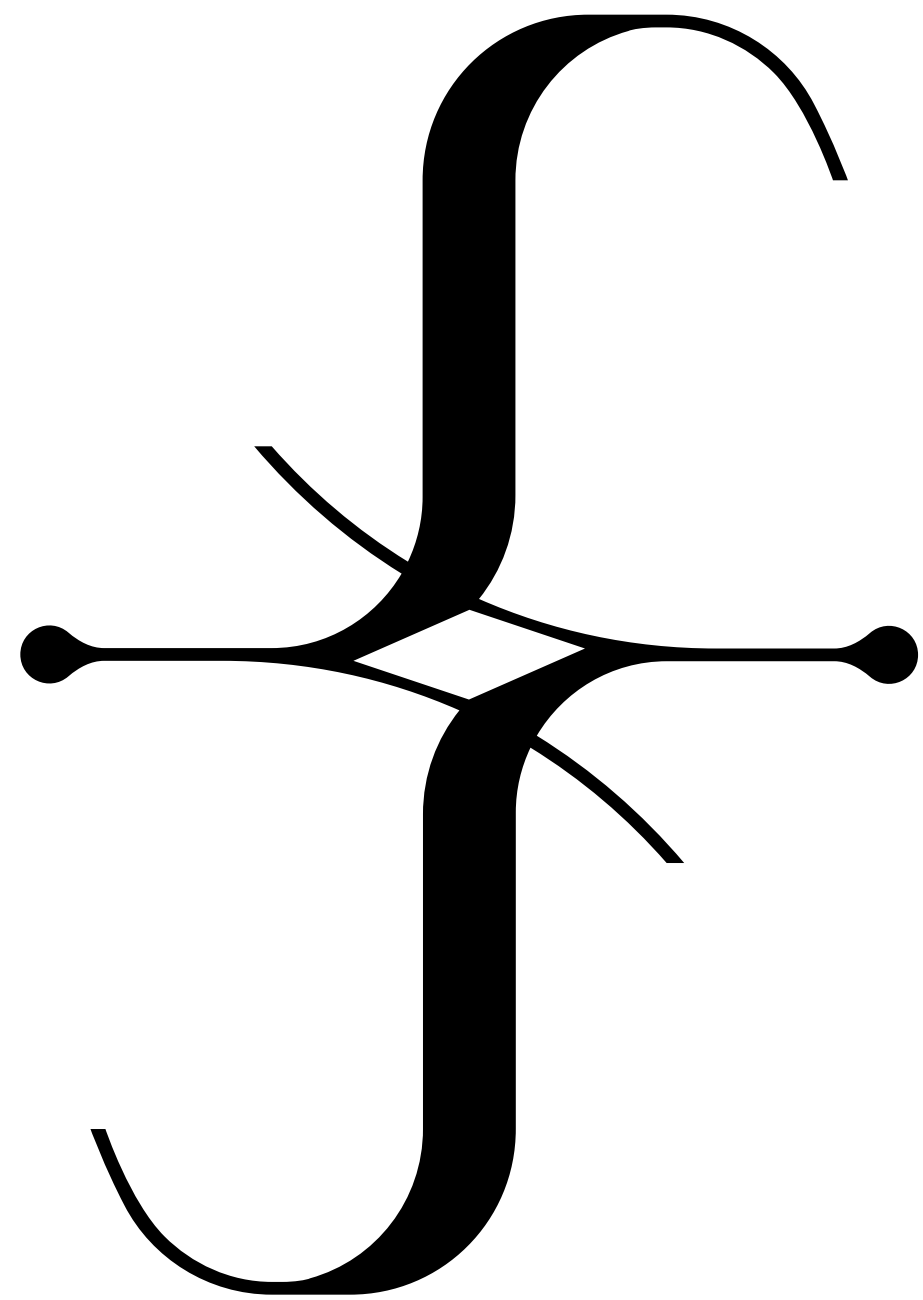


Who Wants to Live Forever? — The science & Art of (Eu)Longevity



DR. KALLIOPI KALAITZI

Who Wants to Live Forever?



Αιώνια Νιότη



1 στις 20.000

Η Πιθανότητα
να Ξεπεράσουμε
τα 100 Χρόνια

1 στις 50

Για τις Γυναίκες
σε Χώρες όπως
η Σουηδία και η Ιαπωνία

↳ Το προσδόκιμο ζωής έχει διπλασιαστεί από το 1900 από τα 32 χρόνια στα 71.

↳ Τα μισά 5χρονα παιδιά σήμερα στις ΗΠΑ θα ξεπεράσουν τα 100.

