



GLOBAL WELLNESS
SUMMIT 2017



The Transformative Power of Lifestyle Medicine

Dr. Dean Ornish, Founder & President, Preventive Medicine
Research Institute, U.S.

A photograph of three people on a rocky shore at sunset. One person is running, while two others stand nearby. The scene is silhouetted against a bright, low sun. A semi-transparent blue rectangle is overlaid on the bottom half of the image, containing the title and speaker information.

The Transformative Power of Lifestyle Medicine

Dean Ornish, M.D.

Founder & President
Preventive Medicine Research Institute
Clinical Professor of Medicine
University of California, San Francisco

Lifestyle Medicine=
lifestyle to reverse disease
as well as prevent it.

Transformative Power of Lifestyle Medicine



- Whole foods plant-based diet naturally low in fat & refined carbohydrates
- Stress management
- Moderate exercise
- Psychosocial support



EAT WELL



MOVE MORE



STRESS LESS



LOVE MORE

What is
the **cause**?



Your body often has a remarkable capacity to begin healing itself if you give it a chance to do so—
and **quickly**.

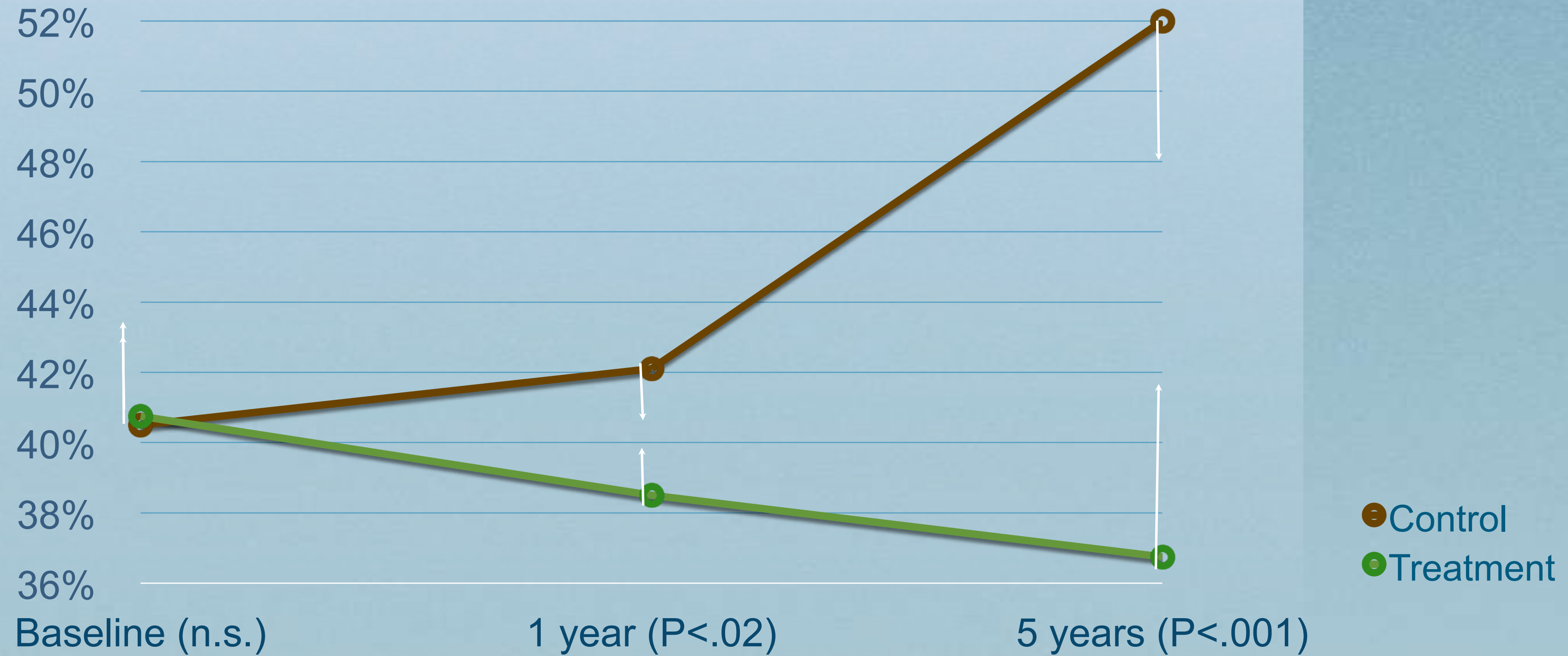
Impossible

Disruptive

Can Lifestyle Changes Reverse Heart Disease?

Lifestyle Heart Trial

% Diameter Stenosis: Quantitative Coronary Arteriography



There was a 400%
improvement in coronary
blood measured by cardiac
PET scans after 5 years.

--Gould KL, Ornish D, et al. *JAMA*. 1995;274:894-901.

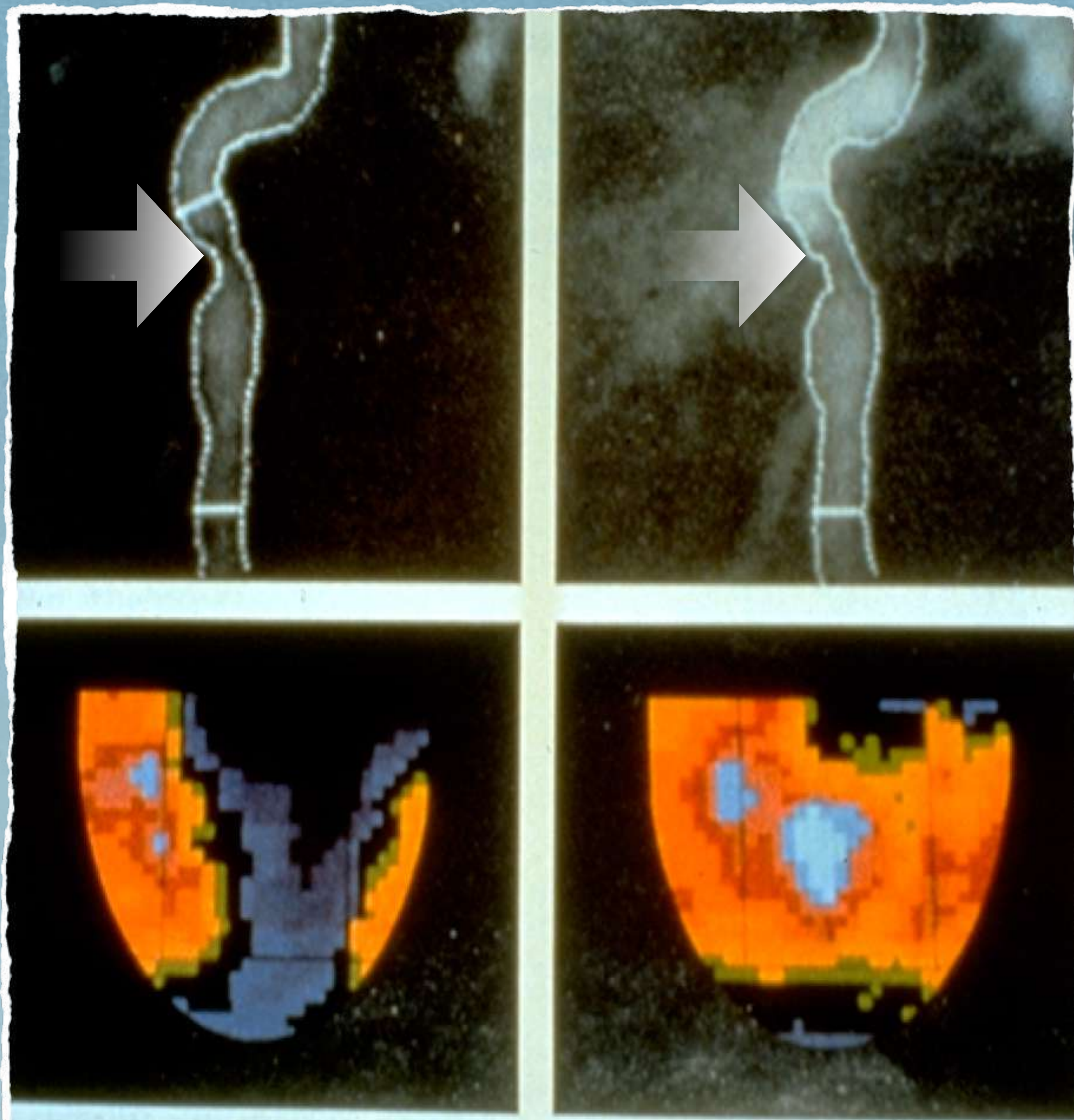
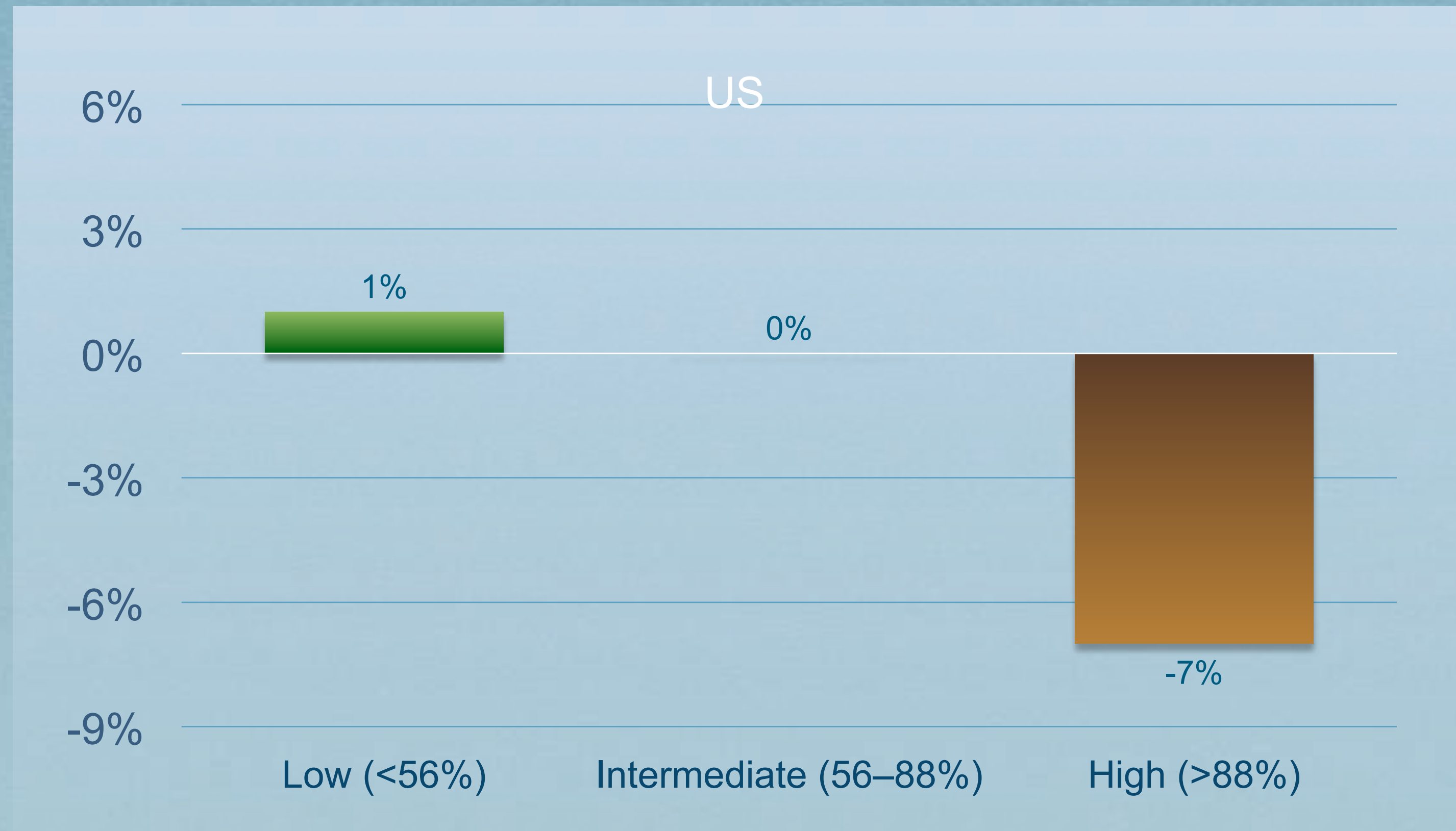


