Health Care Shared Decision Making: Using Empowerment to Drive Individual Behavior

Dexter Shurney, MD, MBA, MPH

Chief Medical Director / Executive Director Global Health and Wellness

What is Shared Decision Making?

Shared decision making (SDM) is a collaborative process that allows patients and their providers to make health care decisions together, taking into account the best scientific evidence available, as well as the patient's values and preferences.

SDM honors both the provider's expert knowledge and the patient's right to be fully informed of all care options and the potential harms and benefits. This process provides patients with the support they need to make the best individualized care decisions, while allowing providers to feel confident in the care they prescribe.

http://www.informedmedicaldecisions.org/

SDM is an old concept

Shared Decision Making and Watchful Waiting in Prostate Cancer…cerca 1990s

"John (Jack) Wennberg pioneered the use of small area analysis to study regional variation in healthcare spending and utilization. Health Affairs, in 1997, named him the most influential policy maker of the last 25 years. The way in which he took the tools of epidemiology and applied them to the delivery of health care services was trailblazing. In the mid 1990's he founded The Center for Evaluative Clinical Sciences at Dartmouth College, the Dartmouth Atlas of Healthcare, and the Informed Medical Decisions Foundation"

Thom Walsh May 8, 2012

Population Health Model

Patient, help heal thyself

A case for letting patients help pick their treatments

by Dr. Glyn Elwyn Dartmouth Center for Health Services, 10/13/13

“Consider the example of breast cancer. Put simply, mortality rates for women with early-stage breast cancer are roughly the same whether they choose lumpectomy (removing just the cancerous tissue) or mastectomy (removing the entire breast). But the procedures differ after surgery: Lumpectomy is usually followed by radiation therapy and a higher risk that the cancer will return; mastectomy is the more disfiguring. Neither treatment is right for everyone.

…one woman in her late 50s who wanted the cancer “gone” and said of her breast, “Just take it off.” Another patient of the same age told us, “Why would I want any of my healthy breast tissue removed?”

“Because the mortality outcomes are so similar when it comes to breast cancer, patients’ preferences should matter.

But physicians are human beings with their own preferences, developed over years or even decades of schooling and experience

The Boston Globe

Harvard Research 'backs watchful waiting' in prostate cancer

Friday 16 August 2013

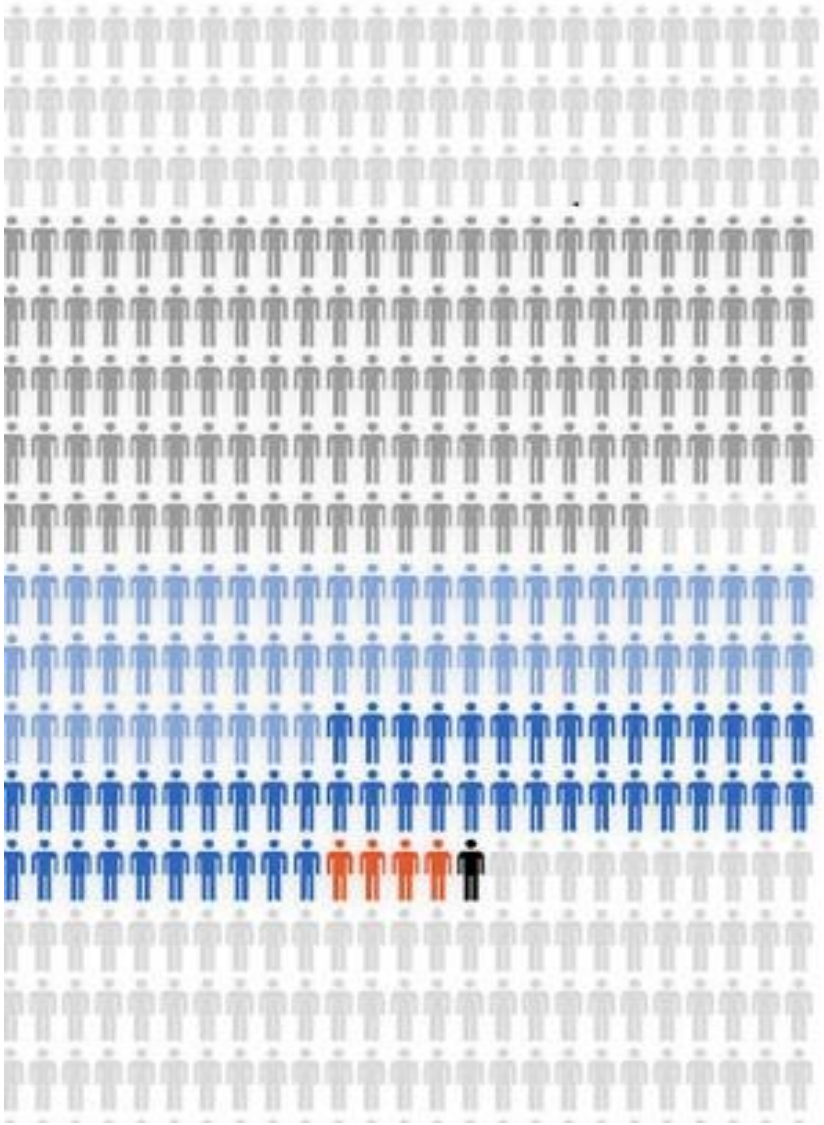
Prostate cancer researchers publishing in the *Cancer Research* journal argue for more watchful waiting to manage the disease, rather than moving straight to aggressive treatment or surgery.

