

# Grandma Age 101





Age 109



Mediterranean  
Diet reduces CV events  
NEJM 2012



# A True Mediterranean Style Diet



# Mediterranean Breakfast

Menú  
**FORNET** 1'95 €



Menú  
**CAPRICI** 2'30 €



Menú  
**...** 4'95

# If You Exercise You Can Eat This Stuff!

Grandma's Calamari



Roberta's Shrimp Scampi

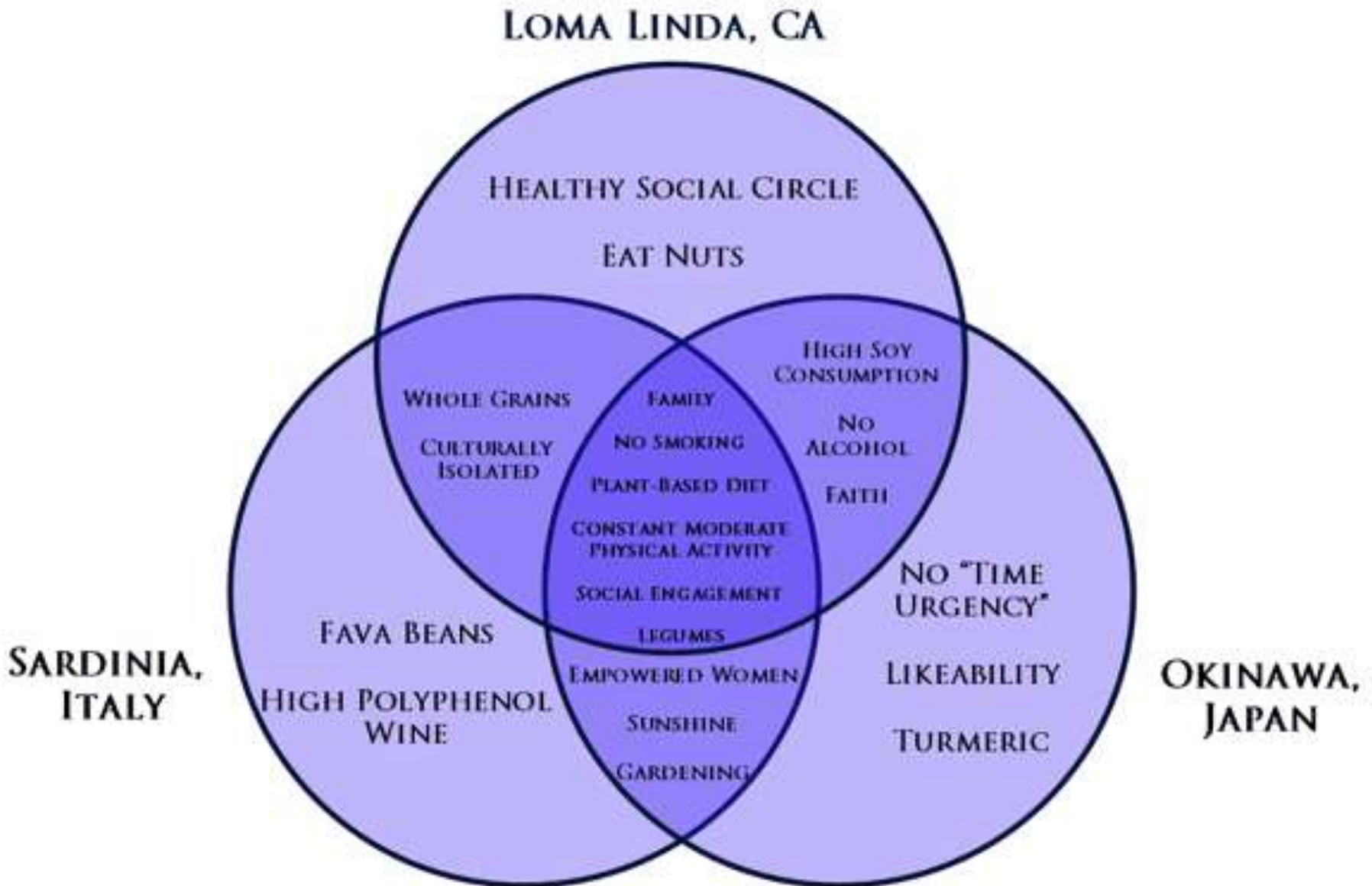




# Blue Zones by Dan Buettner



# Blue Zones Common Threads





50  
ANNIVERSARY  
EDITION

# NUTRITION AND PHYSICAL DEGEN- ERATION

WESTON A. PRICE, D.D.S.

With Forewords from the original editors by Garret Allen Hewson, Professor of Anthropology, Harvard University, Cassville Frank Knight, M.D., William A. Alvarez, Ph.D., Department of Soils, University of Missouri, and new introductions and re-introductions specially written for this Golden Anniversary Edition by Adam Hoffer, M.D., Ph.D., H. Ludo Abrams, Jr., Associate Professor of Anthropology, University System of Georgia, and Donald Deming Fawcett.

Keats Publishing, Inc.

