


MEDICATIONS VS. LIFESTYLE

EARLY DETECTION, PREVENTION AND REVERSAL OF VASCULAR DAMAGE

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 READER'S DIGEST HOUSTON HEART DOC
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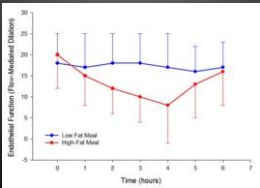
ILOCCOR-B: THE MIRACLE BREAKTHROUGH





FOOD IS MEDICINE OR POISON ?

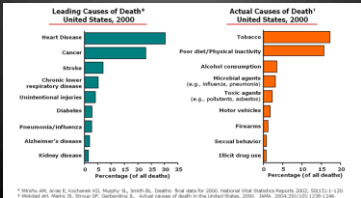
AM J CARDIOL. 1997 FEB 1;79(3):350-4.
 EFFECT OF A SINGLE HIGH-FAT MEAL ON ENDOTHELIAL FUNCTION IN HEALTHY SUBJECTS.
 VOGEL RAJ, CORRETTI MC, PLOTNICK GD



Time (hours)	Low Fat Meal	High Fat Meal
0	20	20
1	18	18
2	18	15
3	18	12
4	18	8
5	18	10
6	18	15



ACTUAL CAUSES OF DEATH: WE KNOW THE SOLUTIONS



Leading Causes of Death* United States, 2000	Actual Causes of Death* United States, 2000
Heart Disease	Tobacco
Cancer	Poor diet/Physical inactivity
Stroke	Alcohol consumption
Chronic lower respiratory disease	Medicinal agents (e.g., influenza, pneumonia)
Unintentional injuries	Traffic agents (e.g., potholes, sidewalks)
Diabetes	Motor vehicles
Pneumonia/Influenza	Firearms
Alzheimer's disease	Sexual behavior
Kidney disease	ISBUI drug use

* Healthy and Anne E. Hershner (Eds), *Medical Care*, 38(12), 1996, 1463-1468. Deaths: final data for 2000. *National vital statistics reports* 2002, 30(23):1-120.
 † *Journal of the American Medical Association*, 289(18), 2003, 2233-2238. Actual causes of death in the United States, 2000. *Annals of Internal Medicine*, 139(12):1238-1246.

1. PREVENTABLE DISEASES

- 80% HEART DISEASE
- 90% ADULT DIABETES
- 60% CANCER

5 DAILY HABITS AND HEART ATTACKS DROP 85%

- DON'T SMOKE
- WALK 30-40 MINUTES DAILY
- EAT >5 SERVINGS OF FRUIT/VEG A DAY
- SLEEP 7 HOURS A NIGHT
- ENJOY A FEW ALCOHOLIC BEVERAGES A WEEK

* HOEGEN STUDY 2013 NETHERLANDS 17,887 MEN AND WOMEN
* KAROLINSKA STUDY 2014 SWEDEN 20,771 MEN

LIFESTYLE REVERSES ALZHEIMER'S: 2015

- UCLA CENTER FOR AD RESEARCH
- GLUTEN FREE , PLANT STRONG DIET
- MEDITATION TWICE A DAY AND YOGA
- SLEEP 7 HOURS
- MELATONIN, D3, OMEGA 3, B12, COQ10
- FASTING 12 HOURS A DAY (7PM-7AM)
- EXERCISE 30 MINS 4-6 DAYS A WEEK
- RESULTS: 90% OF SUBJECTS IMPROVED MEMORY

2. EARLY DETECTION OF AMERICA'S #1 KILLER

<p>Sir Winston Churchill, 91</p> <ul style="list-style-type: none"> • Overweight • Not Fit • Heavy Smoker 	<p>Jim Fixx, 53</p> <ul style="list-style-type: none"> • Not Overweight • Very Fit • Non-Smoker
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MARCH 2015: FORMER NBA STARS ANTHONY MASON 48, JACK HALEY 51, CHRISTIAN WELP 51

HOW DO YOU KNOW IF YOU ARE AT RISK?



50% Traditional testing only identifies half of the people who will have a heart attack or stroke.