Figure 2. Quantitative coronary angiograms and cardiac PET scans obtained

99% of patients stopped or reversed their heart disease as measured by cardiac PET scans after 5 years. In contrast, only 5% of controls improved ($p = 0.03$).

--Gould KL, Ornish D, et al. *JAMA*. 1995;274:894-901.

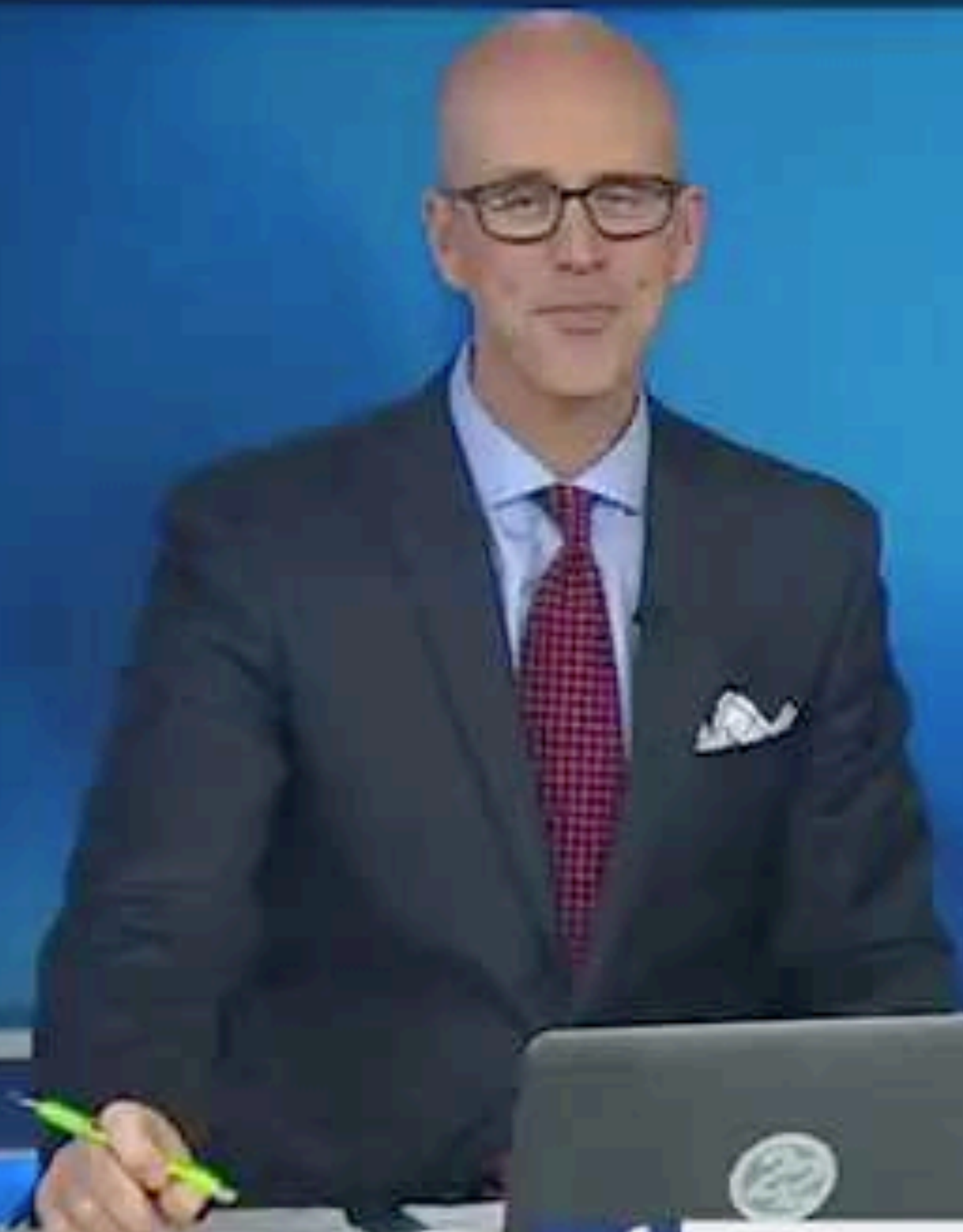
Adherence and Change in Coronary Atherosclerosis after Five Years



Ornish D et al. JAMA. 1998;280:2001

Lifestyle Heart Trial

- There were 2.5 times as many cardiac events in the randomized control group as in the lifestyle group after five years.



f Bob Montgomery WSBT

f Leanne Tokars WSBT



BOB MONTGOMERY

LEANNE TOKARS

6:44 40° ELKHART 9AM 45° | NOON 57° | 3PM 61°

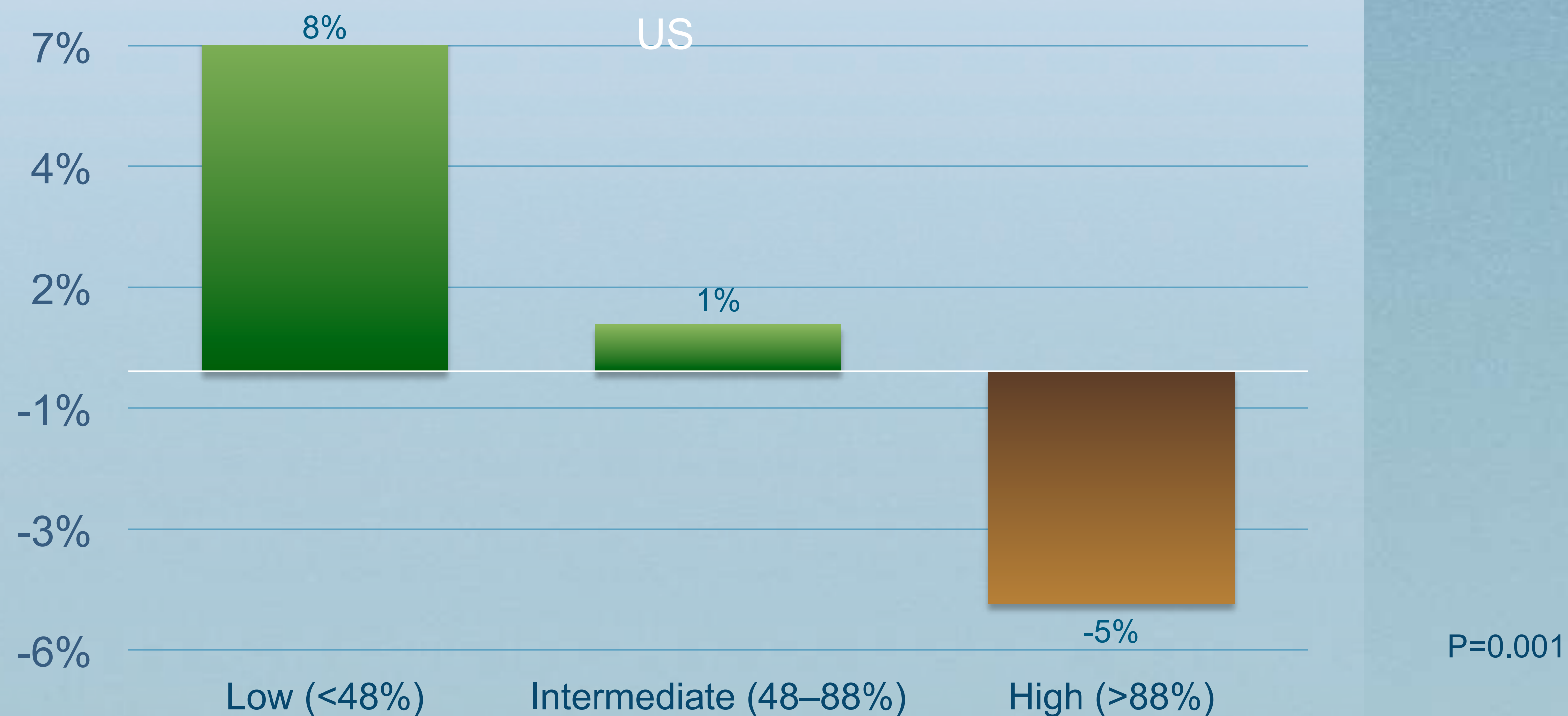
The “Ornish diet” was rated “#1 for heart health” by a panel of independent experts convened by *U.S. News & World Report* in 2011, 2012, 2013, 2014, 2015, 2016, 2017.