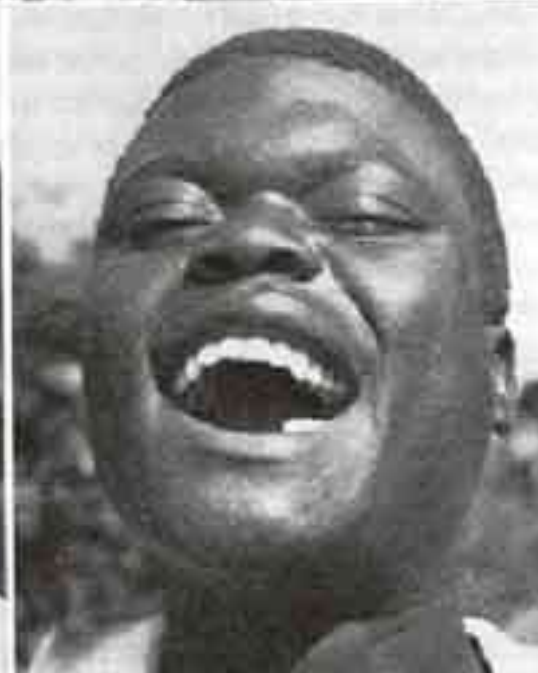
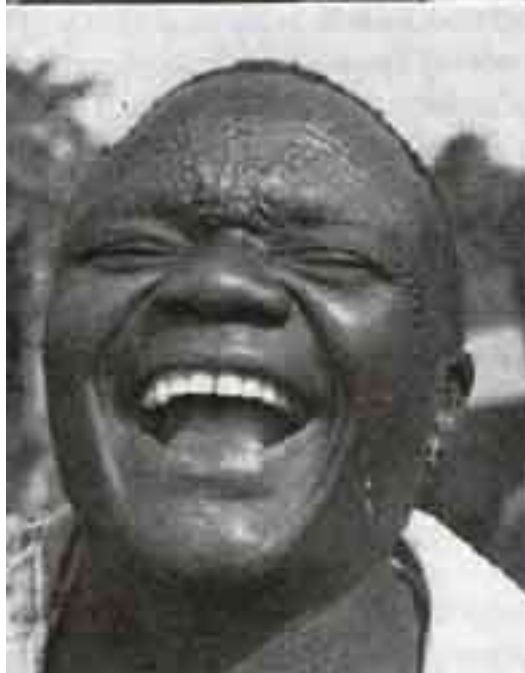
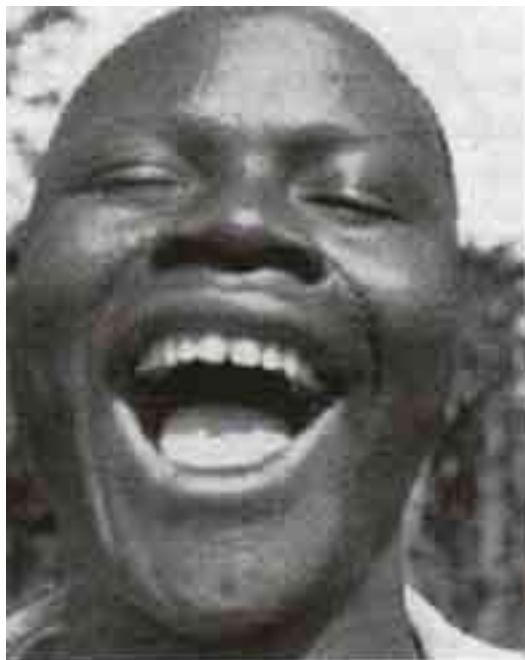


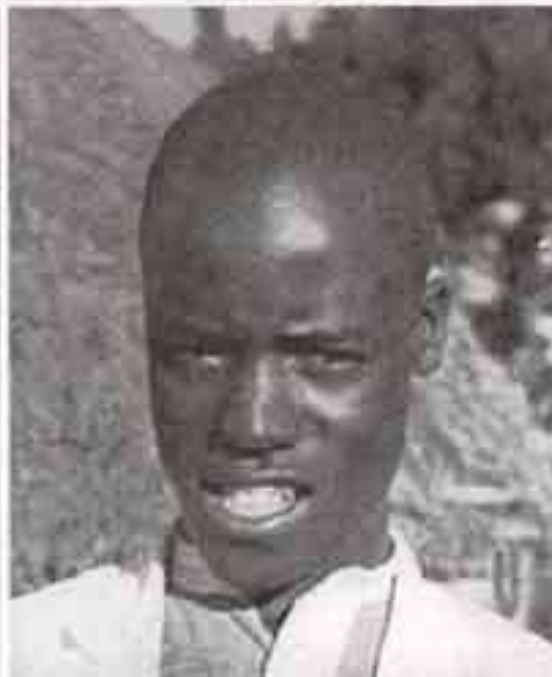
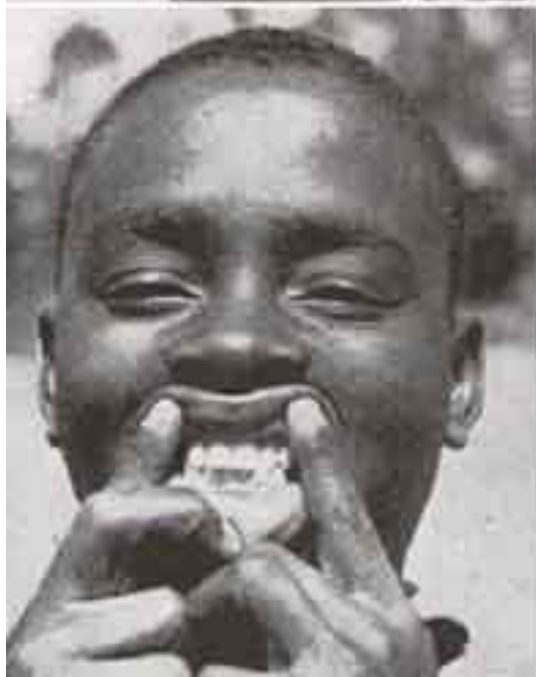
New Canaan, Connecticut

Photos from *Nutrition and Physical Degeneration* copyright and courtesy Price-Pottenger Nutrition Foundation







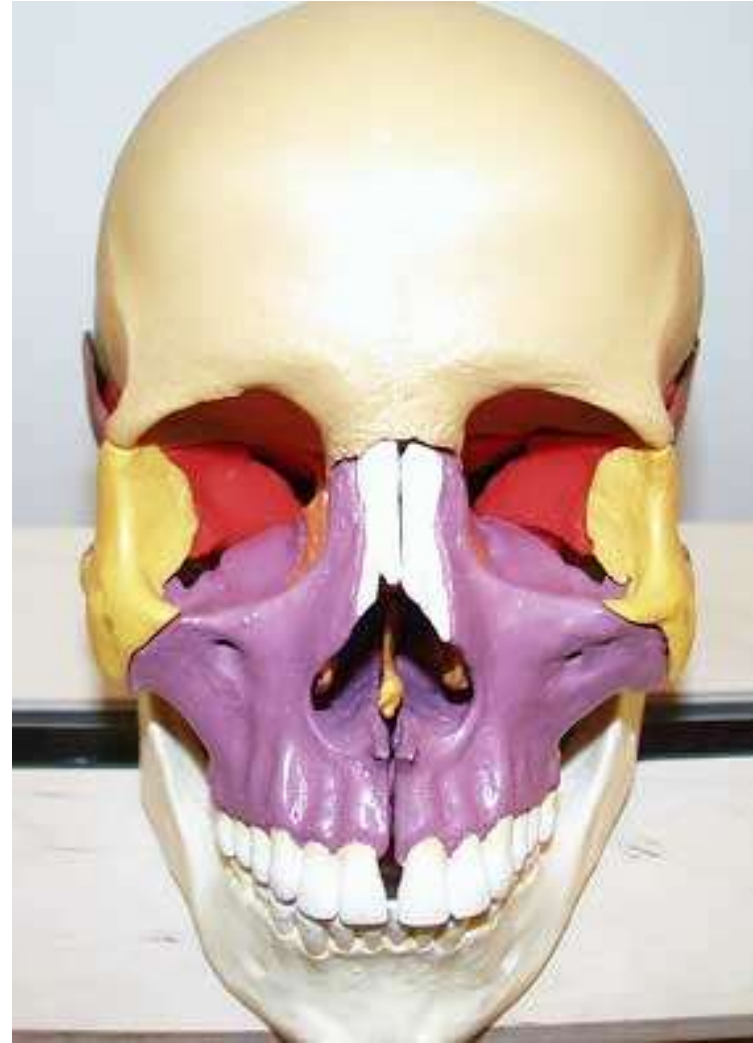




# African Boys



# The Facial Bones





Bill Cody's Wild West Show  
1910





**MODERN PLAINS INDIANS HUNTING  
THE WHITE MAN'S DIET**

# South American Children







## Modern Children

**Most modern children have thin faces and need braces to straighten their teeth**



“Life in its fullness is Mother Nature obeyed.”  
Weston A. Price, DDS



Factory foods are not Mother Nature's foods!