2010 - 2050

Παγκοσμίως οι άνθρωποι

↳ πάνω από 60 θα 2πλασιαστούν

↳ πάνω από 80 θα 3πλασιαστούν

↳ πάνω από 100 θα 10πλασιαστούν

Ζούμε περισσότερο
Ζούμε και καλύτερα;

Healthspan *Lifespan*

VS

Longevity *Eu*Longevity

VS

Determinants of Overall Health

We Can Do Better —
Improving the Health
of the American People,
The New England Journal
of Medicine,
September 2007

↳ Genetics
30%

↳ Environmental Factors
5%

↳ Health Care
10%

↳ Social Circumstance
15%

↳ Individual Behavior
40%



Lifestyle As a Predictor of Longevity

Impact of Healthy Lifestyle Factors on Life Expectancies in the US Population

Yanping Li, PhD^{1,*}, An Pan, PhD^{2,*}, Dong D. Wang, PhD¹, Xiaoran Liu, PhD¹, Klodian Dhana, PhD^{1,3}, Oscar H. Franco, PhD³, Stephen Kaptoge, PhD⁴, Emanuele Di Angelantonio, MD^{4,5,6}, Meir Stampfer, MD, DrPH^{1,7,8}, Walter C. Willett, MD, DrPH^{1,7,8}, and Frank B. Hu, MD, PhD^{1,7,8}

34y Follow-Up-Hrs
Adults With 5
Compared to Zero

All-Cause Mortality
↳ 0.26 (0.22-0.31)
↳ PAR: 60.7%

Cancer Mortality
↳ 0.35 (0.27-0.45)
↳ PAR: 51.7%

CVD Mortality
↳ 0.18 (0.12-0.26)
↳ PAR: 71.7%

Life Expetancy at 50 Years-Old
Depending to Adhearence
to This 5 Items

Zero
↳ Women +29.0 Years
↳ Men +25.5 Years

All 5 Items
↳ Women +43.1 Years
↳ Men +37.6 Years

CVD Mortality
↳ 0.18 (0.12-0.26)
↳ PAR: 71.7%

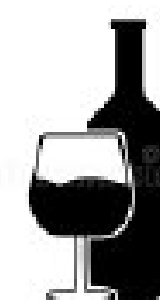
HLS
(0-5) Points



BMI 18.5-22.9m²



Never Smoking



Moderate Consumption
of Alcohol 5-14.9 g/day



Healthy Dietary Patterns
Upper 40%



+30 min/day
MVPA

World Health Organization

- ↳ 40 Million Of the 56 Million of deaths in 2015 Were Due to NCD's
- ↳ 80% of Premature Heart Disease Stroke and Diabetes Can Be Prevented



Τι Δεν Είναι η Lifestyle Medicine

- ↳ Δεν είναι Complementary Medicine
- ↳ Δεν είναι Integrative Medicine
- ↳ Δεν είναι Alternative Medicine
- ↳ Δεν είναι Mind Body Medicine
- ↳ Δεν είναι Functional Medicine

Τι Είναι η Lifestyle Medicine

4. ΚΛΙΝΙΚΕΣ ΠΛΗΡΟΦΟΡΙΕΣ

4.1 Θεραπευτικές ενδείξεις

Το **Olartan-Plus** ενδείκνυται για τη θεραπεία ενηλίκων ασθενών ηλικίας 18 ετών και άνω με σακχαρώδη διαβήτη τύπου 2:

- ως συμπληρωματική θεραπεία στη διαίτα και την άσκηση για τη βελτίωση του γλυκαιμικού ελέγχου σε ενήλικες ασθενείς που δεν ρυθμίζονται επαρκώς με τη μέγιστη ανεκτή για αυτούς δόση μετφορμίνης μόνο ή σε εκείνους που υποβάλλονται ήδη σε θεραπεία με τον συνδυασμό αλογλιπτίνης και μετφορμίνης.
- σε συνδυασμό με πιογλιταζόνη (δηλ. θεραπεία τριπλού συνδυασμού) ως συμπληρωματική θεραπεία στη διαίτα και την άσκηση σε ενήλικες ασθενείς οι οποίοι δεν ελέγχονται επαρκώς με τη μέγιστη ανεκτή για αυτούς δόση μετφορμίνης και πιογλιταζόνης.
- σε συνδυασμό με ινσουλίνη (δηλ. θεραπεία τριπλού συνδυασμού) ως συμπληρωματική θεραπεία στη διαίτα και την άσκηση για τη βελτίωση του γλυκαιμικού ελέγχου σε ασθενείς όταν η ινσουλίνη σε σταθερή δόση και η μετφορμίνη μόνο δεν παρέχουν επαρκή γλυκαιμικό έλεγχο.

1. Τι είναι το **Olartan-Plus** και ποια είναι η χρήση του

Το **Olartan-Plus** ανήκει σε μια ομάδα φαρμάκων γνωστή ως στατίνες, που είναι ρυθμιστικά φάρμακα των λιπιδίων.

Το **Olartan-Plus** χρησιμοποιείται για την μείωση των λιπιδίων στο αίμα, γνωστών ως χοληστερόλη και τριγλυκερίδια, όταν μια διατροφή χαμηλή σε λιπαρά και αλλαγές στον τρόπο ζωής έχουν αποτύχει. Εάν έχετε αυξημένο κίνδυνο καρδιοπάθειας, το **Olartan-Plus** μπορεί επίσης να χρησιμοποιηθεί για την μείωση αυτού του κινδύνου ακόμα και αν τα επίπεδα χοληστερόλης σας είναι φυσιολογικά. Θα πρέπει να διατηρήσετε μια διαίτα για τη μείωση της χοληστερόλης κατά την διάρκεια της θεραπείας.

1. Τι είναι το **Olartan-Plus** και ποια είναι η χρήση του

Το **Olartan-Plus** περιέχει δύο ουσίες που ονομάζονται olmesartan medoxomil και υδροχλωροθειαζίδη, οι οποίες χρησιμοποιούνται για τη θεραπεία των υψηλών επιπέδων της αρτηριακής πίεσης (υπέρταση).