Can Lifestyle
Changes Reverse
Prostate Cancer?

Changes in PSA

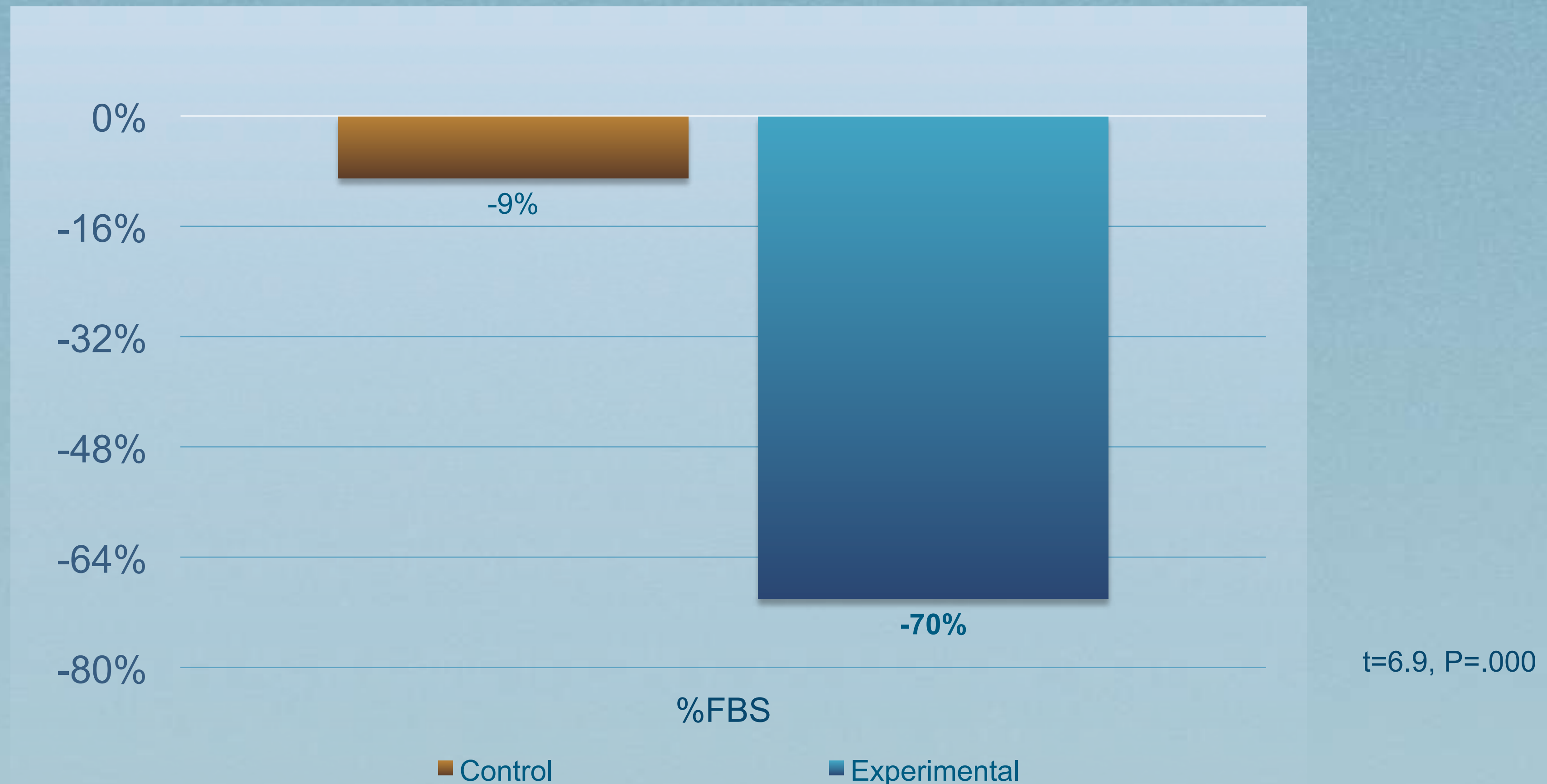


Degree of Lifestyle Change and Changes in PSA

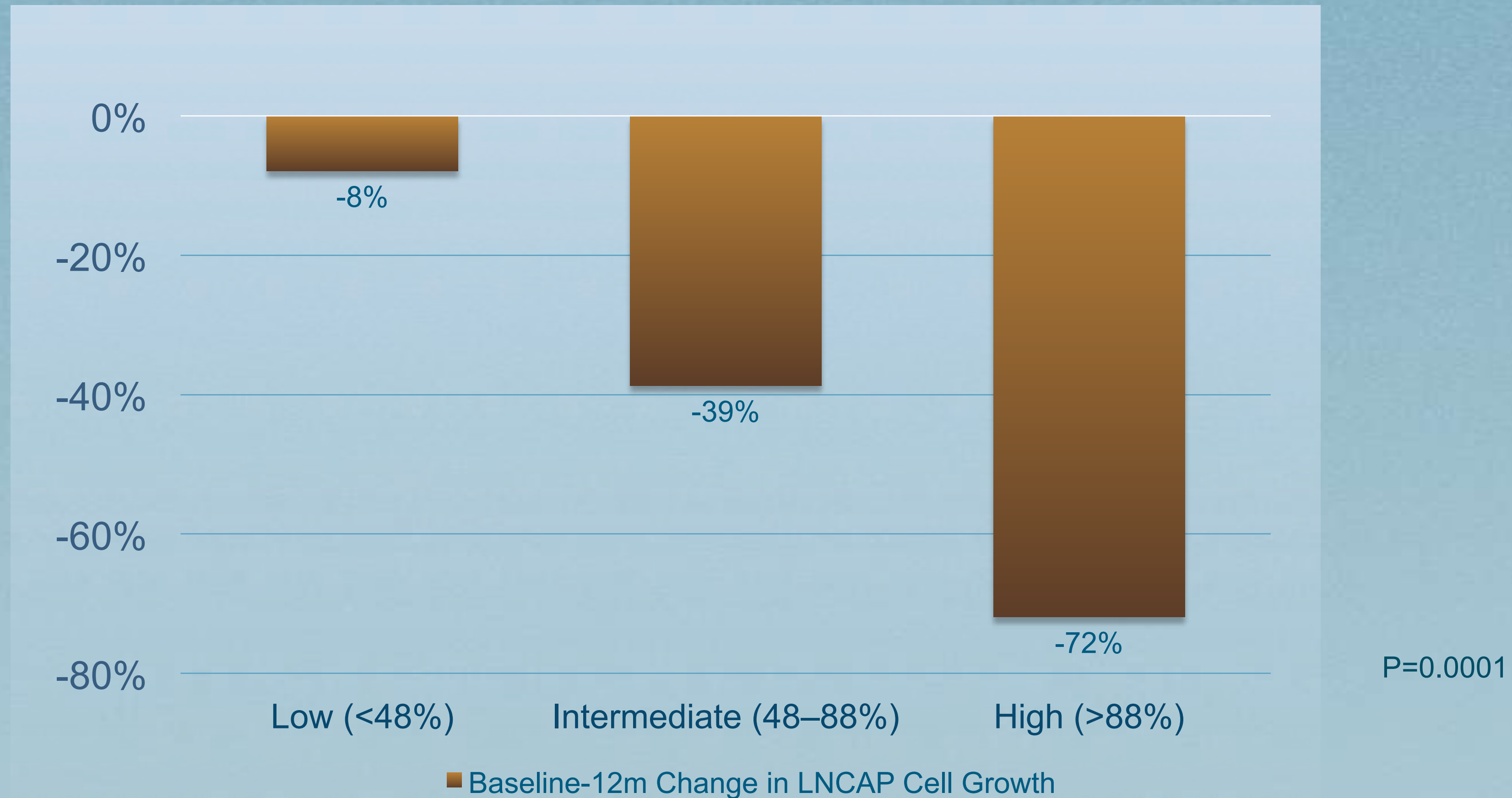


Ornish D et al. Journal of Urology. 2005;174:1065

Change in Prostate Tumor Growth (LNCaP)



Degree of Lifestyle Change and Inhibition of LNCaP Tumor Growth





Baseline
PSA—6.4 ng/ml



1 year later
PSA—4.5 ng/ml

None of the experimental group patients but six control group patients had conventional treatment during the first year.