# Restorative Nutrition vs. Medicine...the Ancient History

- **2000 BC: “Here, eat this plant, especially the root. The root’s Nutritional properties are best to restore health.”**
- **1000 BC: “That root is heathen, say a prayer.”**
- **1840: “That prayer is superstitious, drink this potion.”**
- **1940: “That potion is snake oil, swallow this pill.”**
- **1985: “That pill is ineffective, take this antibiotic.”**

# Restorative Nutrition vs. Medicine...the Current Thinking

- **2014: “That antibiotic is artificial, here eat this plant, especially the root. This will help the body restore its health.”**





# Beneficial Bacteria

**OLD PARADIGM:** Healthy human body is sterile and microbes attack it, making us sick.

**NEW PARADIGM:** Healthy human body lives in symbiotic relationship with microorganisms.

**SIX POUNDS** of healthy bacteria in our digestive tract

- Digest our food

- Assist in assimilation

- Create nutrients

- Protect us against toxins

- Help us feel good

Without good bacteria, we are dead!

# "In my next life I'm going to study the Microbiome"

## Amby Burfoot 1968 Boston Marathon champ

A6 MONDAY, JUNE 5, 2006

## SCIENCE

THE WASHINGTON POST

# Legion of Little Helpers in the Gut Keeps Us Alive

By RICK WEISS  
Washington Post Staff Writer

So you think you are the self-reliant type. A rugged individualist. Well, give it up. You'd be nothing without the trillions of microbial minions toiling in your large intestine, performing crucial physiological functions that your high-latitude human cells wouldn't have a clue how to do.

That's one of the humbling truths emerging from the most thorough census yet of the bacterial tenants homesteading in our bodies. The new view, made possible by cutting-edge DNA screening methods, shows that the vaunted human genome — all the genes in our cells — is but a fraction of what it takes to make a human.

In fact, it's time to stop thinking of yourself as a single living thing at all, say the scientists behind the new work. Better to see yourself as a "super-organism," they say: a hybrid creature consisting of about 10 percent human cells and 90 percent bacterial cells.

"The numbers might strike fear into people, but the overall concept is one we have to understand and adjust to," said Steven Gill, a microbial geneticist who helped lead the study at the Institute for Genomic Research in Rockville.

A better understanding of the bacteria colonizing our bodies could have far-reaching medical implications. In the not-too-distant future, Gill and others predicted, doctors will test for subtle changes in the numbers and kinds of microbes in people's guts as early indicators of disease. Doctors may prescribe live bacterial supplements to bring certain physiological measures back into normal range. And drug companies will invent compounds that mimic or amplify the actions of helpful bacteria.

"These microbes are master physiological chemists," said Jeffrey I. Gordon of Washington University in St. Louis, another team member. "Understanding their biosynthetic capabilities and following the pathways by which they operate could be the starting point for a 21st-century pharmacopoeia."

Scientists have long recognized that the number of human cells in the body is dwarfed by the 100 trillion or so bacteria living in and on it. It's a daunting reality obscured by the fact that human cells are much bigger than bacterial cells. For all their numbers, bacteria account for only about three pounds of the average person's

are, however, has been difficult to appreciate until now. Most bacteria are too finicky to grow in laboratory dishes. As a result, little was known about who these majority shareholders really are and what, exactly, they are doing to and for us.

The new study, described in last week's issue of the journal *Science*, took a novel approach. Rather than straggling to grow the body's myriad microbes and testing their ability to perform various biochemical reactions — the methods scientists traditionally use to classify bacteria — the team used tiny molecular probes resembling DNA Velcro to retrieve tens of thousands of snippets of bacterial DNA from smidgeons of the intestinal output of two volunteers.

By comparing the DNA sequences of those snippets with those of previously studied bacteria, the team was able to sort many of the invisible bugs into known families.

Hundreds of others, it became clear, belong to microbial families unknown to science until now.

But the team members went further. By comparing the genetic puzzle pieces with similar sequences stored in databases, they were able to determine what biological functions many of these microbes are performing in the gut. And, as it turns out, no small number of those functions are crucial to human survival.

Some of the bacteria have the genetic machinery to make essential vitamins that are not found in the diet and that human cells can barely manufacture, including several B vitamins. Others make enzymes that can break the chemical bonds in plant fibers, or polysaccharides, where a plant's nutritional energy is stored.

"We have very few of those linkage-busting enzymes encoded in our own genome, but these microbial genomes have a whole arsenal of gene products to degrade plant polysaccharides to energy," Gordon said.

Some bacteria in the gut break down flavonoids and other chemicals made by plants that could cause cancer or other illnesses if they were not neutralized in the intestines.

Others have the genetic capacity to scavenge hydrogen gas from the gut — a by-product of digestion that can kill helpful bacteria — and convert it into methane. That makes the intestines a more biologically friendly place, while contributing in sometimes embarrassing moments to Earth's accumulation of greenhouse gases.

And in one especially touching example,

tion of butyryl coenzyme A, a fatty acid that is a favorite food of the cells that line the colon.

"We provide them a great place to live," study author David A. Relman of Stanford University said of the bacterial cells, "and they are feeding the lining of our gut."

The new work does not purport to be a complete survey of all microbes in the human gut. And it did not even take a stab at the body's other pockets of microbial diversity — primarily the nose and mouth, the vagina, and the skin. But it demonstrates that the DNA-based approach has the potential to reveal at last the metabolic details of our many mini-mes, said Claire M. Fraser-Liggett, president and director of the Institute for Genomic Research.

With the technology improving and getting cheaper, she said, it won't be long before it is easy to monitor a person's microbial changes from day to day — or compare bacterial population structures among individuals who have different diets or health histories.

"One question we need to tackle is: Is there such a thing as a core microbiome, a set of organisms or bacterial genes you find in most or all individuals?" Fraser-Liggett said. "It may be that microbes are very stable and diet doesn't play a huge role. Or it may be that this is a snapshot in time reflecting something they are in their last meal."