- Η **Olmesartan medoxomil** ανήκει σε μία ομάδα φαρμάκων που ονομάζεται “ανταγωνιστές των υποδοχέων της αγγειοτενσίνης II ” η οποία μειώνει την αρτηριακή πίεση μέσω χαλάρωσης των αιμοφόρων αγγείων.
- Η Υδροχλωροθειαζίδη ανήκει σε μία ομάδα ουσιών που ονομάζεται θειαζιδικά διουρητικά «δισκία νερού» Μειώνει την αρτηριακή πίεση βοηθώντας το σώμα να αποβάλει τα επιπλέον υγρά κάνοντας τους νεφρούς να παράγουν περισσότερα ούρα.

Θα σας χορηγηθεί Olartan-Plus εάν το Olartan (olmesartan medoxomil) μόνο του δεν ελέγχει επαρκώς την αρτηριακή πίεση. Όταν χορηγηθούν μαζί, οι δύο δραστικές ουσίες του Olartan-Plus βοηθούν περισσότερο στη μείωση της αρτηριακής πίεσης από ότι εάν χορηγηθούν ξεχωριστά.

Μπορεί ήδη να λαμβάνεται φάρμακα για τη μείωση της αρτηριακής πίεσης αλλά ο γιατρός θέλει να σας χορηγήσει Olartan-Plus για μεγαλύτερη μείωσή της.

Η υψηλή αρτηριακή πίεση μπορεί να ελεγχθεί με φάρμακα όπως το Olartan-Plus δισκία. Ο γιατρός σας πιθανόν να σας έχει ήδη προτείνει να κάνετε κάποιες αλλαγές στον τρόπο ζωής σας προκειμένου να βοηθήσετε στην μείωση της αρτηριακής πίεσης (για παράδειγμα απώλεια βάρους, διακοπή του καπνίσματος μείωση του αλκοόλ και μείωση της ποσότητας του αλατιού στη διατροφή σας). Ο γιατρός σας επίσης θα σας παροτρύνει να ασκήσετε τακτικά όπως με περπάτημα ή κολύμπι. Είναι πολύ σημαντικό να ακολουθήσετε τις συμβουλές του γιατρού σας.

Lifestyle Medicine — A new medical specialty?

Lifestyle medicine's adherents talk enthusiastically of fixing the broken medical model and saving the NHS. Does the launch of a new diploma and its introduction to the curriculum at medical schools such as Cambridge University signal its emergence as a standalone specialty—and what might its impact be?

“Not just nutrition”

The Lifestyle Medicine Global Alliance, which lists 16 regional members from around the world and runs online training,¹ defines lifestyle medicine as “an evidence based medical specialty” that uses “lifestyle therapeutic approaches” to prevent, treat, or modify non-communicable chronic disease²—the disease area that accounts for 71% of deaths worldwide.³

These approaches include “a predominantly whole food, plant based diet, regular physical activity, adequate sleep, stress management, avoidance of risky substance use, and other non-drug modalities.”²

“Lifestyle medicine is not complementary or alternative—it's mainstream,” says Rob Lawson, a retired NHS GP from East Lothian now working privately, who is chair of the British Society of Lifestyle Medicine (BSLM), founded in 2016. He says people need to realise it's not just about nutrition. “You've got to get to the people who need it most. They're not going to switch fish and chips for avocado and chia seeds,” he says. Helping people find a purpose in life and beat isolation can tackle the “upstream causes” of disease, he says.

Key to the delivery of lifestyle medicine is the ability to help people make sustainable lifestyle changes through behavioural change management techniques. “It's all about behavioural psychology and buy-in,” says Alex Maxwell, a GP in Thornton Heath, south London, who is introducing lifestyle medicine into his practice.

Demand for education

In August, 40 healthcare professionals sat the first examination for the BSLM's diploma in lifestyle medicine, which is certified by the International Board of Lifestyle Medicine. Lawson says the diploma will “set a common standard of lifestyle medicine

protocols” and “differentiate between evidence based and otherwise.”

Medical schools are getting in on the act. Anne Swift, director of public health teaching at Cambridge University's clinical school, has seen “quite a demand from students” for education about lifestyle medicine. “We're going to introduce a new curriculum through public health teaching, which will educate students on nutrition, physical activity, and sleep, and give them skills in behavioural change.”

Theory and evidence will be taught in traditional lectures, while behavioural change techniques will be practised with role play. Students can train as health coaches, “so while still at medical school they have the opportunity to put those skills into practice with patients.” The changes will be introduced over the next two academic years.

Lawson is also working with BSLM on a “blueprint” lifestyle medicine curriculum to make available to other medical schools, and hopes it will become an integral part of the curriculum.

A standalone specialty?

One unresolved question is whether these students are training in a new specialty, or whether lifestyle medicine is, or should be, integrated into other medical specialties.

Lawson says he first expected it to be part of general practice. He has discovered, however, that “folk want to practise lifestyle medicine separately from general practice. I can see why and it reflects the pressure general practice is under.”

“In the long term, it's got the ability to stand alone,” says Maxwell, “but that doesn't stop the fact that the principles can be applied by any speciality.”

Helen Lawal, a GP who works across NHS and private sectors, says: “I'd like to see a time when lifestyle medicine doesn't need a separate label, when it's integral to the way we deliver healthcare.”