"Radical prostatectomy or radiation therapy, the usual treatments for prostate cancer, can have negative side-effects such as impotence and incontinence" , the lead researcher said.

Because *prostate cancer* often grows very slowly, some men may never need treatment.

BENEFITS AND HARMS OF PSA SCREENING FOR PROSTATE CANCER

1,000 men ages 55-69 screened every 1-4 years for 10 years with a PSA test



1,000 men screened.

Of these:

100-120
get false-positive results that may cause anxiety and lead to biopsy
(Possible side effects of biopsies include serious infections, pain, and bleeding)

110
get a prostate cancer diagnosis, and of these men:

- **at least 50** will have treatment complications, such as infections, sexual dysfunction,or bladder or bowel control problems
- **4-5** die from prostate cancer (5 die among men who do not get screened)
- **0-1** death from prostate cancer is avoided

Newest Frontier in Shared Decision Making: Lifestyle Medicine

2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines

2013 ACC/AHA Blood Cholesterol Guideline

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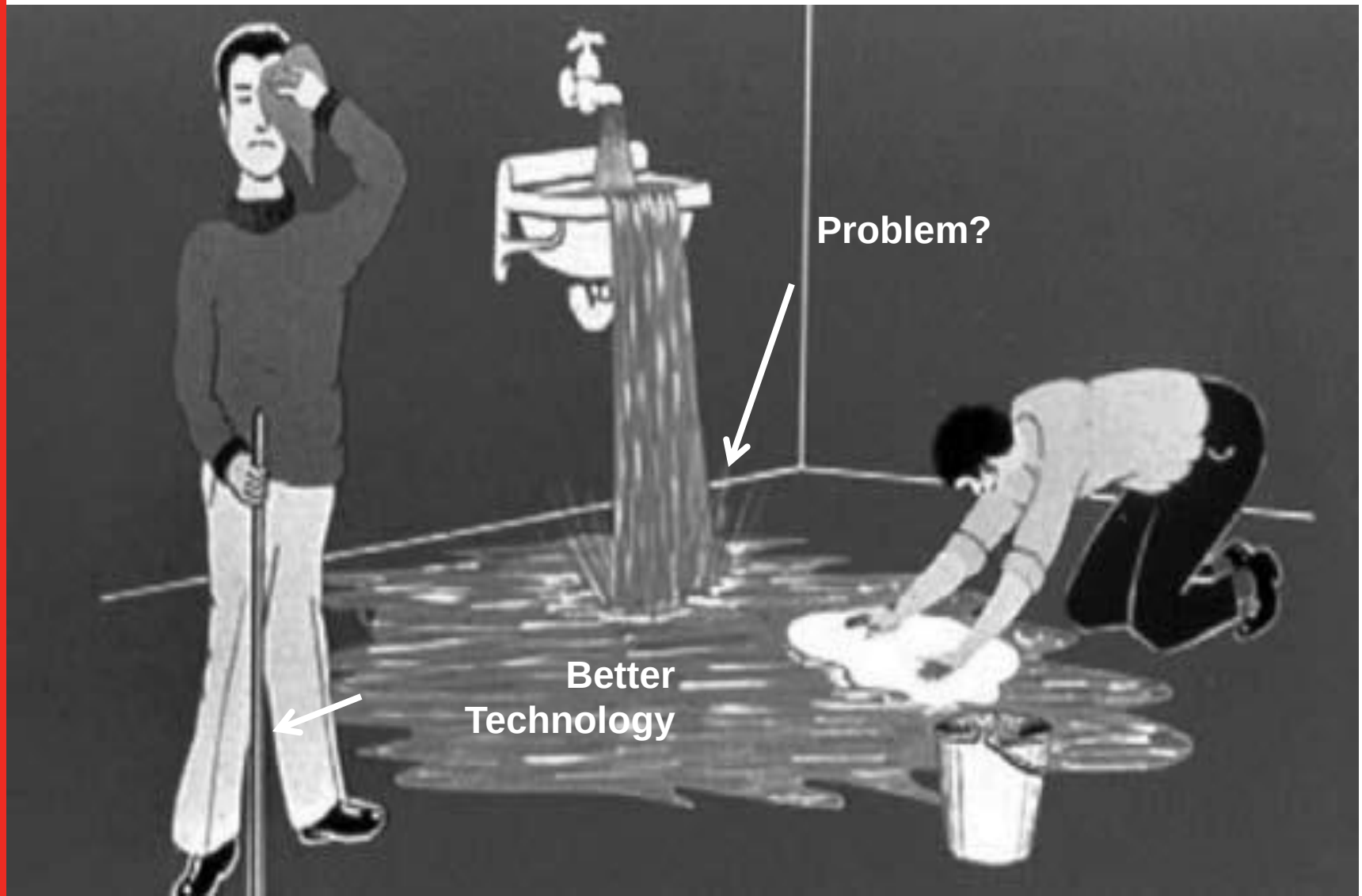
ACCEPTED MANUSCRIPT

2.1 Lifestyle as the Foundation for ASCVD Risk Reduction Efforts

All of these Diseases are Related

- Obesity
  - Sleep Apnea and Insomnia
  - Gallbladder Disease
- Type 2 Diabetes and Metabolic Syndrome
  - Kidney Disease
  - Blindness
  - Leg Amputations
- Coronary Heart Disease, High cholesterol, and Heart Attacks
- High Blood Pressure and Stroke
- Osteoporosis
- Impotence
- Depression
- Cancer
  - Lung Cancer
  - Endometrial Cancer
  - Breast Cancer
  - Prostate Cancer
  - Colon Cancer

Current Approach to Health Care



Focus on where we can gain the largest impact

SICK CARE
Vs.
HEALTH CARE
WHICH WILL YOU CHOOSE?