TOOLS OF THE HEART ATTACK PREVENTION SPECIALIST



CORONARY ARTERY CALCIUM CT SCAN: THE \$100 TRUTH SERUM

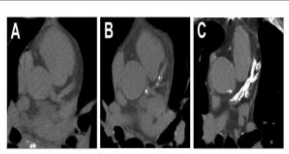
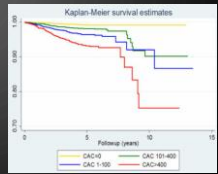



Figure 1. Images illustrating the coronary artery calcium score of three patients with increasing calcification grades in the territory of the anterior descending artery. A: no calcification; B: sparse calcification; C: severe calcification.

JACC Journals

Coronary Artery Calcium Scanning Should be Used for Primary Prevention

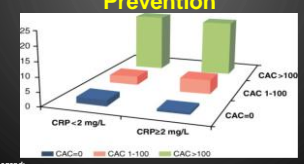


Figure Legend:
 CAC=0 CAC 1-100 CAC 101-400 CAC >400

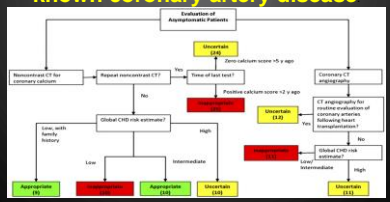
Figure Legend:
 CRP ≤ 2 mg/L CRP > 2 mg/L

Figure Legend:
 CAC=0 CAC 1-100 CAC 101-400 CAC >400

Figure Legend:
 CAC=0 CAC 1-100 CAC 101-400 CAC >400

Figure Legend:
 CAC=0 CAC 1-100 CAC 101-400 CAC >400

Detection of CAD/risk assessment in asymptomatic individuals without known coronary artery disease



Cardiac Computed Tomography Writing Group et al. Circulation. 2010;122:e525-e555

3. THE SCIENCE OF HEART DISEASE REVERSAL

MEDICATION VS LIFESTYLE

PCRM **USDA** **HARVARD**

PICK YOUR PLATE

BEST HEART DIETS JUNE 2014

#1 ORNISH DIET

- THE ORNISH PLAN TO REVERSE HEART DISEASE, ACCORDING TO EXPERTS IS #1.
- THE BALANCED, SOUND MENU PROMOTES HEART HEALTH, IF—EXPERTS EMPHASIZED THE *IF*—THE DIET’S RULES ARE FOLLOWED.

Original Dean Ornish Plan

No calorie restriction Moderate exercise
Stress reduction
Smoking cessation

Fats ($\le 10\%$)

Nonfat dairy products – yogurt, cheese, egg whites

Nonfat products – cereal, soups, tofu, crackers, egg beaters

Whole grain – corn, rice, oats, wheat, etc

Beans and legumes

Fruits

Vegetables

All oils
All meats
Olives
Avocados
Nuts – seeds
High or low fat products
Sugar – syrup – honey
Alcohol

EFFECTS OF STRESS MANAGEMENT TRAINING AND DIETARY CHANGES IN TREATING ISCHEMIC HEART DISEASE.

- **ORNISH D ET AL. JAMA. 1983 JAN 7;249(1):54-9.**
- 23 PATIENTS RECEIVED INTERVENTION AND A RANDOMIZED CONTROL GROUP OF 23 PATIENT DID NOT.
- AFTER 24 DAYS A 44% MEAN INCREASE IN DURATION OF EXERCISE
- A 21% MEAN DECREASE IN PLASMA CHOLESTEROL LEVELS AND A 91% MEAN REDUCTION IN ANGINA.