The diploma may encourage the development of a standalone specialty, Lawson accepts. “Now we have a global exam, you can work almost anywhere in the world as a healthcare professional in lifestyle medicine.”

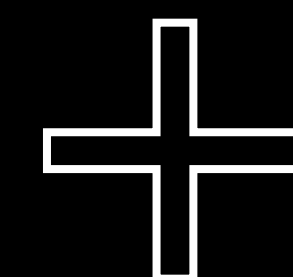
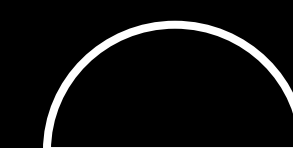
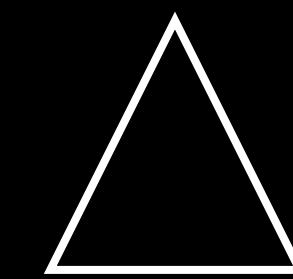
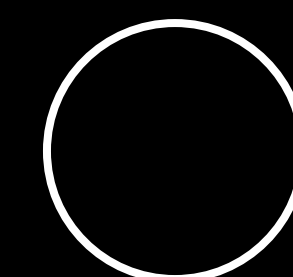
Lifestyle Medicine

is the evidence-based use of a whole food, plant—predominant dietary lifestyle, regular physical activity, restorative sleep, stress management, avoidance of risky substances and positive social connection as a primary therapeutic modality for treatment and reversal of chronic disease.

It is one of the fastest growing specialty career fields in medicine and holds the promise of real value-based care and true health reform as it addresses the root- cause of most chronic illness.

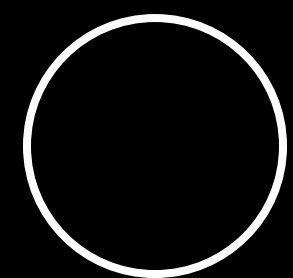
The Pillars of Lifestyle Medicine

- ↳ Healthy Eating
- ↳ Physical Activity
- ↳ Sleep
- ↳ Healthy Relationships
- ↳ Minimizing Harmful Substances
- ↳ Mental Well-being