Ornish D et al. Journal of Urology. 2005;174:1065

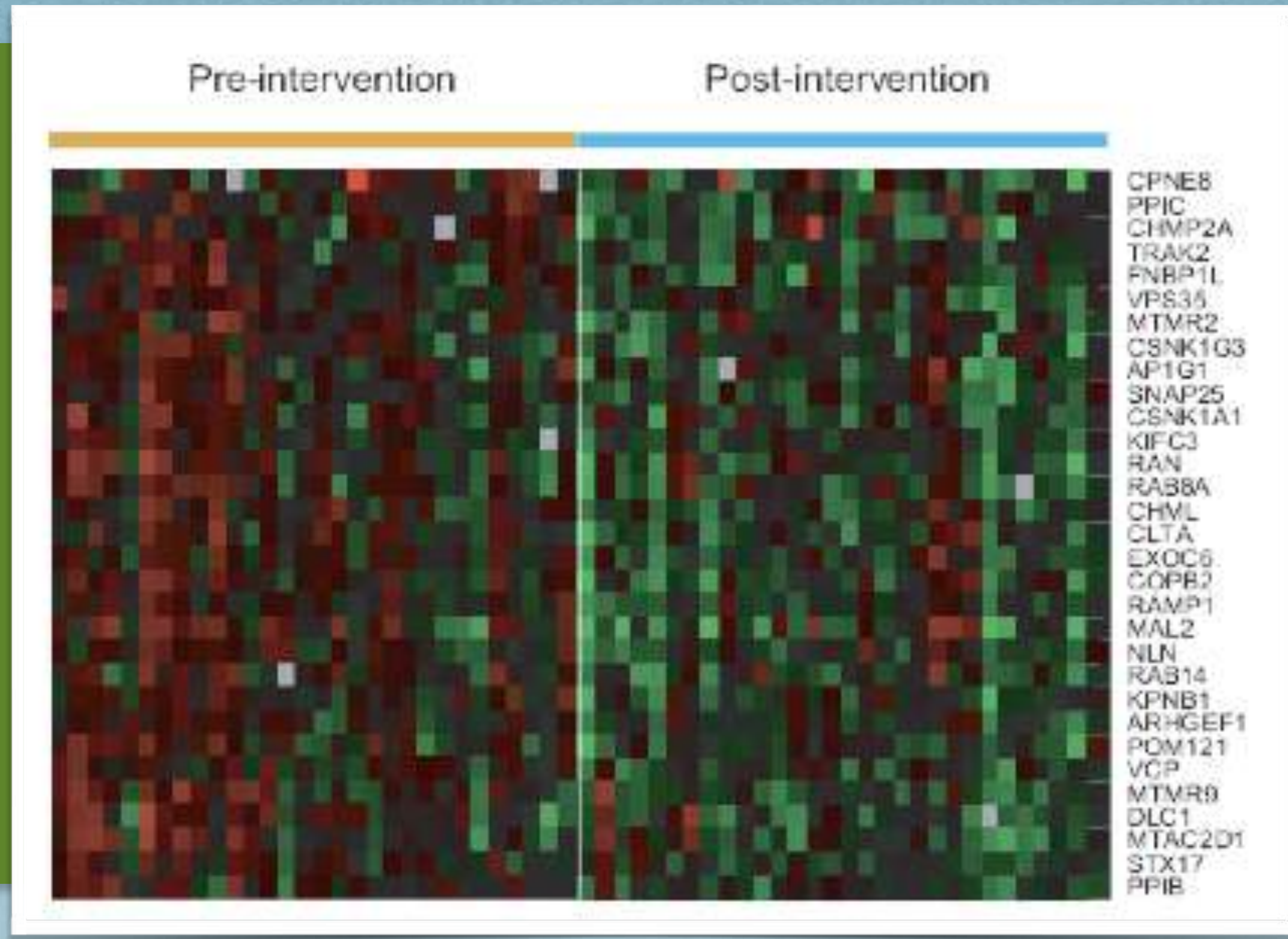
A man with dark, curly hair and a beard is smiling broadly while sitting at a wooden table. He is wearing a dark brown t-shirt and is using a yellow-handled spoon to eat from a white bowl of cereal. On the table, there is also a white mug, a bag of flour, and a large white jug of milk. In the background, a wooden window frame is visible, and a shopping list is pinned to the wall. The list includes items like 'Chives', 'Mint', 'Melon', 'Mango', 'Eggs', 'Lemon', 'Rund', 'Salad', and 'Evos'. There is also a section with 'Sal.', 'C.M.', 'Can', 'MA', and 'VE' with some boxes checked or marked. The scene is brightly lit, suggesting a sunny day.

can lifestyle changes
beneficially affect
gene expression?

Gene expression in 501
genes was beneficially
affected in only 3 months

Ornish et al. Proc Nat Acad Sci USA 2008; 105: 8369.

Oncogenes that promote prostate cancer, breast cancer, and colon cancer were downregulated (turned off).



change in genes linked with breast cancer and prostate cancer (red = turned on green = turned off)

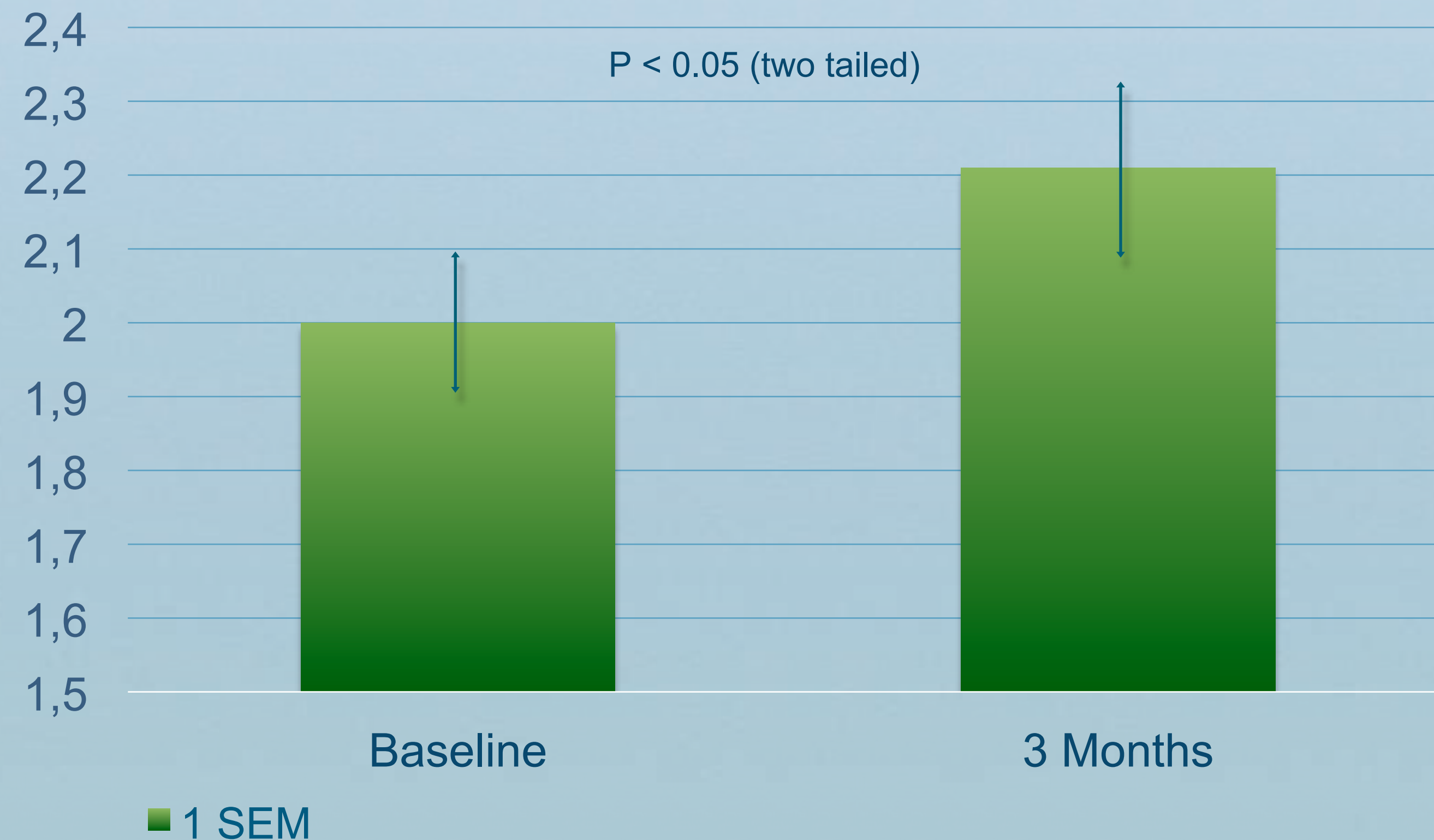
Ornish et al. *Proc Nat Acad Sci USA* 2008; 105: 8369.