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2.1 Lifestyle as the Foundation for ASCVD Risk Reduction Efforts

2.2 Four Major Statin Benefit Groups

ACCEPTED MANUSCRIPT

Of the 8760 hours in the year where is our time spent as clinicians?

8757 is the number of hours per year the average patient must fend for themselves to remain healthy

Lifestyle Medicine Approach to High Cholesterol

1. Consume less Dietary Cholesterol

2. Consume MORE Dietary Fiber

3. Reduce/eliminate Dietary Transfats

Test Your Knowledge

Test Your Knowledge: Question #1

Which food item has the fewest grams of cholesterol?

a. 1 cup custard

b. 5 oz. chicken

c. 5 oz. of steak

d. 5 oz. of peanut butter

Cholesterol Content of Food

Meats & Protein	Portion	Cholesterol (mg)	Total Fat (g)
Halibut	3 ½ oz	41	3
Salmon	3 ½ oz	63	12
Lobster	3 ½ oz	71	1
Tuna (in water)	3 ½ oz	30	1
Shrimp	3 ½ oz	194	1
Squid	3 ½ oz	231	1
Beef (ground, lean)	3 ½ oz	78	18
Beef (short ribs)	3 ½ oz	94	42
Beef (sirloin)	3 ½ oz (deck of cards)	89	12
Beef Liver	3 ½ oz	389	5
Veal (top round)	3 ½ oz	135	5
Lamb (foreshank)	3 ½ oz	106	14
Pork (tenderloin)	3 ½ oz	79	6
Pork (chop)	3 ½ oz	85	25
Chicken Liver	3 ½ oz	631	6
Chicken (no skin)	3 ½ oz	85	5

Test Your Knowledge: Question #2

Which category(s) of foods have the most trans-fats?

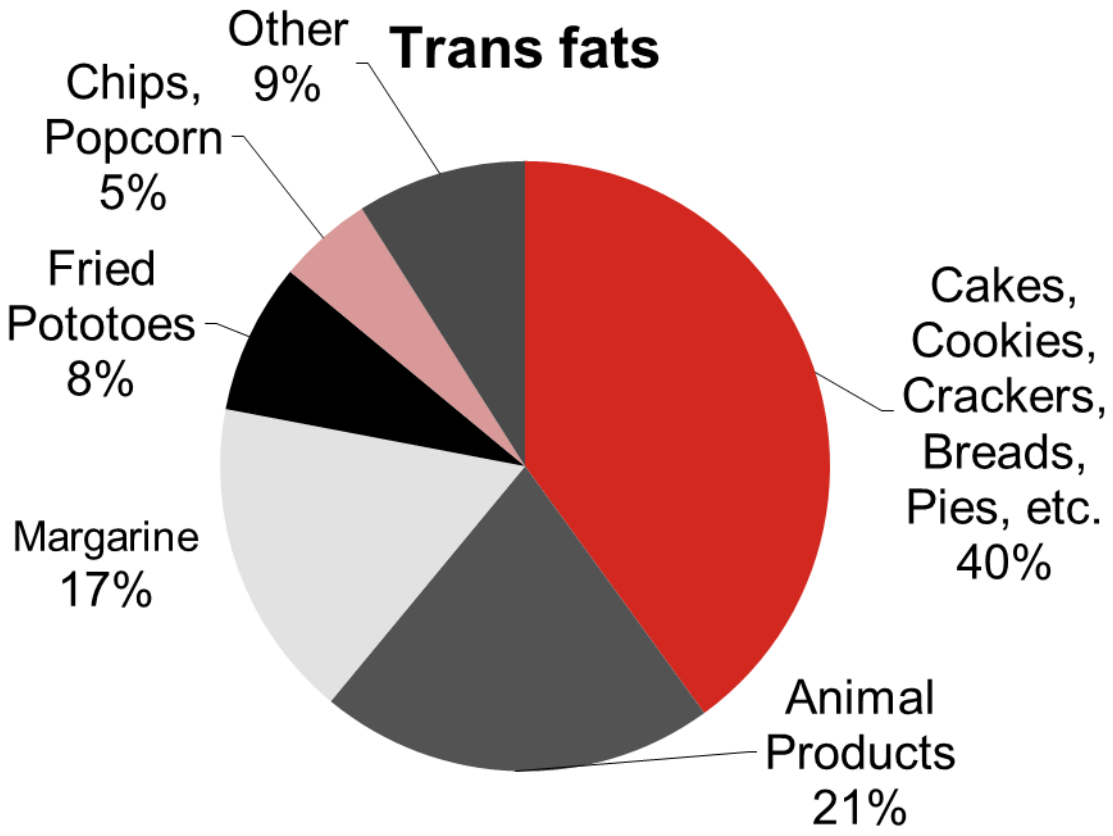
a. Popcorn

b. French Fries

c. Breads, cakes, cookies

d. Margarine

Major Food Sources of Trans Fat U.S.A.