With that kind of information in hand, doctors could think about prescribing particular "probiotic" foods or supplements to change a patient's microbiome in healthful ways, or adjusting a patient's diet to make a better fit with the bugs that the patient is saddled with.

"To ignore our microbial side would be to ignore an important contributor to our health and our biology," Gordon said.

Edward DeLong, a professor at the Massachusetts Institute of Technology who has used similar techniques to study marine microbial diversity, said he was not completely comfortable with the idea that people are super-organisms. "I'm not sure where the super-organism ends and the environment begins," he said.

But he said he appreciated the focus on the positive side of bacteria.

"We typically think of microbes as being associated with human disease," DeLong said. "But they are always with us and are associated most of the time with human health."

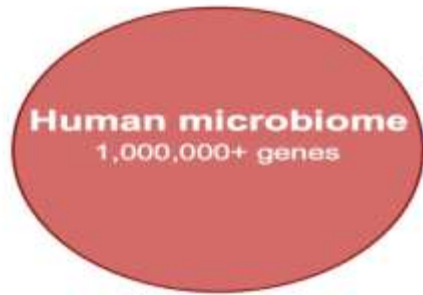


ILLUSTRATION: PETER/CLARK — THE WASHINGTON POST/JEFFREY PERLES

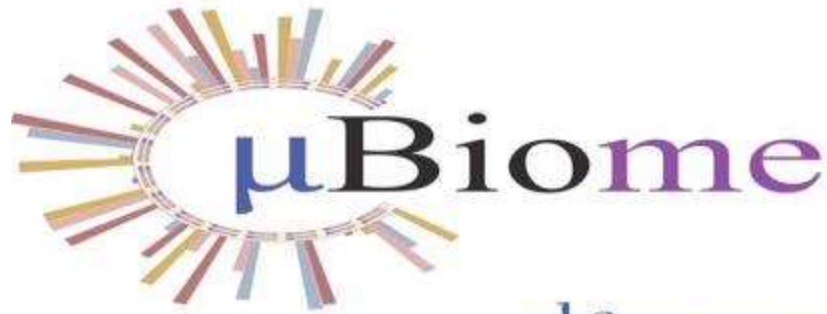
### Gut Bacteria: Our Essential Assistants

Five ways that intestinal microbes keep us alive, by doing what we can't:

- Vitamin synthesis, including several B vitamins.
- Breakdown of complex plant sugars to extract energy.
- Fermentation of dietary fiber.
- Conversion of butyrate gas to methane.



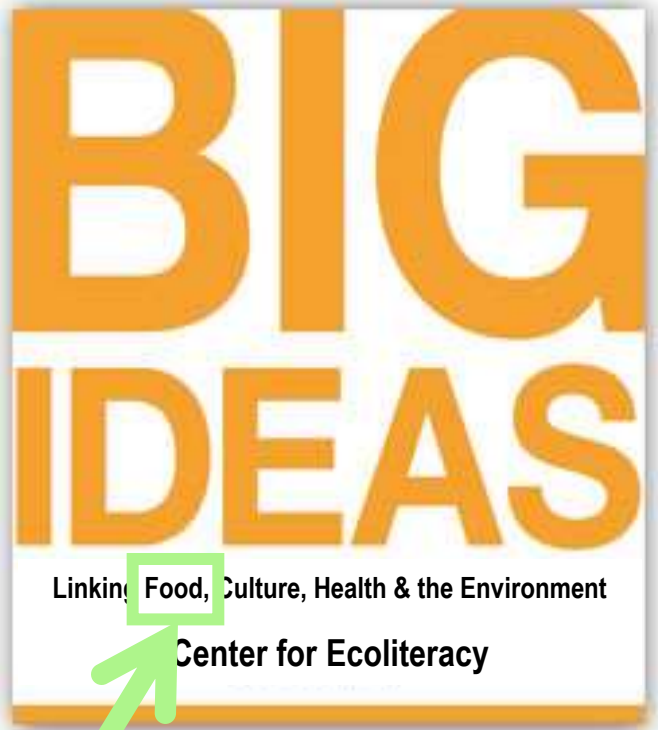
Human genome  
23,000 genes



qb3  
California Institute for  
Quantitative Biomedical Research

- When we eat, we feed ourselves ***and our microbiome***
  - Up to 1000 distinct bacterial species in our distal GI tracts- outnumbering our own cells 10:1 & our genes at least 50:1
  - A crucial *heritable* ecosystem for human health
- The Standard American Diet (SAD) selects for organisms poised to metabolize simple sugars
  - Linked to chronic disease, obesity and mental health
- “Real Food” selects for organisms that thrive on resistant starch and complex carbs
  - Linked to better immunity, weight regulation, stress resilience