Our Genes Are
Not Our Fate

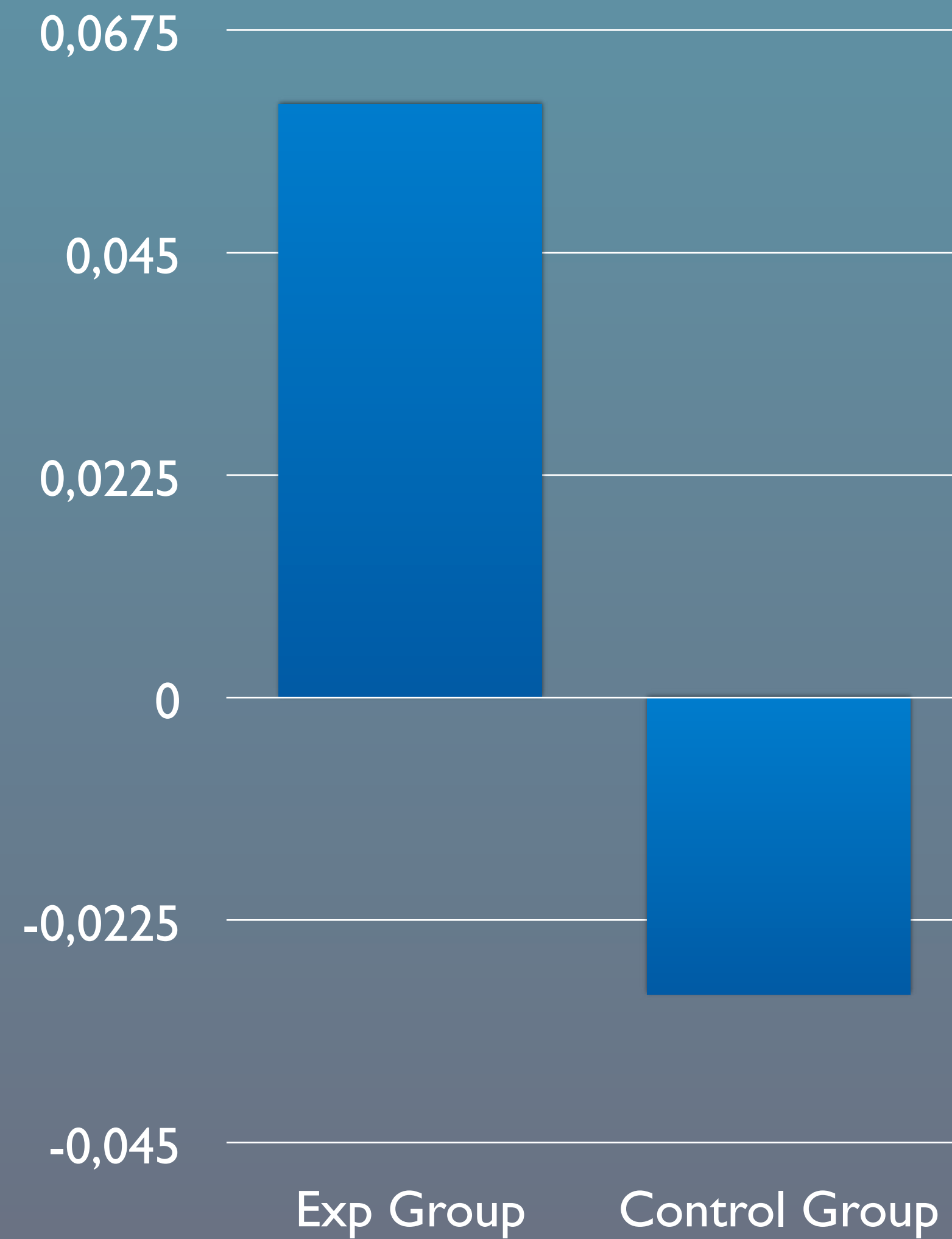
Can Lifestyle Changes Reverse Cellular Aging?

Telomerase increased 30% in only 3 months

Telomerase Activity (Ln)



Mean Changes in Telomere Length After 5 Years



$p < 0.004$

There was a significant correlation between adherence and telomere length ($p < 0.007$)

Ornish D et al. *Lancet Oncology* 2013.

The more chronic diseases and
the more mechanisms we studied,
the more benefits we
documented.

Same diet and lifestyle
program for all of these
improvements.

Shared Underlying Mechanisms

- Chronic inflammation
- Oxidative stress
- Apoptosis
- Angiogenesis
- Gene expression
- Telomeres
- Immune system

What enables people
to make sustainable
changes in their lives?