Primarily “JUNK” Food

What do you think?

Lowers LDL Cholesterol Up To 14%
Spread
55% Vegetable Oil
Benecol
Proven to Significantly Reduce Cholesterol
See Nutrition Information For Fat Content
NET WT. 8 OZ. (227g)
No Trans Fatty Acids
No Trans Fatty Acids
Nutrition Facts
Serv. Size 1 Tbsp. (14g)
Servings 16
Calories 70
Fat Cal. 70
* Percent Daily Values (DV) are based on a 2,000 calorie diet.
Amount/Serving % DV* Amount/Serving % DV*
Total Fat 8g 12% Cholest. 0mg 0%
Sat. Fat 1g 5% Sodium 110mg 5%
Polyunsat. Fat 2g Total Carb. 0g 0%
Monounsat. Fat 4g Protein 0g
Vitamin A 10% • Vitamin E 20%
Not a significant source of dietary fiber, sugars, vitamin C, calcium and iron.
Ingredients: Liquid Canola Oil, Water, Plant Stanol Ester, Partially Hydrogenated Soybean Oil, Salt, Emulsifiers (Vegetable Mono- and Diglycerides, Soy Lecithin), Polyglycerol Esters of Fatty Acids), Hydrogenated Soybean Oil, Potassium Sorbate, Citric Acid and Calcium Disodium EDTA to Preserve Freshness, Artificial Flavor, dl-α-Tocopheryl Acetate, Vitamin A Palmitate, Colored with Beta Carotene.

ALL NATURAL
PAM
Original Canola
Cooking Spray
for Fat Free
Cooking
ORIGINAL
SPRAY onto unheated cook/ bakeware.
A 1 SECOND SPRAY COVERS A 10" SKILLET.
Nutrition Facts
Amount Per Serving
Calories 0 Calories from Fat 0
% Daily Value*
Total Fat 0g 0%
Saturated Fat 0g 0%
Cholesterol 0mg 0%
Sodium 0mg 0%
Total Carbohydrate 0g 0%
Protein 0g
Not a significant source of dietary fiber, sugars, vitamin A, vitamin C, calcium and iron.
*Percent Daily Values are based on a 2,000 calorie diet.
INGREDIENTS: CANOLA OIL†, GRAIN ALCOHOL FROM CORN (ADDED FOR CLARITY), LECITHIN FROM SOYBEANS (PREVENTS STICKING), AND PROPELLANT.
†ADDS A TRIVIAL AMOUNT OF FAT.

ALL NATURAL
PAM
Original Canola Cooking Spray
for Fat Free Cooking
ORIGINAL
SPRAY onto unheated cook/ bakeware.
A 1 SECOND SPRAY COVERS A 10" SKILLET.
Nutrition Facts
Serving Size About
1/3 Second Spray (.266g)
Servings Per Container About 702
Amount Per Serving
Calories 0 Calories from Fat 0
% Daily Value*
Total Fat 0g 0%
Saturated Fat 0g 0%
Cholesterol 0mg 0%
Sodium 0mg 0%
Total Carbohydrate 0g 0%
Protein 0g
Not a significant source of dietary fiber, sugars, vitamin A, vitamin C, calcium and iron.
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INGREDIENTS: CANOLA OIL†, GRAIN ALCOHOL FROM CORN (ADDED FOR CLARITY), LECITHIN FROM SOYBEANS (PREVENTS STICKING), AND PROPELLANT.
†ADDS A TRIVIAL AMOUNT OF FAT.

Test Your Knowledge: Question #3

Which food item has more grams of fiber per average servicing size?

a. Blueberries

b. Cheddar Cheese

c. Salmon

d. Lamb

Fiber Content of Foods

Food Item	Fiber (g/kg)
Blueberries	15.2
Brussels Sprouts	13.5
Oat Flakes	13.5
Pumpkin	12.0
Cooked Carrot	9.6
Brown Rice	8.1
Swiss Chard	6.8
Lettuce	6.3
Cucumber	5.7
Applesauce	5.3

Food Item	Fiber (g/kg)
Ground Beef	0
Sirloin Steak	0
Lamb Chops	0
Pork Chops	0
Chicken	0
Ocean Perch	0
Salmon	0
Cheddar Cheese	0
Whole Milk	0
Eggs	0

Cholesterol Content of Food

Animal Foods

Cholesterol Content (mg per 100 gm portion)	
Liver Chicken	600
Egg, whole	550
Liver, beef	350
Butter	250
Oysters	200
Cream cheese	120
Lamb	100
Lard	95
Beef	80
Chicken	80
Pork	80

Plant Foods

Cholesterol Content (mg in 100 gm portion)	
All grains	0
All vegetables	0
All nuts	0
All seeds	0
All fruits	0
All legumes	0
All vegetable oils	0

Pennington J. Food Values of Portions Commonly Used, ‘85.