ORNISH: THE LIFESTYLE HEART TRIAL

- RANDOMIZED CONTROLLED TRIAL:
1 YEAR INTERVENTION, 5 YEAR FOLLOW-UP WITH CATH ANALYSIS AND PET SCANS PRE AND POST
- 48 SUBJECTS WITH DOCUMENTED CAD
- INTERVENTION: “INTENSIVE LIFESTYLE CHANGES”
- CONTROL: FOLLOW THE ADVICE OF THEIR PERSONAL PHYSICIANS

JAMA 1998;280(23):2001-2007, Lancet 1990;336:129-33

LIFESTYLE HEART TRIAL 1-YEAR RESULTS

Variable	Experimental	Control	p <
LDL mg/dl	95 ± 60	157 ± 45	.0072
HDL mg/dl	37 ± 15	51 ± 15	ns
Progression	18%	53%	
Regression	82%	42%	
Δ stenosis	-2.2%	+3.4%	.001

Intensive Lifestyle Changes for Reversal of Coronary Heart Disease

Dean Ornish, MD, Larry W. Sotomayor, PhD, James H. Billings, PhD, MPH, S. Lance Glasser, MD, Tania A. Munch, MD, Charles Spitzer, MD, William T. Armstrong, MD, Thomas A. Poole, MD, Richard A. Kominan, PhD, Chaitan Hegdeboom, PhD, Richard A. Brand, PhD

CONCLUSIONS: Intensive lifestyle changes that encompassed diet, exercise, stress management, and smoking cessation significantly reduced the mortality of coronary artery disease after 5 years. Coronary artery disease was reversed in 30% of patients in the intervention group. The lifestyle changes that encompassed diet, exercise, stress management, and smoking cessation significantly reduced the mortality of coronary artery disease after 5 years. Coronary artery disease was reversed in 30% of patients in the intervention group. The lifestyle changes that encompassed diet, exercise, stress management, and smoking cessation significantly reduced the mortality of coronary artery disease after 5 years. Coronary artery disease was reversed in 30% of patients in the intervention group.

Changes in myocardial perfusion abnormalities by positron emission tomography after long-term, intense risk factor modification over 5 years.

Gould KL, Ornish D et al. JAMA. 1995 Sep 20;274(11):894-901.

CONCLUSIONS: Modest regression of coronary artery stenoses after risk factor modification is associated with decreased size and severity of perfusion abnormalities on rest-dipyridamol PET images.

Can This Man Save Your Heart?
By Dr. Dean Ornish

PROSTATE CANCER LIFESTYLE TRIAL

ORNISH D, LURJO L, SOU S, 174(3), 1065-70

- RANDOMIZED CONTROLLED TRIAL: 93 MEN (NON-SMOKING) ON ACTIVE SURVEILLANCE FOR PROSTATE CANCER FOR ONE YEAR
- RESULTS:
 - PSA ↓ 4% IN THE INTERVENTION GROUP & ↑ 6% IN THE CONTROL GROUP.
 - PROSTATE CANCER CELL GROWTH WAS INHIBITED ~8 TIMES MORE BY BLOOD FROM THE VEGAN VS. CONTROL GROUP.
 - RNA SAMPLES TAKEN BEFORE THE INTERVENTION COMPARED WITH RNA SAMPLES TAKEN 3 MONTHS INTO IT, SHOWED 48 GENES HAD UP-REGULATED AND 453 HAD DOWN-REGULATED. EPIGENETICS

Lifestyle Changes May Lengthen Telomeres

1. LOSE WEIGHT
2. EXERCISE
3. STRESS MANAGEMENT
4. INCREASED SOCIAL SUPPORT

Lancet Oncology 9/13

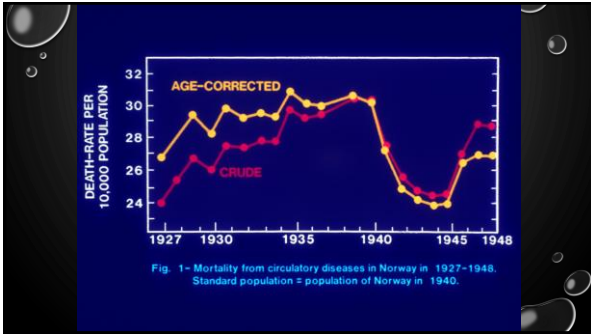
A STRATEGY TO ARREST AND REVERSE CORONARY ARTERY DISEASE: A 12-YEAR LONGITUDINAL STUDY OF A SINGLE PHYSICIAN'S PRACTICE