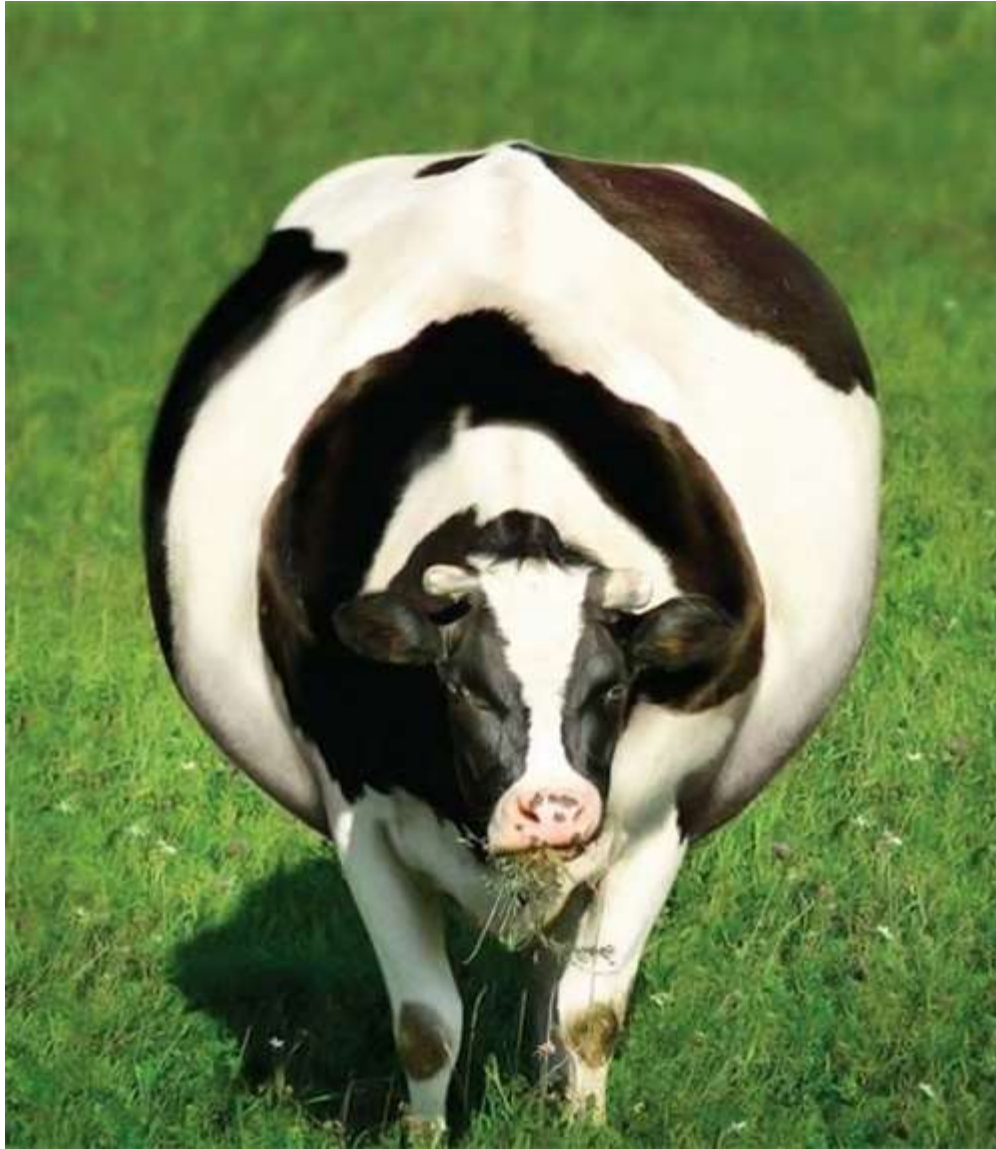




1. Food is essential for survival  
- *know who & where it comes from*
2. Food is more than nourishment -  
*it also reflects our culture*
3. What and how we eat **provides or saps** our health & strength
4. Every living thing on earth is linked by food energy  
- *good stewardship is a good idea*

# The Obesity Microbiome

Do Hormone Fed Cattle affect our Hormones?





© 1977 International Bottling of Seven-Up, Inc.



## Why we have the youngest customers in the business

When young people are 10 months old, they could be kept from drinking anything but milk. But 7up is the great one. It's the only one that's safe for them. And that's why we have the youngest customers in the business. Because they all love 7up. And we know that's why they love it. It's not just because it's so good. It's because it's so safe. It's because it's so healthy. It's because it's so refreshing. It's because it's so delicious. It's because it's so... 7up!

*Nothing does it like Seven-Up!*



# WEAPONS OF MASS DESTRUCTION

These companies support research activities which promote the unproven theory that obesity is due to reduced energy output (physical activity) independent of changes in energy intake



# I want to Be Beyonce!



# Heart Healthy Counseling Brought to you by....



*The Coca-Cola Company*  
*Beverage Institute For Health & Wellness*

Share with a Colleague 

A Resource for Professionals

**REGISTER NOW! NEW FREE CPE WEBINAR FEBRUARY 27, 2013**

Continuing Education for RNs, NPs, RDs and DTRs



## Heart Healthy Lifestyle Counseling: **Making the Clinical Encounter More Efficient and Effective**

*With presenters Jane Nelson-Worel, MS, APRN-BC, APNP, and  
Lynne T. Braun, PhD, CNP, FAHA, FAAN, and moderator  
Catherine Christie, PhD, RD, LD/N, FADA*

*Wednesday, February 27, 2013*

*1:00 - 2:00 pm ET*

Making and sustaining lifestyle changes are integral components of reducing cardiovascular disease risk. Yet, providing support to patients in a brief clinical encounter can pose a difficult challenge for health professionals. Join Dr. Lynne T. Braun, Rush College of Nursing, and adult nurse practitioner Jane Nelson-Worel, Meriter Medical Group, as they explore common challenges, practical solutions, and new tools and resources to support your work and your patients' efforts.

**Register Now**

*Space is Limited!*



# **FUEL YOUR ENGINES!**

Weight Management that Goes the Distance

Weight  
Management  
that Goes the Distance

## **Coaching Your Clients Toward Lasting Weight Loss**

Gold Sponsor

*The Coca-Cola Company*



# American Dietetics Assn Annual Meeting

TABLE 6: 2012 AND Corporate Sponsors

## 2012 Partners



## 2012 Premier Sponsors



**Monday, September 30, 2013**

11:30 a.m. - 1:45 p.m.  
Remarks begin at noon sharp  
Toronto Region Board of Trade  
Downtown Centre



**Healthcare Series**

## Ontario's Healthy Kids Strategy: Assurance of a Strong Future



**Kate Manson-Smith**  
Assistant Deputy Minister,  
Health Promotion Division,  
Ministry of Health and  
Long Term Care



**Alex Munter**  
President and Chief  
Executive Officer,  
Children's Hospital  
of Eastern Ontario



**Kelly Murumets**  
President & CEO,  
ParticipACTION

In order to secure a healthy and productive future for Ontario, it is important that all sectors, both public and private promote children's well-being through regulation of the food environment and community activities.

Join leading industry experts as they discuss:

- The government's mandate for the strategy and the goals to be achieved by 2018
- The process and priorities that public and private organizations are taking to achieve the provincial goal of reducing childhood obesity by 20% over five years
- The initiatives that businesses are taking to promote well-being in children

Supporting Sponsor:



**\$79** for individual members (**\$99** for non-members). Tables of 8 are available.

**Register Now:**

Visit [bot.com/events](http://bot.com/events) or call **416.862.4500**



# Food Break at the Medical Conference





# Advice to McDs Employees





# This is Real



FRY HOLDER  
THAT FITS IN  
YOUR CAR'S  
CUPHOLDERS

WITH KETCHUP  
CUP







Best Advice Ever!



Insert Caption.....