®

NHANES Data Show Higher amounts of dietary fiber are associated with lower cardiometabolic risks, but Americans fall well below recommended intakes.

National Health and Nutrition Examination Survey data collected over a 12-year period to examine trends in the nation's fiber intake and to compare that with risk levels for metabolic syndrome, obesity, and cardiovascular inflammation as measured by C-reactive protein.

Daily fiber intake recommendations averaged about 16 g overall in the participants.

People in the highest quintile of consumption (> 22.5 g) showed lower risks for cardiovascular inflammation than those in the lowest quintile (< 8.1 g).

American Journal of Medicine, October 22, 2013

Fabulous Fiber

- Lowers cholesterol
- Creates bulk
- Stabilizes blood sugar

Soluble fiber, exercise fight visceral fat, study says

Soluble fiber found in fruits, vegetables and beans may help people lose visceral fat that wraps around internal organs and is linked to chronic disease.

For each 10-gram increase in soluble fiber consumed daily, visceral fat dropped by 3.7% over five years and adding in moderate exercise increased that to 7.4%.

HealthDay News (07/01/11)

Statins, Diuretics Linked to Increase Diabetes Risk in patients with impaired glucose tolerance (NAVIGATOR study)

Diuretics and statins are both associated with significantly increased risks for new-onset diabetes in patients with impaired glucose tolerance at high cardiovascular risk, according to a *BMJ* study.

After a median follow-up of 5 years, patients who began taking diuretics were at higher risk for developing diabetes than those who did not (adjusted hazard ratio, 1.23). New statin users were also at increased risk (HR, 1.32).

Beta-blockers and calcium-channel blockers did not pose a significantly higher risk for incident diabetes.

These results "suggest that glycemia should be better monitored when these drugs are initiated in high risk patients," the researchers conclude.

Role of diuretics, β blockers, and statins in increasing the risk of diabetes in patients with impaired glucose tolerance: reanalysis of data from the NAVIGATOR study BMJ 2013; 347:f6745. December 2013

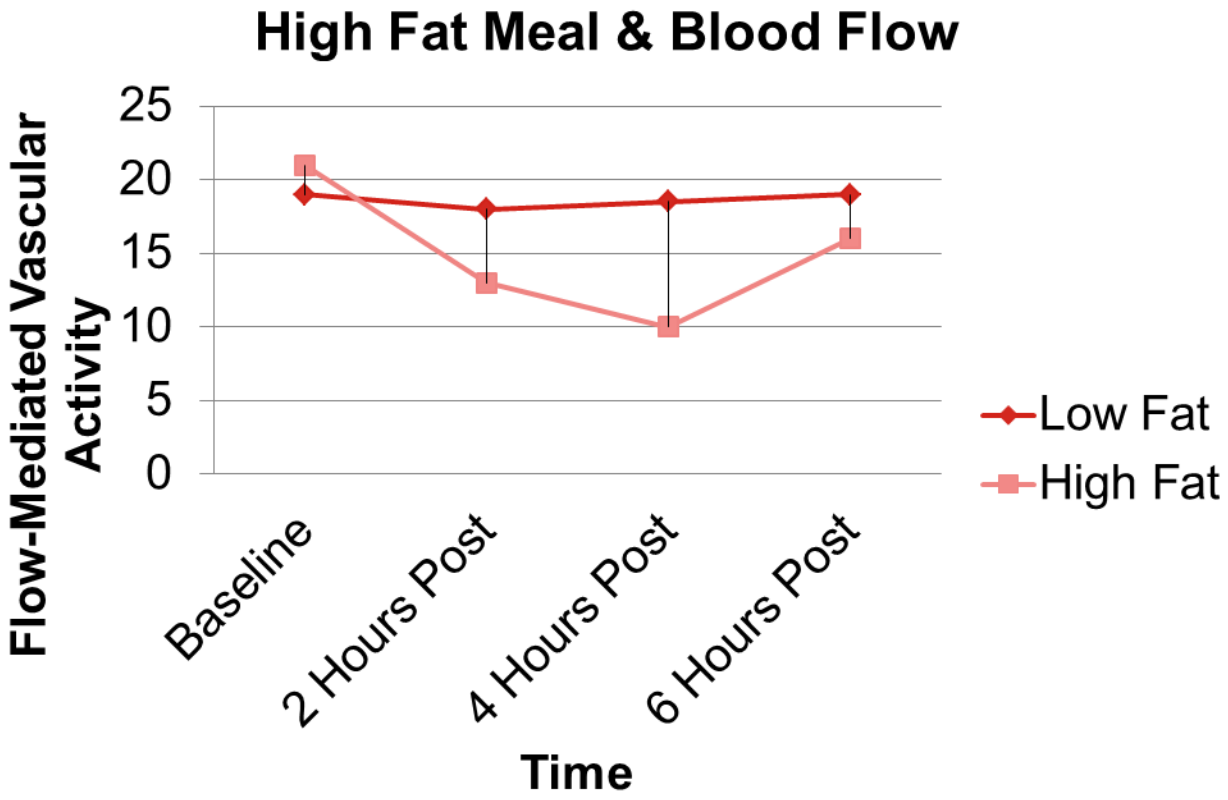
High-Nitrate Diet Good for the Aging Brain

Perfusion MRI Study --a high-nitrate diet improves cerebral blood flow in key areas of the brain involved in executive function.