The Pillars of Lifestyle Medicine

↳ Healthy Eating

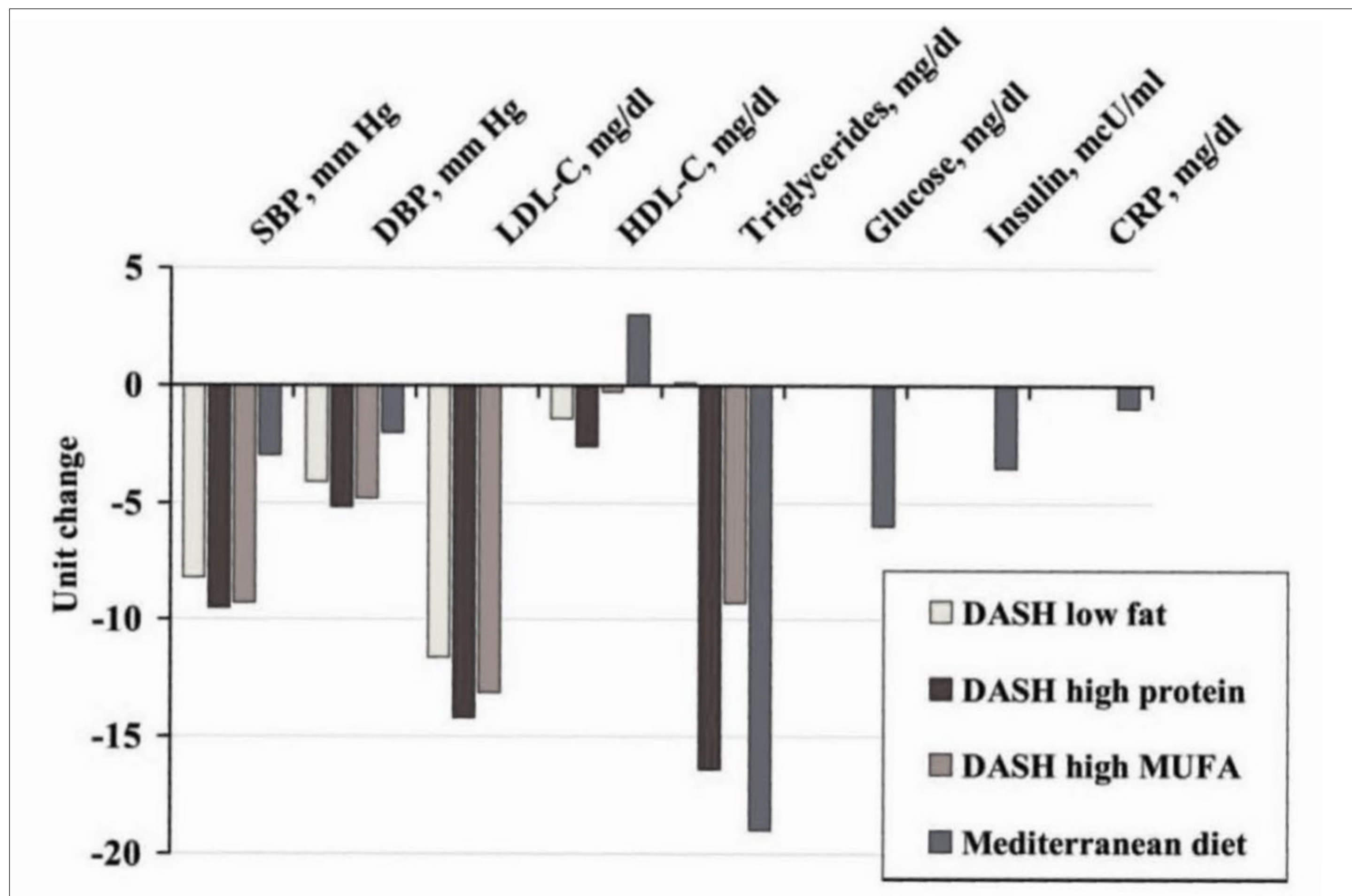


Είναι η Διατροφή του/της Ασθενούς σας Αντικείμενο Συζήτησης με τους Ασθενείς σας;

- ↳ Ναι, σε κάθε περίπτωση
- ↳ Ναι, τις περισσότερες φορές
- ↳ Μερικές φορές, προσπαθώ
- ↳ Σπάνια, μακάρι να μπορούσα περισσότερο
- ↳ Θα ήθελα, αλλά δεν ξέρω πώς να το κάνω
- ↳ Όχι, οι Ιατροί δεν έχουν λόγο να γνωρίζουν τη διατροφή του/της ασθενούς, ούτε να συμβουλεύουν για αυτή.

Άμεση Επίδραση Διατροφής

Η Αλλαγή Ποιότητας
Διατροφής Βελτιώνει
τους Βασικούς Παράγοντες
για ΑΕΕ σε 6-8 Εβδομάδες
Ακόμη και Χωρίς
Απώλεια Βάρους



US National Ambulatory Medical Care Survey

Jackowski RM, Pogge EK, Early NK, Fairman KA, Sclar DA. Provision of Lifestyle Counseling and the Prescribing of Pharmacotherapy for Hyperlipidemia Among US Ambulatory Patients: A National Assessment of Office-Based Physician Visits. *Am J Cardiovasc Drugs*. 2018 Feb;18(1):65-71. doi: 10.1007/s40256-017-0247-y. PMID: 28849367.


- ↳ Patients aged ≥ 20 years with diagnosis of hyperlipidemia
- ↳ Received pharmacotherapy
Rx = 54.6%
- ↳ Received diet/nutrition education = 22.4%

What Could Work for Prevention?

International Agency for Research on Cancer


World Health Organization

EPIC study




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- CENTRES
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HIGHLIGHTS

- General introduction
- Mediterranean diet and health**
- Genetic predisposition to lung cancer
- Abdominal adiposity and mortality
- Alcohol and cancer incidence
- Vitamin D and colorectal cancer
- Biomarkers for early detection of HPV-driven oropharyngeal cancer



Filipe B. Varela/Shutterstock.com

HIGHLIGHTS

Mediterranean Diet and Health

Ecological evidence in the 1960s suggested that the traditional Mediterranean diet could have beneficial health effects, mostly on cardiovascular diseases. EPIC investigators operationalized adherence to the Mediterranean diet through a simple scoring system and have documented, in a series of papers, that closer adherence to this diet is associated with reduced overall mortality as well as incidence of and mortality from cardiovascular diseases and cancer. In a paper studying more than 70 000 elderly men and women from nine European countries, it was shown that adherence to the Mediterranean diet can improve survival in this vulnerable group.

Trichopoulou A *et al.* **Modified Mediterranean diet and survival: EPIC-elderly prospective cohort study.** *BMJ.* 2005 Apr 30;330(7498):991. [PMID: 15820966](#)

An
Epic
Study

Overall 78% lower risk of developing chronic disease

- ↳ 93% Diabetes
- ↳ 81% myocardial infarction
- ↳ 50% stroke
- ↳ 36% cancer

Healthy Living Is the Best Revenge

Findings From the European Prospective Investigation Into Cancer and Nutrition–Potsdam Study

Earl S. Ford, MD, MPH; Manuela M. Bergmann, PhD; Janine Kröger; Anja Schienkiewitz, PhD, MPH; Cornelia Weikert, MD, MPH; Heiner Boeing, PhD, MSPH

Background: Our objective was to describe the reduction in relative risk of developing major chronic diseases such as cardiovascular disease, diabetes, and cancer associated with 4 healthy lifestyle factors among German adults.

Methods: We used data from 23 153 German participants aged 35 to 65 years from the European Prospective Investigation Into Cancer and Nutrition–Potsdam study. End points included confirmed incident type 2 diabetes mellitus, myocardial infarction, stroke, and cancer. The 4 factors were never smoking, having a body mass index lower than 30 (calculated as weight in kilograms divided by height in meters squared), performing 3.5 h/wk or more of physical activity, and adhering to healthy dietary principles (high intake of fruits, vegetables, and whole-grain bread and low meat consumption). The 4 factors (healthy, 1 point; unhealthy, 0 points) were summed to form an index that ranged from 0 to 4.