Risk factor
modification =
fear-based

Fear is not a
sustainable
motivator

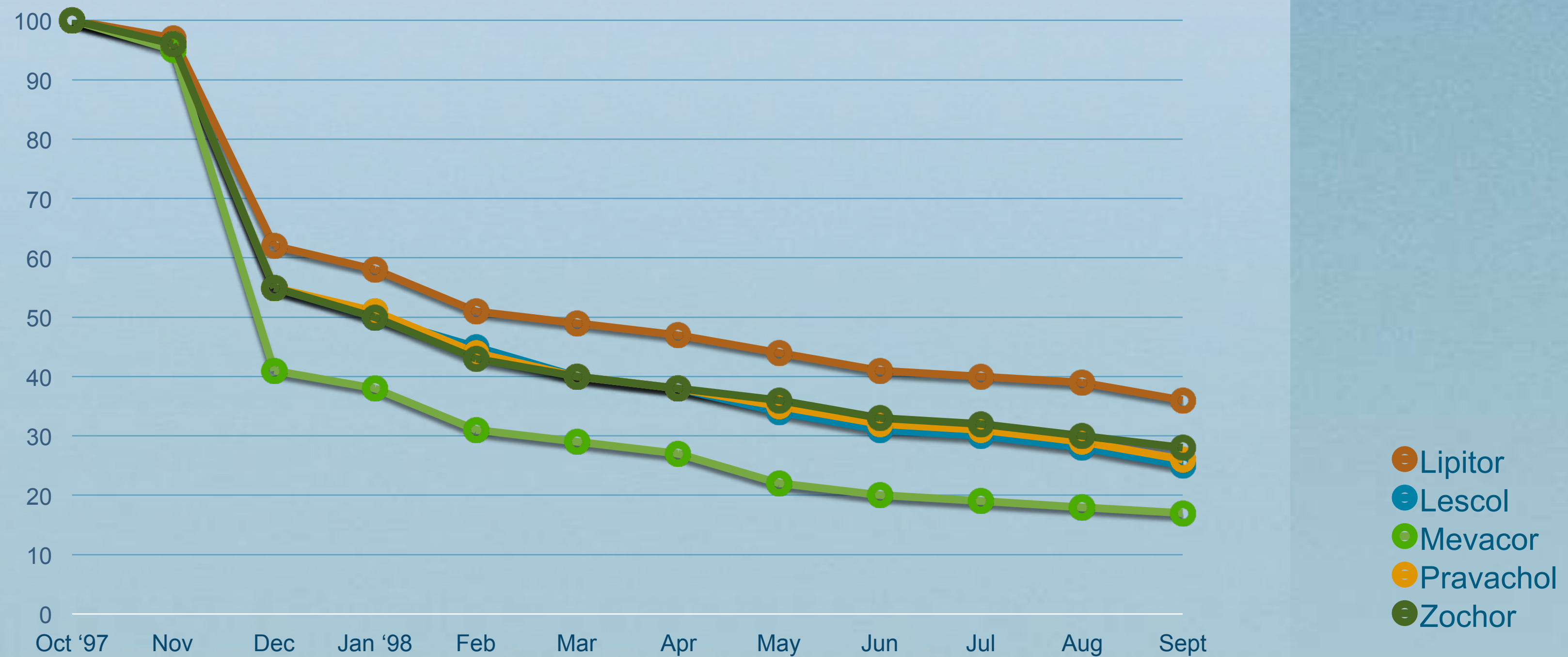


Fun, freedom,
pleasure, & love

Love is more
powerful than fear

Adherence to Statin Therapy

% of 37,000 New-to-Statin Patients Remaining on Therapy



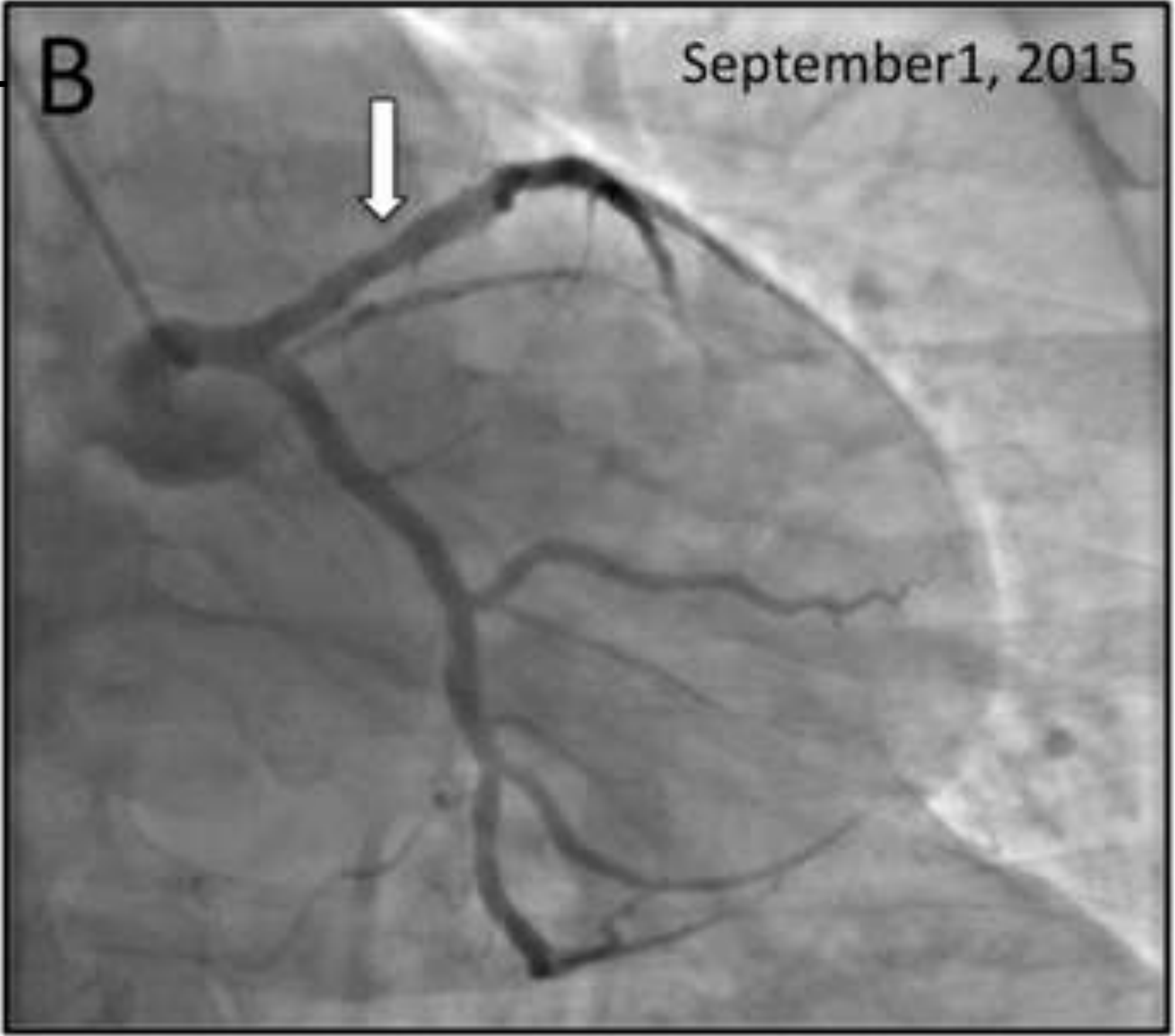
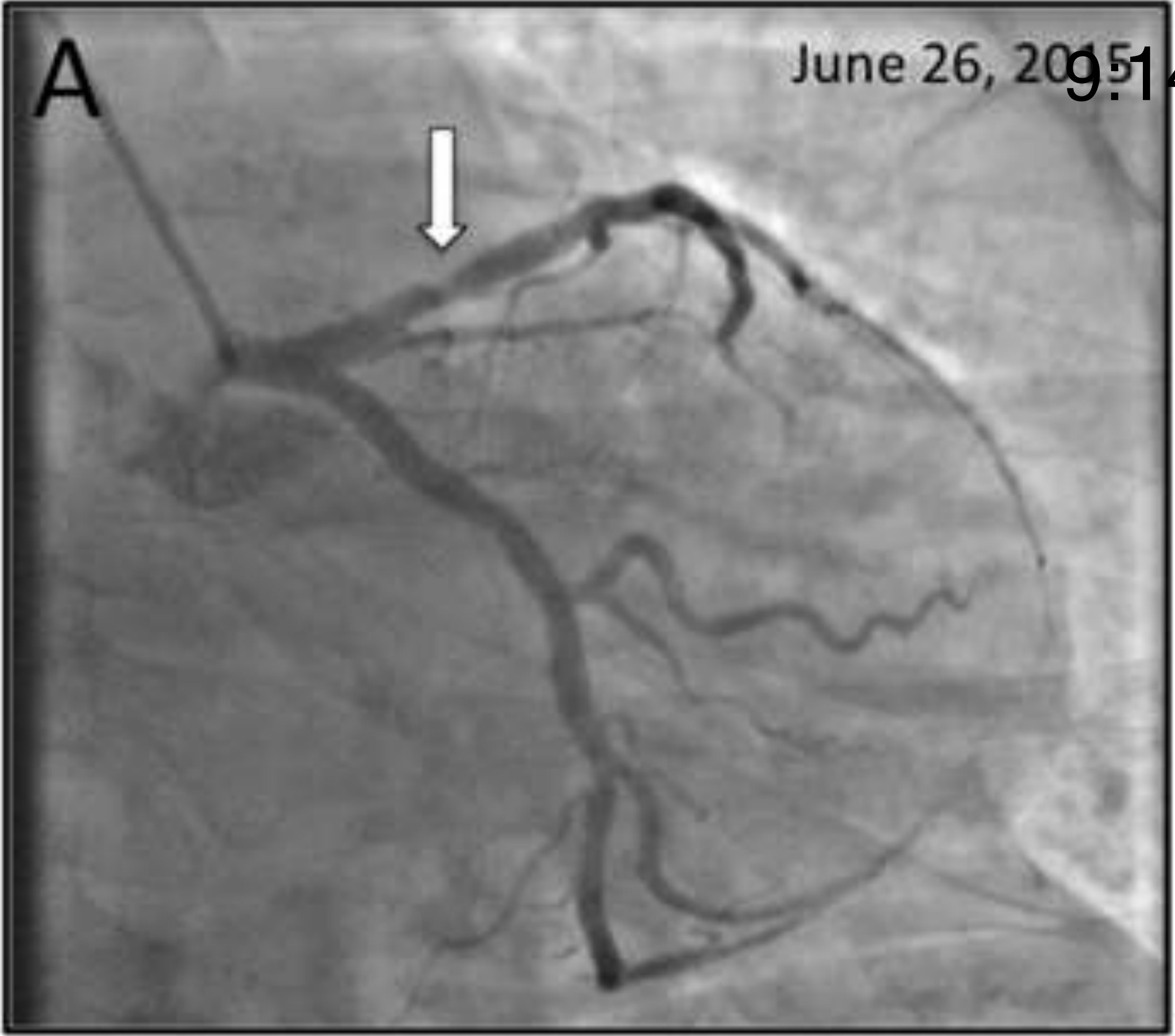
Source: NDC Health Information Services, 1998

- Adherence was 85-90% in 3,780 men and women at all sites after 1 year

When people feel loved and cared for,
they are more likely to make lifestyle
choices that are life-enhancing than
self-destructive.

Dynamic

There's no point in giving up something you enjoy unless you get something back that's even better—and quickly!



A photograph of a person sitting at a desk, working on a laptop. In the foreground, a single green apple sits on the desk. The background is slightly blurred, showing a home office environment. The text is overlaid on the image in white, bold, sans-serif font.

DO LIFESTYLE CHANGES SAVE MONEY?

A small blue arrow pointing towards the text.

multicenter lifestyle
demonstration projects

Lifestyle Medicine Saves Money Quickly

- 80% of U.S. total health care costs are due to 5% of the population.
- Therefore, this lifestyle medicine program shows substantial cost savings in the first year.

1 | The Multicenter Lifestyle Demonstration Project

- Almost 80% of 333 patients who were eligible for bypass surgery or angioplasty were able to safely avoid it by changing lifestyle

Ornish D. Avoiding revascularization with lifestyle changes: The Multicenter Lifestyle Demonstration Project. *American Journal of Cardiology*. 1998; 82: 72T–76T.

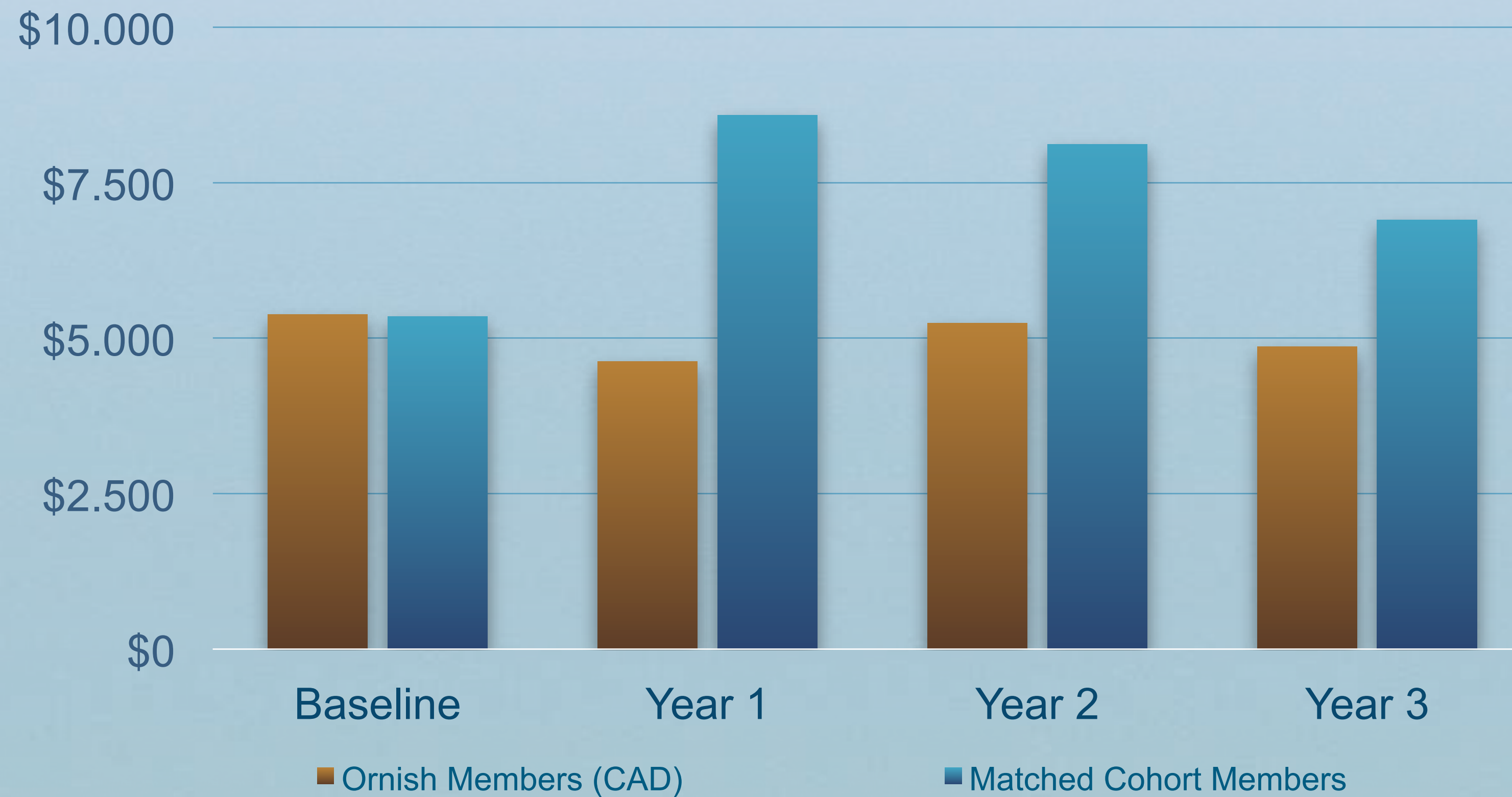
Koertge J, Weidner G, Elliott-Eller M, et al. Improvement in medical risk factors and quality of life in women and men with coronary artery disease in the Multicenter Lifestyle Demonstration Project. *American Journal of Cardiology*. 2003; 91: 1316–1322.