# The Promise of Place Based Learning

“To say this is my  
home and I care  
enough about it is  
the essence of  
citizenship”

Peter Forbes  
Trust for Public Land



# TRYTHIS Encourage food preservation

- Every year, Margo Davis of Rock Cave preserves a cellar full of vegetables, fruits, and meats. “Most of our great-grandmas knew how to do it all,”





# TRYTHIS Grocery stores: Feature healthy items

- “I never expected it to be this successful, but I love it that it is,” said Parkersburg Foodland manager Dave Worst of the healthy checkout aisle in his store



# On your way to check out





# TRYTHIS Healthy cooking classes

- Karin Kozlowski, WVU Extension Nutrition Outreach worker, helped design a month-long course at a food pantry, teaching people how to cook fresh food on a food stamp budget





# TRYTHIS Teach people to read labels

- Kanawha County WIC employees conducting tour or a local Kroger store, helping participants learn to read labels and compare similarly-priced brands



12 oz Cola (or Juice/Sports Drink)= 10 tsp sugar





**SAFEWAY**  
 ALL AMERICAN SUB WHOLE SANDWICH  
 SS

Packed On		Sell By
Sep.19.12@11:32		Sep.20.12
Quantity	Unit Price \$/Pcs	Total Price
1	6.9900	\$ 6.99

ENRICHED UNBLEACHED WHEAT FLOUR (WHEAT FLOUR,MALTED BARLEY FLOUR,NIACIN,IRON,THIAMIN MONONITRATE,RIBOFLAVIN,FOLIC ACID), WATER,BEEF,WATER,SALT,POTASSIUM LACTATE,DEXTROSE,SOY PROTEIN CONCENTRATE,SALT,POTASSIUM LACTATE,SODIUM PHOSPHATE,NATURAL FLAVORING,SODIUM DIACETATE. RUBBED WITH: SALT,DEXTROSE,CARAMEL COLOR,HYDROLYZED SOY PROTEIN,ONION & GARLIC POWDER, EXTRACTIVES OF SPICES,HAM,CURED WITH: WATER,DEXTROSE,SALT, SODIUM PHOSPHATES,SODIUM ERYTHORBATE,SODIUM NITRITE,TURKEY BREAST MEAT,TURKEY BROTH,MODIFIED FOOD STARCH,SALT,SODIUM PHOSPHATE,CARRAGEENAN,FLAVORING,TOMATOES,SOYBEAN OIL,EGG YOLKS,WHOLE EGG,WATER,DISTILLED VINEGAR,SUGAR,SALT,LEMON JUICE CONCENTRATE,CALCIUM DISODIUM,NATURAL FLAVORS,LETTUCE,AMERICAN CHEESE (MILK,CHEESE CULTURE,SALT,ENZYMES),WATER,DRY CREAM, MILKFAT,SODIUM PHOSPHATES,SALT,SORBIC ACID,ANNATTO,OLEDRESIN PAPRIKA COLOR,AMERICAN CHEESE (MILK,CHEESE CULTURE,SALT & ENZYMES),WATER,DRY CREAM,MILKFAT,SODIUM PHOSPHATES,SALT,SORBIC ACID AS A PRESERVATIVE,WATER,DISTILLED VINEGAR,MUSTARD SEED, SALT,MUSTARD BRAN,TURMERIC,NATURAL FLAVOR,PAPRIKA,FRENCH BASE, WHEAT FLOUR,DIACETYL TARTARIC ACID ESTERS OF MONO-AND DIGLYCERIDES (DATEM),ENZYMES,SOYBEAN OIL,ASCORBIC ACID,SALT, YEAST. \*\*CONTAINS WHEAT,EGGS,SOY AND MILK\*\*