Results: During a mean follow-up of 7.8 years, 2006 participants developed new-onset diabetes (3.7%), myocardial infarction (0.9%), stroke (0.8%), or cancer (3.8%). Fewer than 4% of participants had zero healthy factors, most had 1 to 3 healthy factors, and approximately 9% had 4 factors. After adjusting for age, sex, educational status, and occupational status, the hazard ratio for developing a chronic disease decreased progressively as the number of healthy factors increased. Participants with all 4 factors at baseline had a 78% (95% confidence interval [CI], 72% to 83%) lower risk of developing a chronic disease (diabetes, 93% [95% CI, 88% to 95%]; myocardial infarction, 81% [95% CI, 47% to 93%]; stroke, 50% [95% CI, -18% to 79%]; and cancer, 36% [95% CI, 5% to 57%]) than participants without a healthy factor.

Conclusion: Adhering to 4 simple healthy lifestyle factors can have a strong impact on the prevention of chronic diseases.

Arch Intern Med. 2009;169(15):1355-1362

The 4 factors were

- ↳ Never smoking
- ↳ Having a body mass index lower than 30
- ↳ Performing 3.5 h/wk or more of physical activity
- ↳ Adhering to healthy dietary principles (high intake of fruits, vegetables, and whole-grain bread and low meat consumption).

MED DIET!!!

1990 Smoking > Junk Food

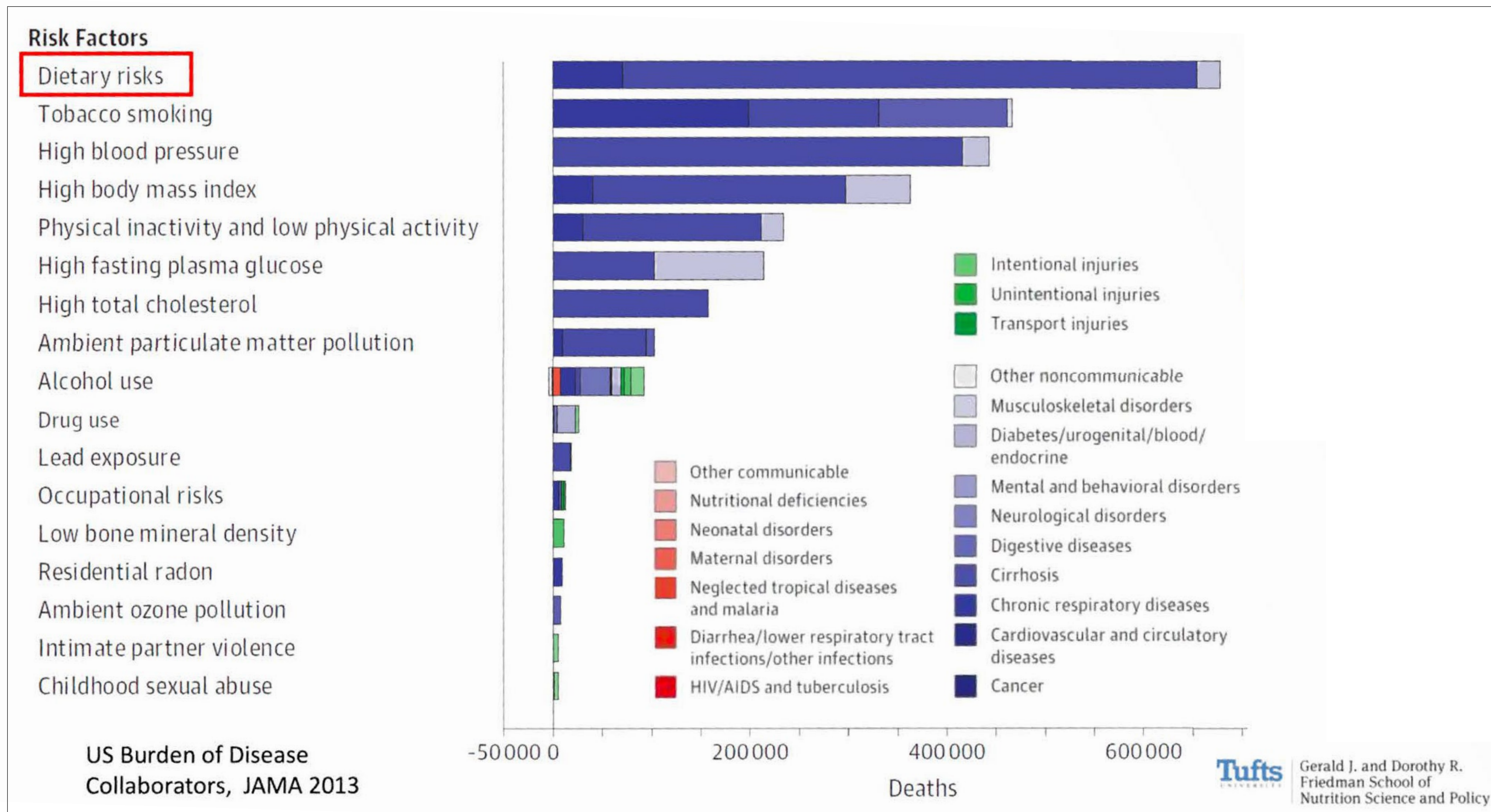
McGinnis, J.M. (2013).
Actual causes of death,
1990-2010.
Presentation at the
Workshop on Determinants
of Premature Mortality,
September 18,
National Research Council,
Washington, DC.