The high-nitrate diet included many vegetables, particularly leafy green vegetables such as spinach, lettuce, and broccoli, in addition to the beetroot juice. Both diets had the same amount of calories and other nutrients. ($P < .005$).

The low-nitrate diet was low in fruits and vegetables and contained primarily grains, meats, and dairy products.

Effects of One High Fat Meal



- Decreases blood flow on average 31%

Source: Vogel, R.A., American Journal of Cardiology, 1997; 79:350-354.

Diet Patterns May Keep Brain from Shrinking

People with diets high in several vitamins (B, C, D, and E) and in omega 3 fatty acids are less likely to have the brain shrinkage associated with Alzheimer's disease than people whose diets are not high in those nutrients.

People with diets high in trans fats were more likely to have brain shrinkage and lower scores on the thinking and memory tests than people with diets low in trans fats.

Trans fats are primarily found in packaged, fast, fried and frozen food, baked goods and margarine spreads.

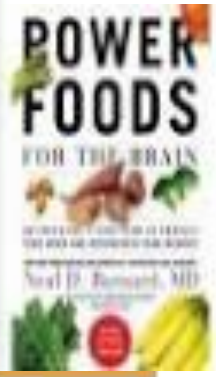
Source: Neurology, December 28, 2011.

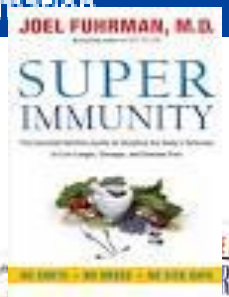
CDC Centers for Disease Control and Prevention
Your Online Source for Credible Health Information

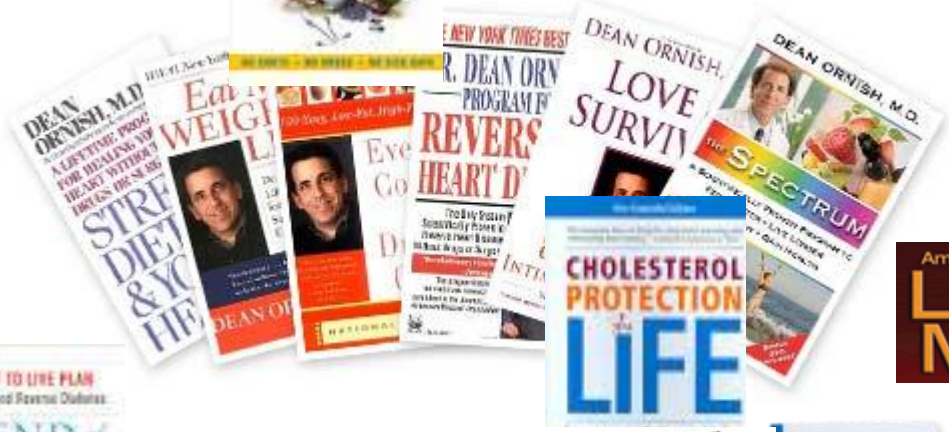
The American Journal of Cardiology

JNHA The Journal of Nutrition, Health and Aging

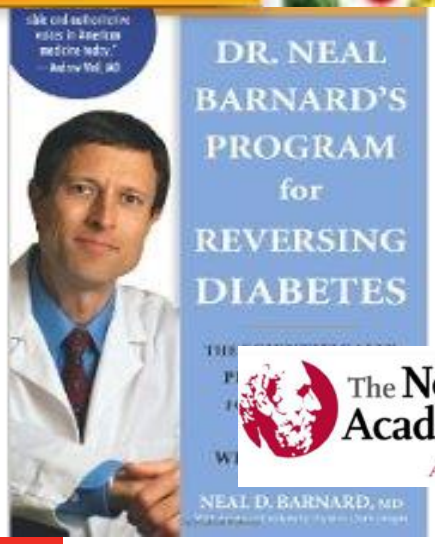
THE AMERICAN JOURNAL OF MANAGED CARE

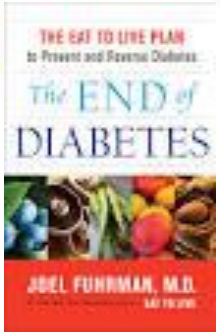






American Journal of Lifestyle Medicine

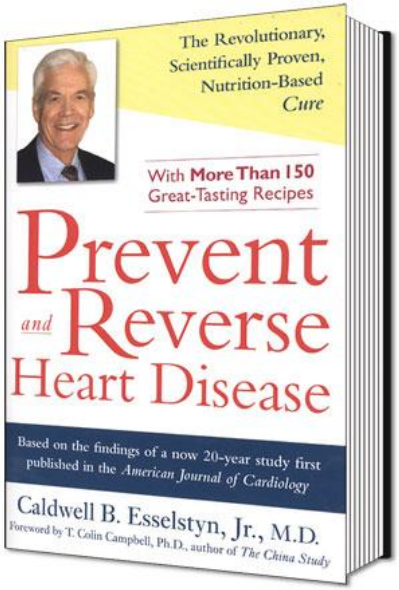


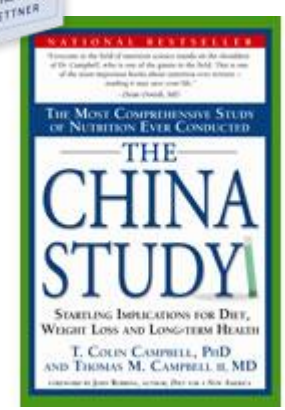


Preventive Medicine
ACADEMIC PRES

JOEM Journal of Occupational Environmental Medic

The New York Academy of Medicine
At the heart of urban health since 1847





CHIP Lifestyle Program at Vanderbilt University Demonstrates an Early ROI for a Diabetic Cohort in a Workplace Setting: A Case Study