Mutual of Omaha calculated saving almost \$30,000 per patient in the first year.

2

The Highmark Blue Cross Blue Shield Demonstration Project: Cost Comparisons After 3 Years

Experimental Group (CAD) vs. Matched Cohort (CAD) Members Year by Year



Experimental Group (CAD) (N=75) Baseline vs. 3 year average=8.7% decrease in costs

Matched Cohort Members (CAD) (N=75) Baseline vs. 3 year average= 47.2% increase in costs

Highmark BCBS High Cost Study

In the year after entering our lifestyle program, there was a **400% reduction** in patients with claims costs greater than \$25,000 compared to matched controls

3 | Medicare

- On January 1, 2011, Medicare began covering “Dr. Ornish’s Program for Reversing Heart Disease,” the first time Medicare has covered a program of lifestyle changes as **treatment** in a new benefit category, “Intensive Cardiac Rehabilitation.”

We train a team of six health care professionals:

- Physician = Quarterback
- Nurse
- Stress management specialist
- Exercise physiologist
- Registered dietitian
- Clinical psychologist





Patients come for 18 four-hour sessions with 15 patients/class (twice/week for 9 weeks):

- 1 hour of supervised exercise
- 1 hour of stress management
- 1 hour of a support group
- 1 hour lecture + group meal

Or a 12-day immersion retreat (six hours/day x 12 days)





Patients come for 18 four-hour sessions with 15 patients per class.

Medicare reimburses \$107/hour/patient:

72 hours are reimbursed =

$72 \times \$107/\text{hour} = \underline{\$7,704/\text{patient}}$



Commercial carriers reimburse \$130/hr x72 hours = \$9,360/patient

15 patients/group x \$107/hr = \$1,605/hr

15 patients/group x \$130/hr = \$1,950/hr



If it's reimbursable,
then it's sustainable.

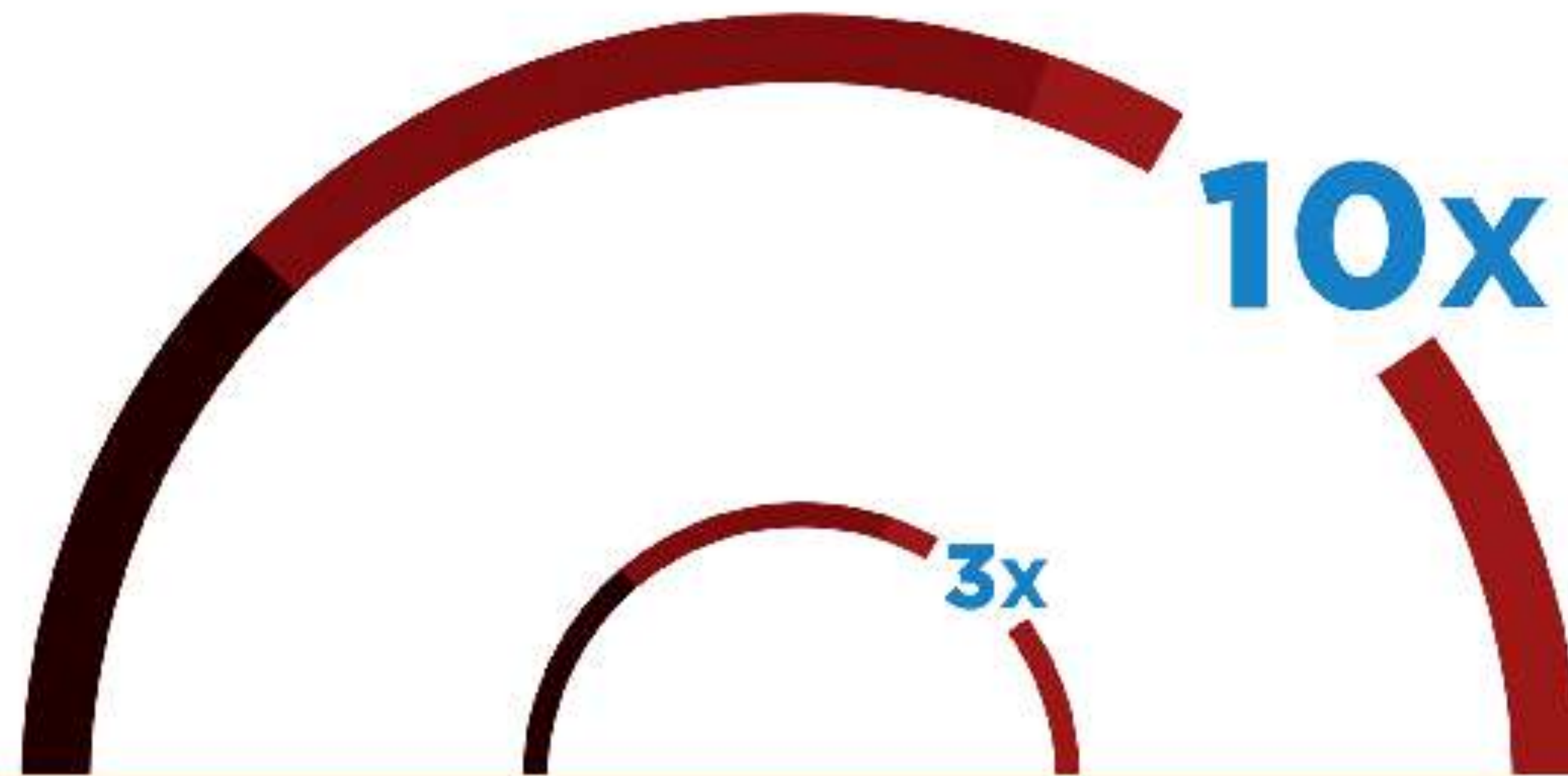
Reclaiming our role
as healers, not just
technicians

DANGER IN LONELINESS

ISOLATION AND
DEPRESSION

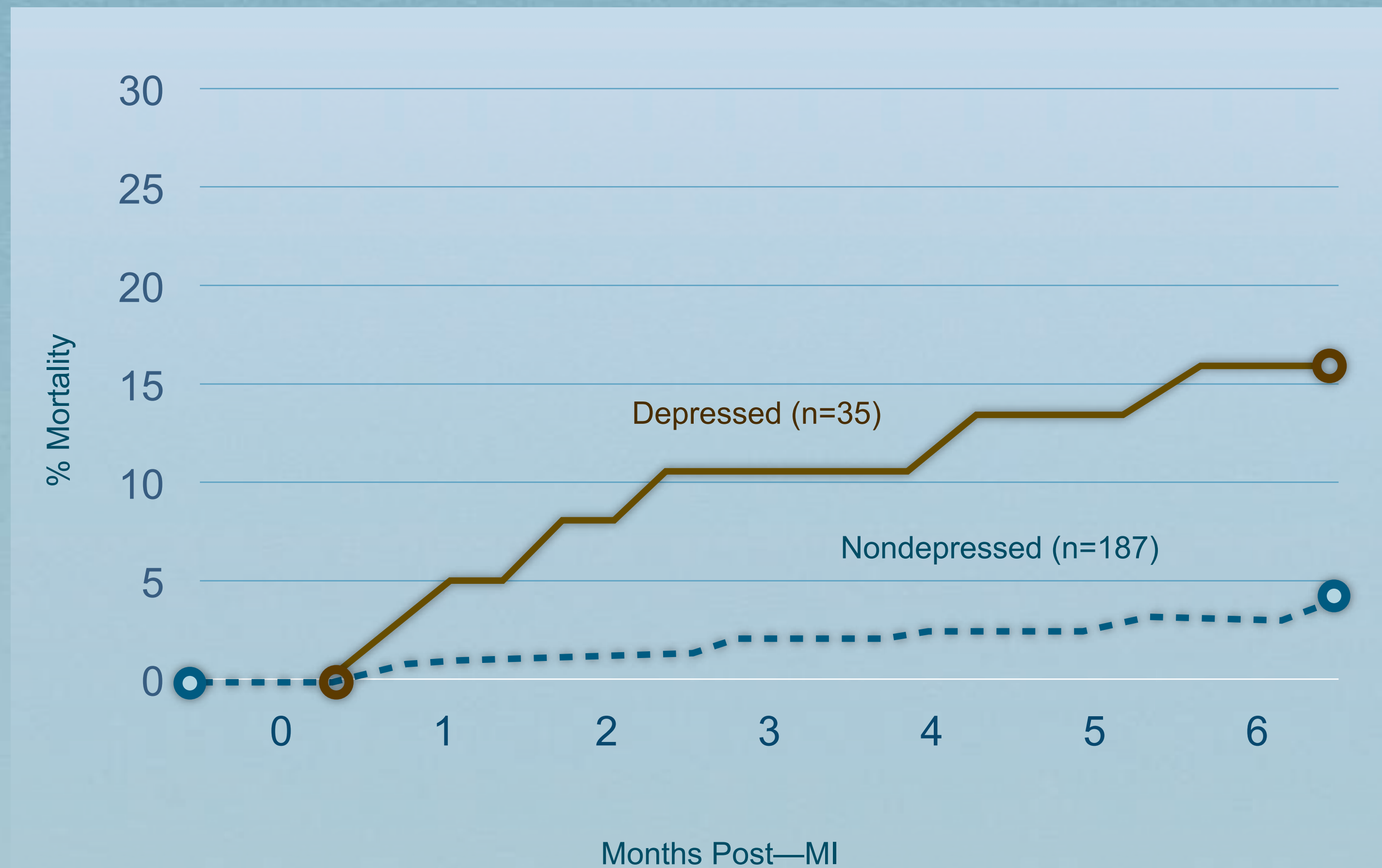


CHRONIC STRESS
AND HEART DISEASE



PEOPLE SUFFERING FROM LONELINESS, DEPRESSION
AND ISOLATION HAVE **3 TO 10** TIMES GREATER RISK
FOR PREMATURE DEATH

Depression and Mortality 6 months After a Heart Attack



INTIMACY IS HEALING

YOU CAN ONLY BE **INTIMATE** TO THE DEGREE THAT YOU CAN BE **EMOTIONALLY VULNERABLE**, AND YOU CAN ONLY BE VULNERABLE TO THE DEGREE THAT YOU FEEL **SAFE**.