Cause	1990 % of total deaths	2010 % of total deaths
Tobacco	17	15
Diet/Activity patterns	14	18
Alcohol	4	3
Microbial agents	4	2
Medical errors	NA	3
Toxic agents	3	2.5
Firearms	2	1.5
Sexual behavior	2	1
Motor vehicles	1	1
Illicit use of drugs	1	1
Total	48	48
All causes	100.0	100.0

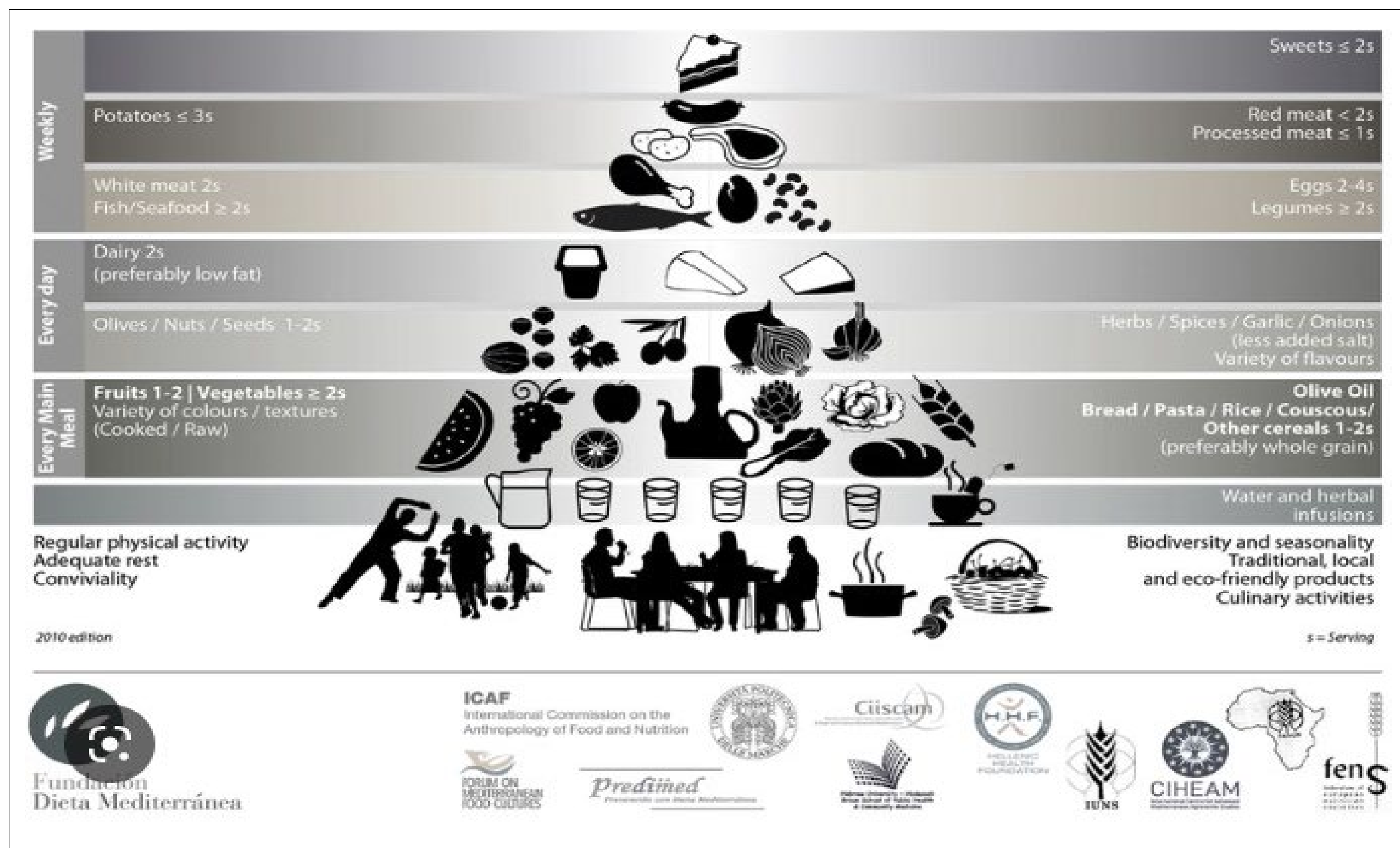
2010 Junk Food > Smoking



Our Food: The #1 Cause of Poor Health



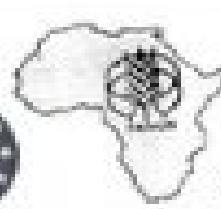
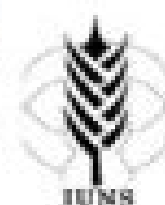
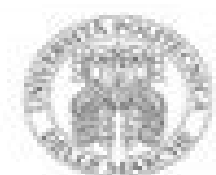
Mediterranean diet: More than a diet.



ICAF
International Commission on the
Anthropology of Food and Nutrition



Predimed



Συνδέεται η Μαγειρική με την Ιατρική;

Η Γαστρονομική Ιατρική είναι ένα νέο πεδίο στην Ιατρική Επιστήμη που συνδυάζει το φαγητό και τη μαγειρική με την επιστήμη της ιατρικής. Στόχος αυτής της σύμπραξης μαγειρικής-ιατρικής είναι να καθοδηγούνται οι ασθενείς στο πώς θα επιλέγουν τροφές που βοηθούν όχι μόνο στην πρόληψη, αλλά και στη θεραπεία ασθενειών (Πηγή: John La Puma, 2016).

