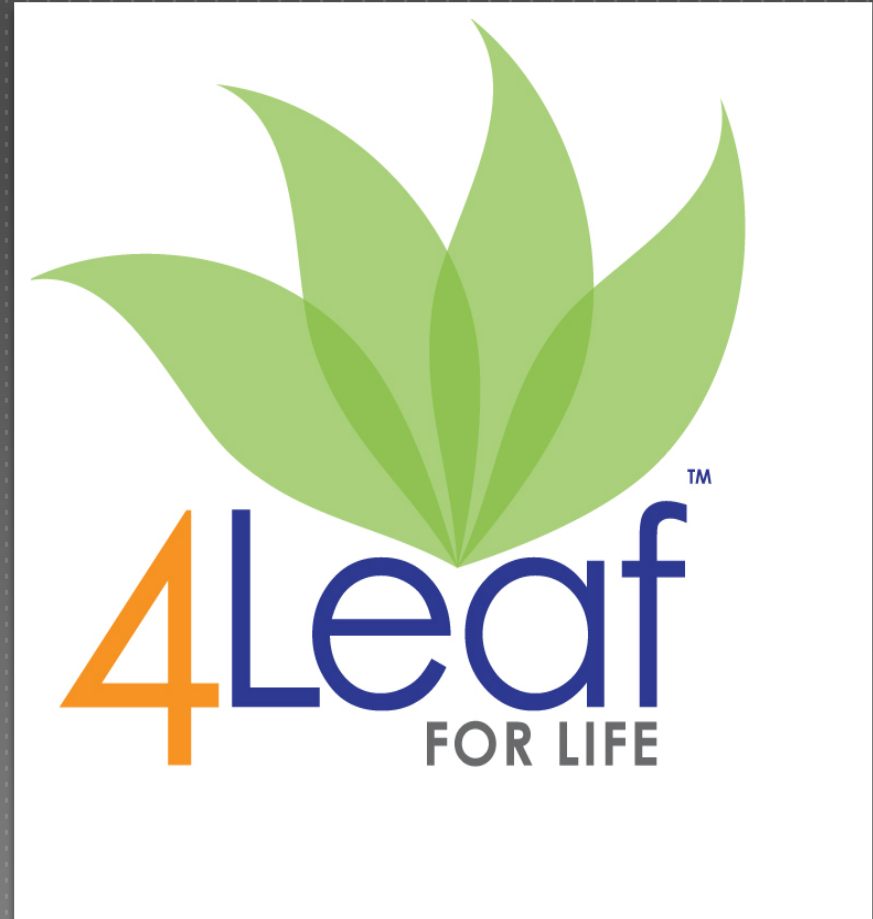
# EATING 4LEAF IN NEW YORK



# 4Leaf Mentality

Making every bite count

- Healthy routine...
- No calorie counting
- Eat all you want
- 100 trillion cells
- Ten trillion cells/year
- **The 4leaf Survey**



Einstein, the United Nations and the A.D.A. >>>

## EINSTEIN GOT IT RIGHT

“Nothing will benefit human health and increase chances of survival for life on earth as much as the **evolution** to a vegetarian diet.”

---Albert Einstein



# THE UNITED NATIONS

“A global shift towards a vegan diet is vital to save the world from hunger, fuel poverty and the worst impacts of climate change,”

(UN report, June 2, 2010)

## MORE FROM THE U.N.

“As the global population surges towards a predicted 9.1 billion people by 2050, western tastes for diets rich in meat and dairy products are unsustainable,”

*\*From United Nations Environment Programme's (UNEP) international panel of sustainable resource management.*



# AMERICAN DIETETIC ASSN. (ADA)

“If vegetarian diets are well-planned, they are **healthful** and **nutritious** for adults, infants, children and adolescents and can help **prevent** and **treat** chronic diseases including **heart disease, cancer, obesity and diabetes.**” July 2009

So what's the problem?



35 million jobs at stake--no incentive...

# “HEALTH, HOPE & HARMONY”

From the last paragraph of our book...

“As each of us begins to take charge of our own **health...**

We simultaneously plant the seeds of **hope,**

Accelerating the pace with which the human race can return to living in **harmony with nature.”**

# BLOG AND WEBSITE

750 ARTICLES & PAGES

hpjmh.com ---Copy of this PPT  
HealthyEatingHealthyWorld.com  
4leafprogram.com

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