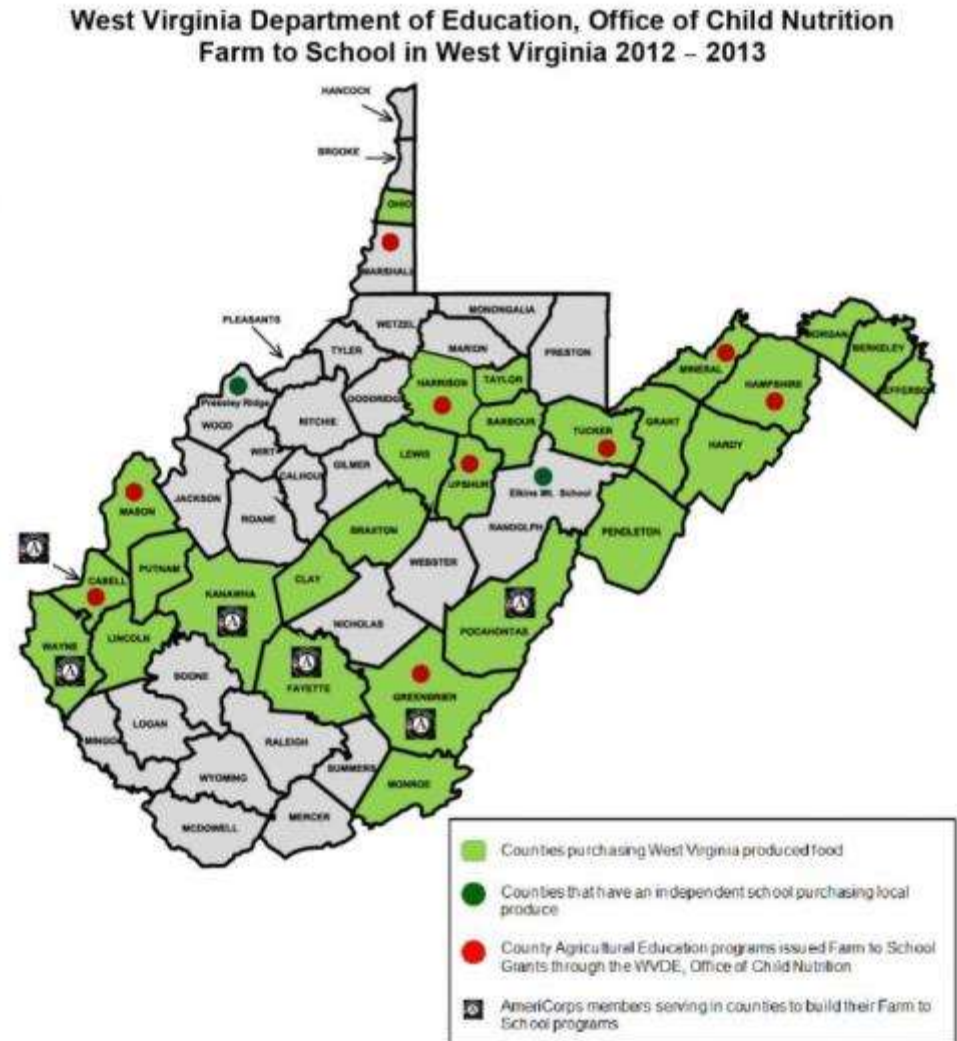
## INGREDIENTS OF AN ALL-NATURAL EGG



**INGREDIENTS:** AQUA (75.8%), **AMINO ACIDS (12.6%)** (GLUTAMIC ACID (14%), ASPARTIC ACID (11%), VALINE (9%), ARGININE (8%), LEUCINE (8%), LYSINE (7%), SERINE (7%), PHENYLALANINE (6%), ALANINE (5%), ISOLEUCINE (5%), PROLINE (4%), TYROSINE (3%), THREONINE (3%), GLYCINE (3%), HISTIDINE (2%), METHIONINE (3%), CYSTINE (2%), TRYPTOPHAN (1%)); **FATTY ACIDS (9.9%)** (OCTADECENOIC ACID (45%), HEXADECANOIC ACID (32%), OCTADECANOIC ACID (12%), EICOSATETRAENOIC ACID (3%), EICOSANOIC ACID (2%), DOCOSANOIC ACID (1%), TETRACOSANOIC ACID (1%), OCTANOIC ACID (<1%), DECANOIC ACID (<1%), DODECANOIC ACID (<1%), TETRADECANOIC ACID (<1%), PENTADECANOIC ACID (<1%), HEPTADECANOIC ACID (<1%), TETRADECENOIC ACID (<1%), HEXADECENOIC ACID (<1%), EICOSENOIC ACID (<1%), DOCOSENOIC ACID (<1%), OMEGA-6 FATTY ACID: OCTADECADIENOIC ACID (12%), OMEGA-3 FATTY ACID: OCTADECATRIENOIC ACID (<1%), EICOSAPENTAENOIC ACID (EPA) (<1%), OMEGA-3 FATTY ACID: DOCOSAHEXAENOIC ACID (DHA) (<1%)); **SUGARS (0.8%)** (GLUCOSE (30%), SUCROSE (15%), FRUCTOSE (15%), LACTOSE (15%), MALTOSE (15%), GALACTOSE (15%)); **COLOUR** (E160c, E160a), E306, E101; **FLAVOURS** (PHENYLACETALDEHYDE, DODECA-2-ENAL, HEPTA-2-ENAL, HEXADECANAL, OCTADECANAL, PENTAN-2-ONE, BUTAN-2-ONE, ACETALDEHYDE, FORMALDEHYDE, ACETONE); SHELL (E170), ALSO CONTAINS BENZENE & BENZENE DERIVATIVES, ESTERS, FURANS, SULFUR-CONTAINING COMPOUNDS AND TERPENES.

# TRYTHIS Expand Farm to School program

- West Virginia schools spend more than \$80 million each year on school meals
- If the schools bought a tenth of that locally, West Virginia farmers would make \$8 million





# “Roots to Shoots” SES Garden





# Building the Fitness Trail- Page Jackson Elementary School





# TRYTHIS Check your food pantry offerings

- Jefferson County  
Community  
Ministries  
community garden  
keeps volunteers  
busy growing food  
for the food pantry  
boxes and cooking  
classes



# USDA FOOD PYRAMID

Fats, oils & sweets  
USE SPARINGLY



Milk, yogurt & cheese group  
2-3 SERVINGS



Meat, poultry, fish, dry  
beans, egg & nuts group  
2-3 SERVINGS



Fruit group  
2-4 SERVINGS



Vegetable group  
3-5 SERVINGS



Bread, cereal,  
rice & pasta  
6-11 SERVINGS

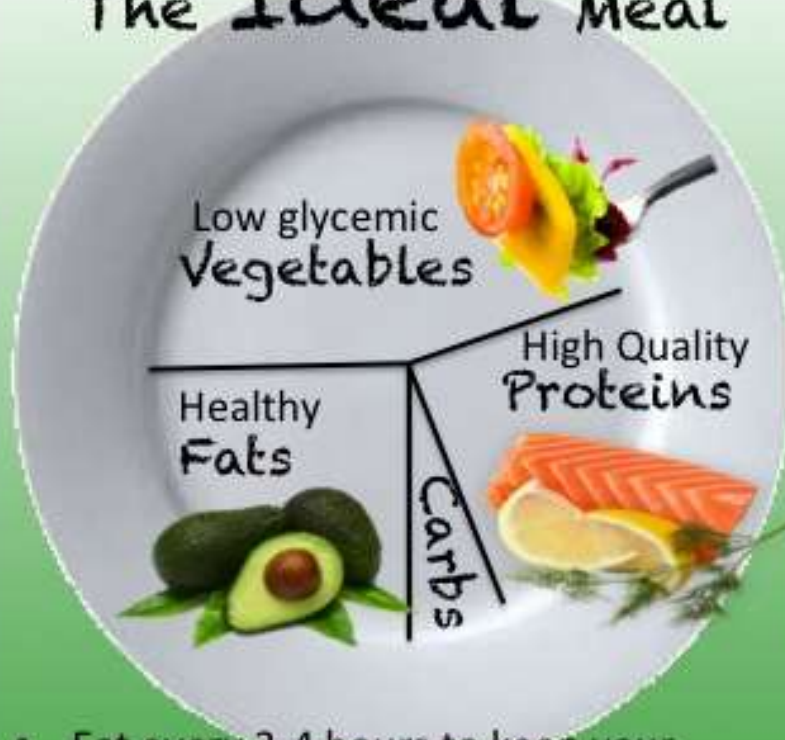






Choose **MyPlate**.gov

# The Ideal Meal



## Water

Drink half your body weight in ounces of **PURE** water daily.

## Vegetables

- All Leafy greens
- Brussel Sprouts
- Broccoli
- Cauliflower
- Onions/Garlic
- Bell Peppers
- Asparagus
- Eggplant
- Cucumber
- Cabbages

*Choose local/organic whenever possible*

## Proteins

- Wild Salmon
- Wild Seafood
- Eggs
- Chicken
- Turkey
- Beef
- Venison
- Bison

*Choose pasture raised/organic whenever possible.*

## Fats

- Animal fats
- Coconut oil
- Free range eggs
- Butter
- Avocado
- Nuts & Seeds
- Nut butters
- Olives & Olive Oil

## Carbs

- Fruits
- Potato's
- Sweet potatoes
- Brown Rice
- Properly prepared grains
- NON GMO corn

- Eat every 3-4 hours to keep your metabolism going and to avoid blood sugar ups and downs.
- Eat carbs early in the day when you will be able to burn them off.
- Eat a balance of protein, healthy fats and generous serving of non-starchy veggies at every meal for maximum energy.