Prevent and Reverse Heart Disease
Caldwell B. Esselstyn, Jr., MD

With More Than 150 Great-Tasting Recipes

- RURAL CHINA
- PAPUA HIGHLANDERS
- CENTRAL AFRICA
- TARAHUMARA INDIANS

ABSENCE OF CORONARY ARTERY DISEASE

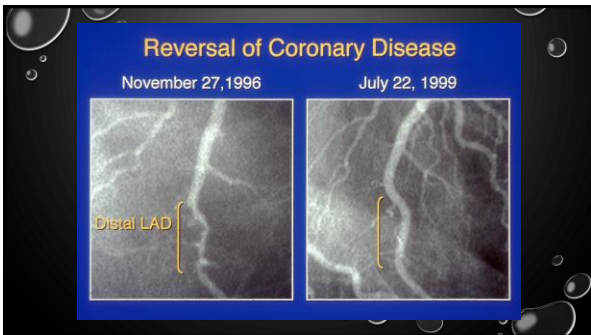


- WHOLE GRAINS
 - LEGUMES, LENTILS
 - VEGETABLES
 - FRUIT
- FOODS TO BE INCLUDED**

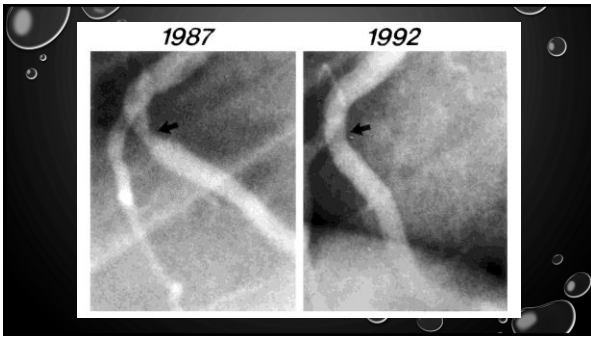
- Avoid**
- OIL
 - FISH
 - FOWL
 - MEAT
 - DAIRY

Diet – 11% fat –
 plant based
 Cholesterol
 lowering
 medication
 Unstructured
 exercise

**ARREST AND REVERSAL
 TREATMENT REGIMEN**



- 18 PATIENTS FOLLOWED 12 YEARS**
- 49 CORONARY EVENTS DURING 8 YEARS PRIOR TO STUDY
 - NONE IN 17 COMPLIANT PATIENTS DURING 12 YEARS



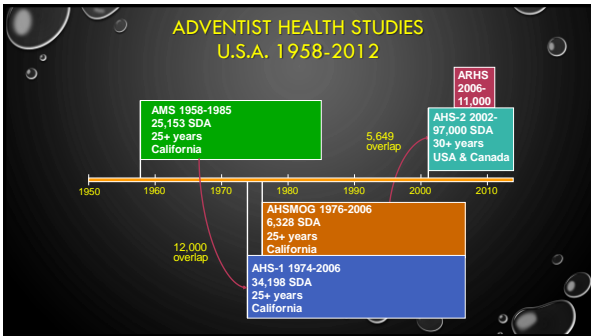
A PRACTICAL WAY TO REVERSE CAD?

• ESSELSTYN C ET AL. J FAM PRACT. 2014 JUL;63(7):356-364B.

WE FOLLOWED 198 CONSECUTIVE PATIENTS COUNSELED IN PLANT-BASED NUTRITION.

THERE WAS ONE STROKE IN THE ADHERENT CARDIOVASCULAR PARTICIPANTS—A RECURRENT EVENT RATE OF .6%, SIGNIFICANTLY LESS THAN REPORTED BY OTHER STUDIES OF PLANT-BASED NUTRITION THERAPY. THIRTEEN OF 21 (62%) NONADHERENT PARTICIPANTS EXPERIENCED ADVERSE EVENTS.

THIS DIETARY APPROACH TO TREATMENT DESERVES A WIDER TEST TO SEE IF ADHERENCE CAN BE SUSTAINED IN BROADER POPULATIONS. PLANT-BASED NUTRITION HAS THE POTENTIAL FOR A LARGE EFFECT ON THE CVD EPIDEMIC.