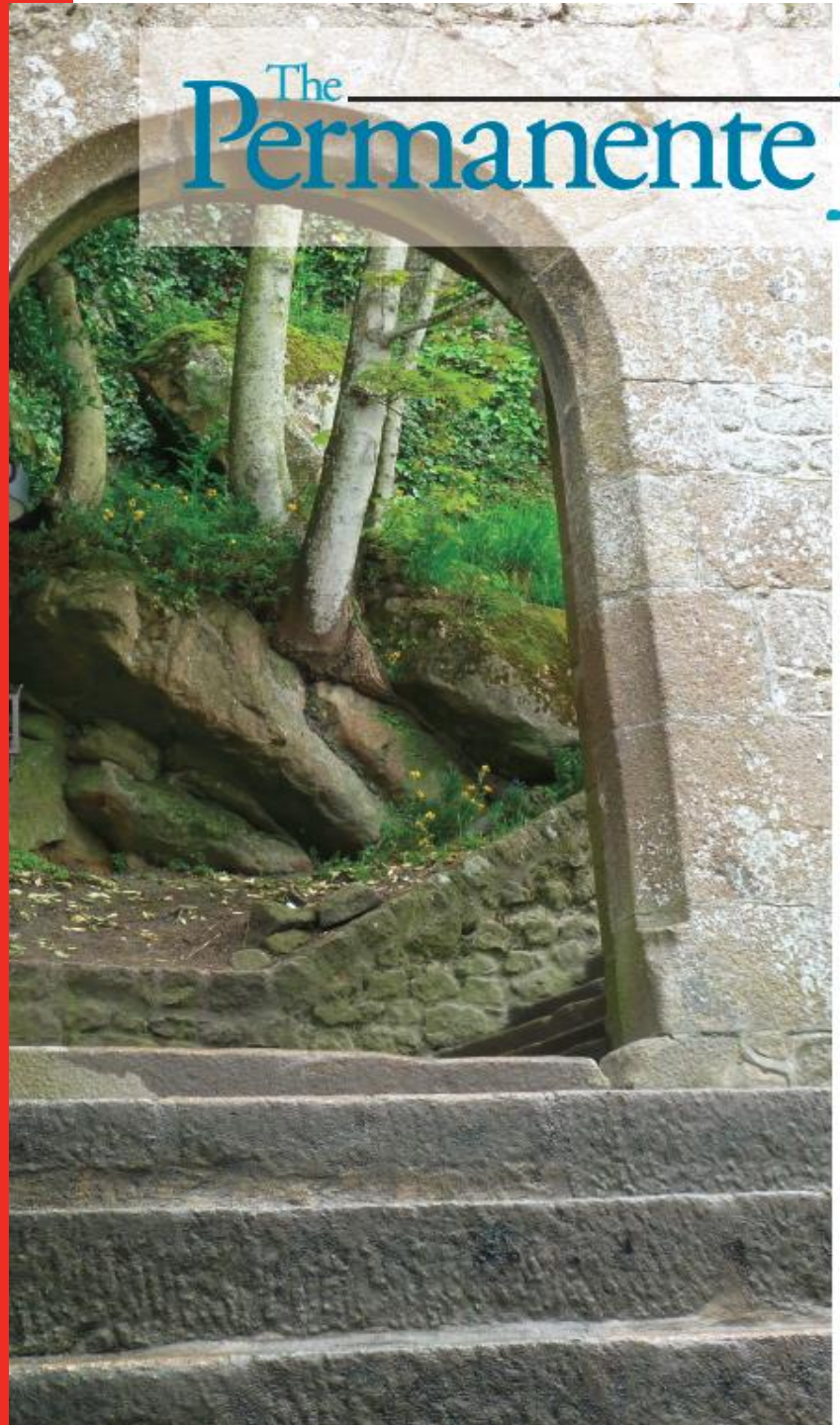
Dexter Shurney, MD, MBA, MPH; Sandra Hyde, MSPS; Kristina Hulsey, MSPS; Roy Elam, MD; Abby Cooper, MHIM; Jay Groves, EdD, MMHC

Summary

Several studies have found a strong dose-response relationship between most chronic diseases and lifestyle-related risk factors. This study examined the feasibility of a comprehensive, workplace-based, intensive lifestyle training program, to help type 2 diabetics alter the course of their disease within relatively short (6, 12 and 24-month) measurement windows. An additional purpose of this study was to determine whether health care cost savings could be achieved for the lifestyle group when compared to non-intervened type 2 diabetics within the same employer-sponsored health plan.