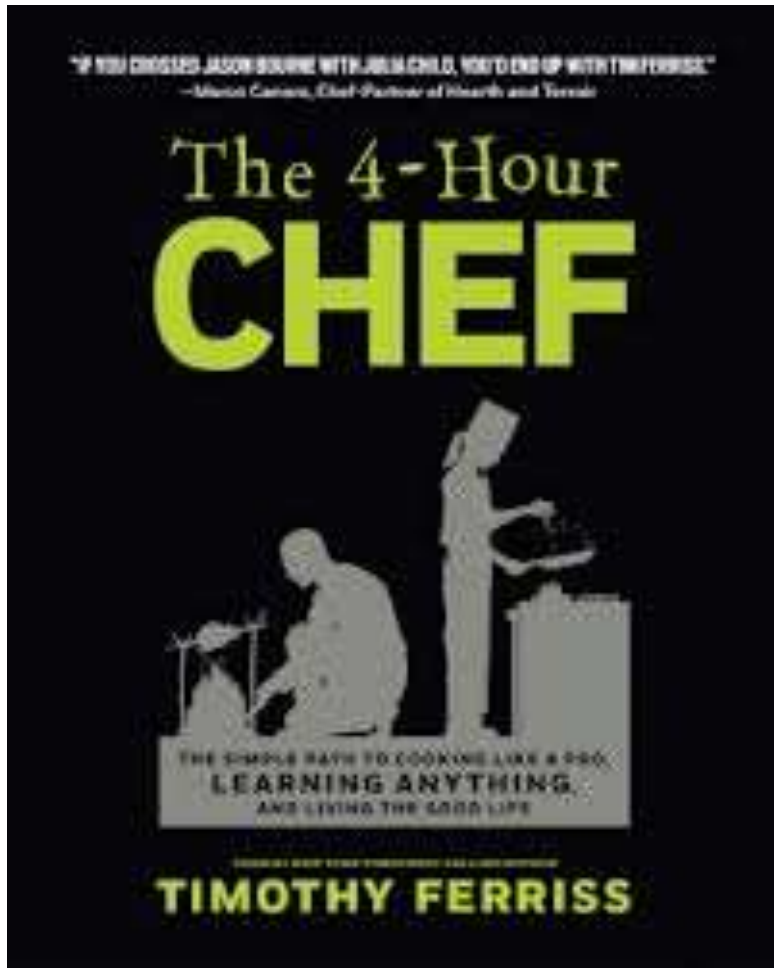
# Safe Dessert- DARK Chocolate





you lose *pounds* in the *kitchen*  
and *ounces* at the *gym*

- A generation is being raised that does not know how to cook



# WVU MedCHEFS





# Join Them After the Show





# Learning the Art

## Lily age 8 with Grandma Age 86



# Dr James Murray- My Hero



Where Do We Go From Here?

**EAT REAL FOOD**

**MOVE MORE**

**DO IT LOCAL**



# This is You Change Agents

“Never doubt that a small group of thoughtful committed citizens can change the world. Indeed, it’s the only thing that ever has.”

Margaret Mead



**C'EST LA REVOLUTION !..**  
**QUE FAIT LE "SUAVITOS"**  
**DANS L'ALIMENTATION**

"SUAVITOS" NE SAUVENT PAS SEULEMENT VOTRE GOUT, MAIS ILS  
SE TRAITENT DANS VOTRE LAISSEZ-FAIRE ALIMENTAIRE.

# Our Kids and Future Depend on Us







MLK Jr  
(Apr 3 1968:  
his last speech)

**“Like anybody, I would like to live a long life. Longevity has its place. But I’m not concerned about that now. I just want to do God’s will, and He’s allowed me to go up to the mountain. And I’ve looked over. And I’ve seen the promised land.”**

- <https://www.youtube.com/watch?v=lcAl4evwK3o>
- <https://www.youtube.com/watch?v=aCUbvOwwfWM>
- <https://www.youtube.com/watch?v=8EeYTBaG3Oc>

# LA Lakers and Grass Fed Tim



[Click to view full Lakers menu.](#) 





# IN DEFENSE OF FOOD

AN EATER'S MANIFESTO



MICHAEL POLLAN

AUTHOR OF

THE OMNIVORE'S DILEMMA

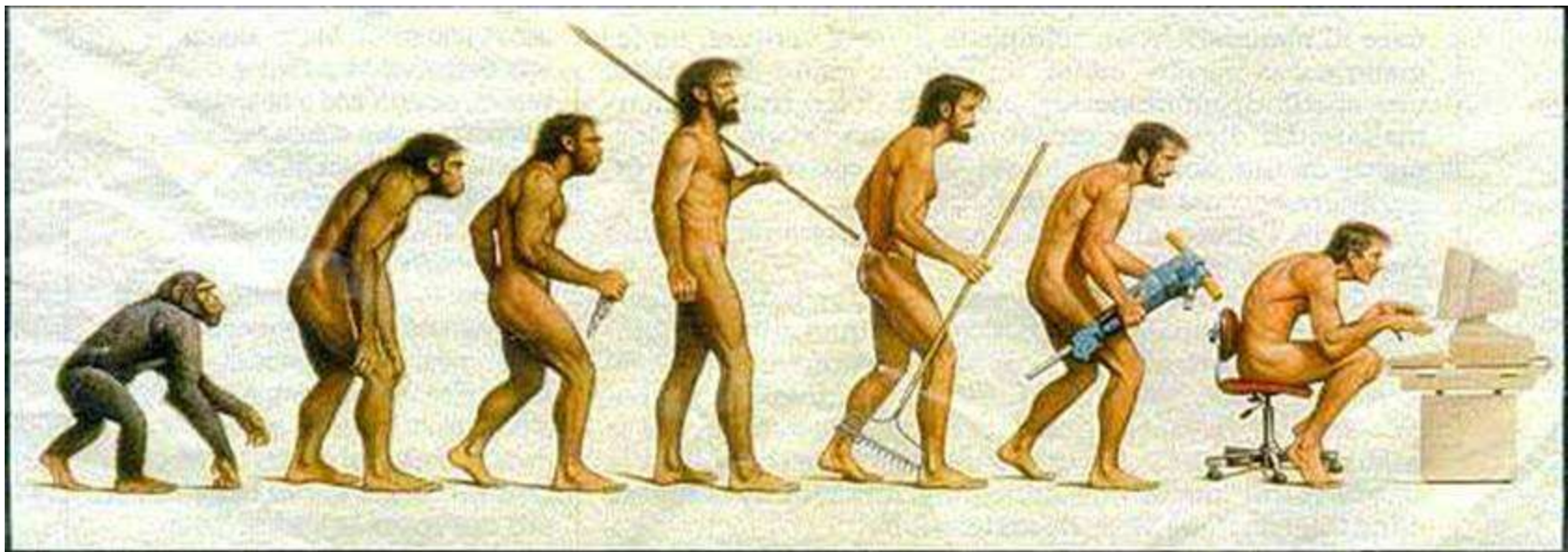
- Become a Locavore!
- Farmer's Markets
- CSA
- Local Grocers

**“Let thy food be thy medicine and  
thy medicine be thy food”**

**Hippocrates, 480 B.C**



Don't Sit on your @\$ and be passive





The Body is Like A Grandfather Clock  
....got to wind it up every day Walter Bortz MD