Dietary Assessment Increasing Complexity

Adventist Mortality Study (1958 - 1980)

- 4-page questionnaire
- n = 25,153

Adventist Health Study-1 (1974 - 2006)

- 20-page questionnaire
- n = 34,198

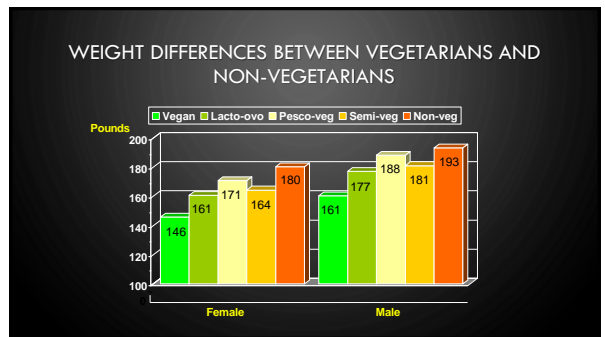
Adventist Health Study-2 (2002 - ????)

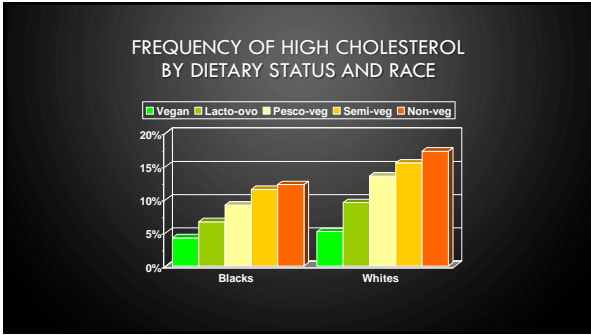
- 52-page questionnaire
- n = 97,000

Classification of Dietary Status

	%	VEG	PLANT/VEG	SEMI-VEG	NON-VEG
LACTO-OVO	21.0	VEG	VEG	VEG	NON
PESCO-VEG	29.3	VEG	VEG	VEG	NON
SEMI-VEG	19.4	VEG	VEG	VEG	NON
NON-VEG	30.3	VEG	VEG	VEG	NON

Notes: 1. Vegans do not consume any animal-derived products. 2. Lacto-ovo vegetarians eat both dairy and eggs but do not eat meat or fish. 3. Pescovegetarians eat both dairy and eggs but do not eat meat. 4. Semi-vegetarians eat both dairy and eggs but do not eat meat and fish. 5. Non-vegetarians eat both dairy and eggs but do not eat meat and fish.



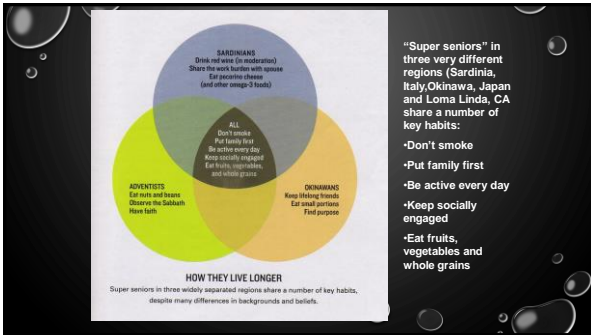


JAMA INTERN MED. 2013 JUL 8;173(13):1230-8.

VEGETARIAN DIETARY PATTERNS AND MORTALITY IN ADVENTIST HEALTH STUDY 2.

A total of 73,308 Seventh-day Adventist men and women recruited between 2002 and 2007. There were 2570 deaths among 73,308 participants during a mean follow-up time of 5.79 years. The mortality rate was 6.05 (95% CI, 5.82-6.29) deaths per 1000 person-years. The adjusted hazard ratio (HR) for all-cause mortality in all vegetarians combined vs nonvegetarians was 0.88 (95% CI, 0.80-0.97). The adjusted HR for all-cause mortality in vegans was 0.85 (95% CI, 0.73-1.01).

Vegetarian diets are associated with lower all-cause mortality and with some reductions in cause-specific mortality.



THE SCIENCE OF EARLY DETECTION, PREVENTION AND REVERSAL OF VASCULAR DAMAGE

PREVENT ONE MILLION HEART ATTACKS BY 2017 USING SCIENCE BASED LIFESTYLE, EARLY DETECTION, AND REVERSAL METHODS