The Vanderbilt CHIP study measured participants' pre- and post-intervention health care costs (total medical and prescription drug) and health services utilization on a year-over-year (YOY) basis, and compared them with the costs and utilization of the other (non-intervened) diabetics of the plan. Biometric and lab data were collected at the beginning and end of the program and six months after the study's conclusion to document immediate and long-term changes in health outcomes and health risk behaviors.

Our six-month findings provide evidence that educating a member population about the benefits of a plant-based, whole-foods diet is feasible and can reduce associated health care costs.



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61 Nutritional Update for Physicians: Plant-Based Diets

www.thepermanentejournal.org

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Special Report

61 **Nutritional Update for Physicians: Plant-Based Diets.** Philip J Tuso, MD; Mohamed H Ismail, MD; Benjamin P Ha, MD; Carole Bartolotto, MA, RD

CME

Physicians are becoming more involved in helping their patients adopt healthier lifestyles. Healthy eating may be best achieved with a plant-based diet (which encourages whole, plant-based foods and discourages meats, dairy products, and eggs as well as all refined and processed foods). Research shows that these diets

are cost-effective, low-risk interventions that may lower body mass index, blood pressure, HbA_{1C}, and cholesterol levels, and may also reduce the number of medications needed to treat chronic diseases.

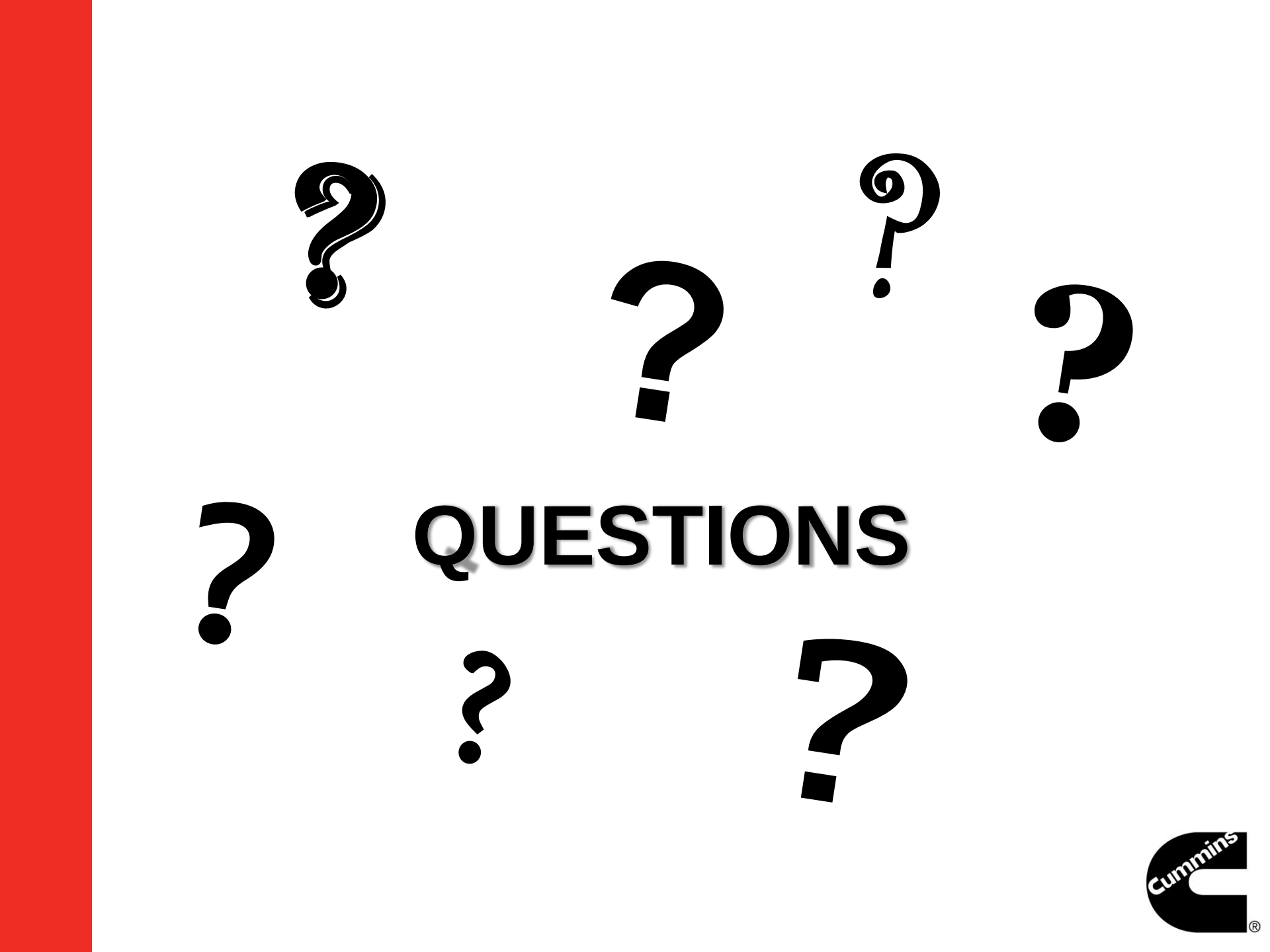
“Knowledge is power.

Lack of knowledge results in lack of power.”

And…

A lot of wasted effort doing the wrong things

De-Motivation


QUESTIONS