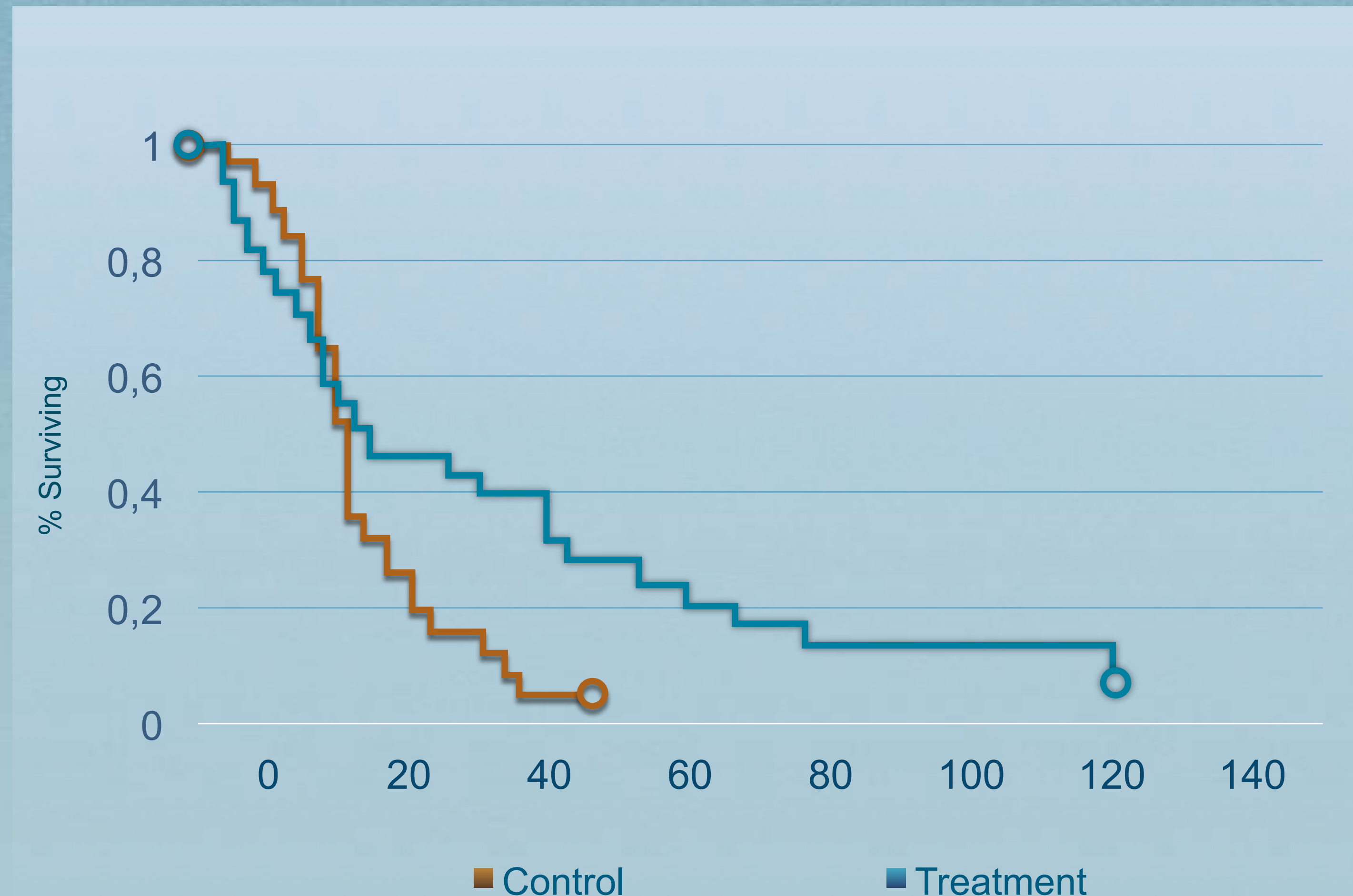
GROUP SUPPORT IS A

Safe

ENVIRONMENT FOR YOU



Support Groups DOUBLED Survival in Breast Cancer



Trust→

Intimacy→

Healing & Meaning

Social Networks & Health

- If your friends are obese, your risk of obesity is 45% higher
- If your friend's friends are obese, your risk of obesity is 25% higher
- If your friend's friend's friend is obese, your risk is 10% higher—even if you've never met them

“**Why** do you want
to live longer?”

If it's meaningful,
it's sustainable

“I feel deprived because I can't eat this food” is not sustainable.

“I’m choosing not to eat this because what I gain is much more than what I give up” is sustainable.

Choosing **not** to do something
imbues it with deep meaning &
purpose, making it **sacred**

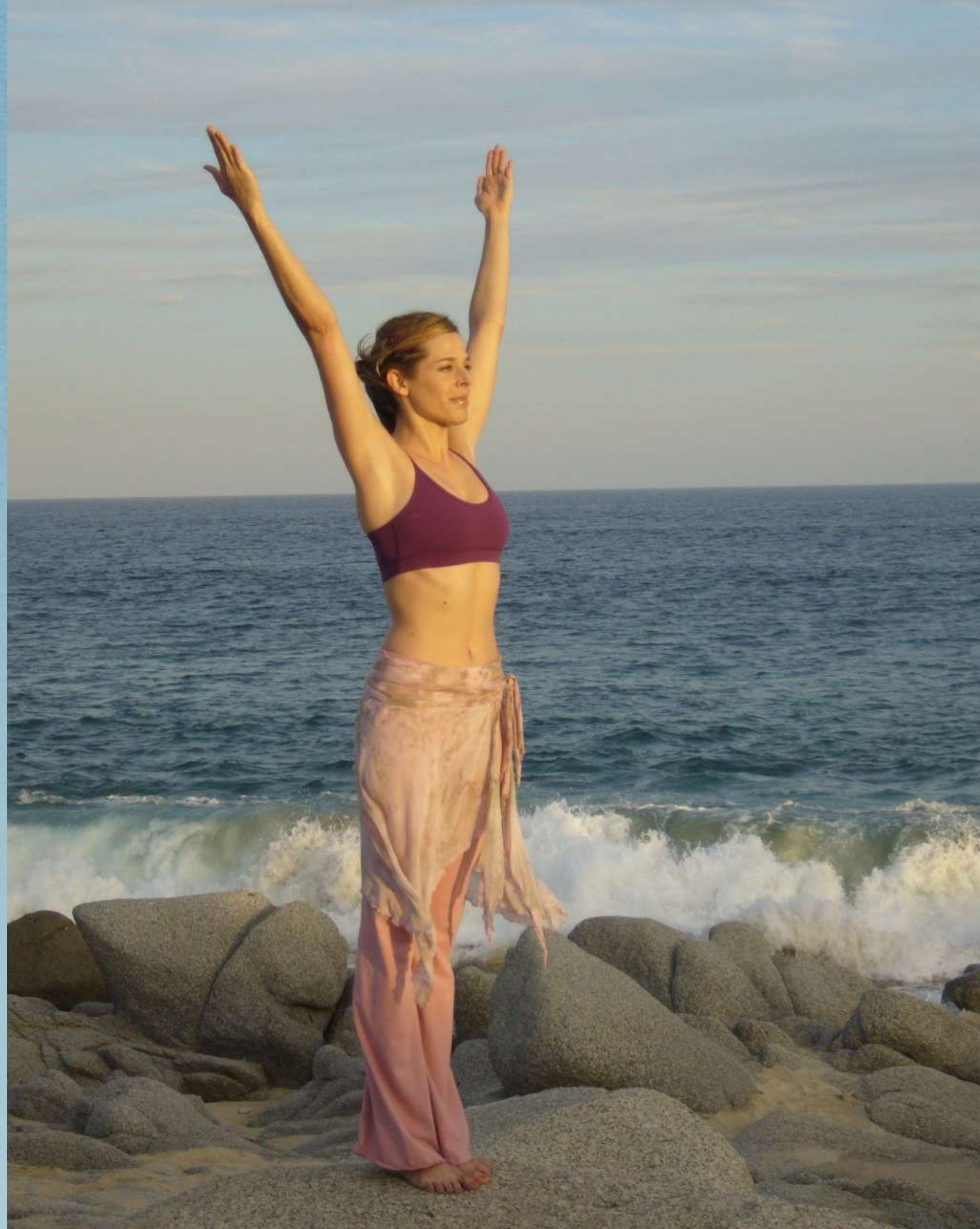
SACRED =

- the most meaningful
- the most intimate
- the most erotic
- the most exciting
- the most powerful
- the most fun
- the most ecstatic

Dis-ease

De-fine

Lifestyle Medicine and
Wellness = Spiritual Journey
and Conspiracy of Love



Doing this sacred work to help people use the experience of illness and suffering as a doorway for transforming and healing their lives in the most meaningful ways—for them and for each of us.



ornish
lifestyle medicine

www.ornish.com







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