Στην ουσία, η Γαστρονομική Ιατρική απαντά στο ερώτημα του ασθενούς: “Και τι πρέπει να τρώω για το νόσημά μου;”

Οι ίδιες τροφές και η ίδια διατροφή δεν ταιριάζουν σε όλους τους ανθρώπους. Οι διαφορετικές ασθένειες και οι διαφορετικοί ασθενείς απαιτούν ένα εξατομικευμένο πλάνο γευμάτων, τροφών και ροφημάτων.

Harvard Medical School

What to Eat: The Emerging Field of Culinary Medicine

News & Events

June 19, 2018

+ Talks@12

— 2018 Talks@12

Eavesdropping on Bacteria

MD vs. Machine: How Artificial Intelligence Will Transform Medicine

Music as Medicine

Oral Health Facts Matter

Culinary medicine, a new educational and nutritional approach to improving eating behaviors, focuses on skills such as food shopping, storage and meal preparation. Lifestyle medicine physician Rani Polak will discuss how to blend the joy of cooking with the science of medicine to create a recipe for good health.



Rani Polak, MD

Research Associate in Physical Medicine and Rehabilitation, Harvard Medical School
Founding Director, CHEF Coaching Program, Institute of Lifestyle Medicine, Spaulding
Rehabilitation Hospital

Highest MedDiet Adherence inversely associated with:

European Journal of Nutrition (2021) 60:1561–1586
<https://doi.org/10.1007/s00394-020-02346-6>

ORIGINAL CONTRIBUTION

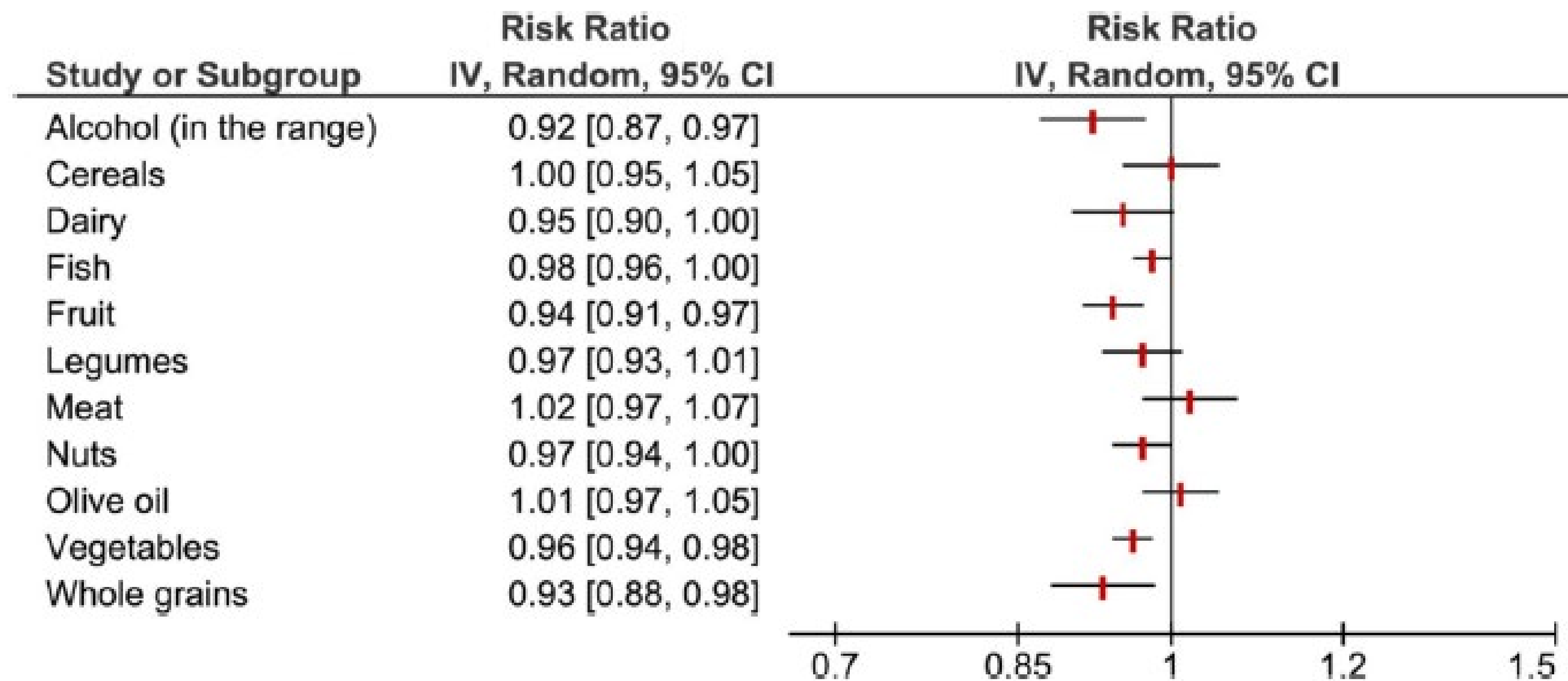
An updated systematic review and meta-analysis on adherence to mediterranean diet and risk of cancer

Jakub Morze^{1,2} · Anna Danielewicz² · Katarzyna Przybyłowicz² · Hongmei Zeng^{3,4} · Georg Hoffmann⁵ · Lukas Schwingshackl⁶

- ↳ Breast (RR: 0.94, 95% CI 0.90, 0.97; N = 23)
- ↳ Colorectal (RR: 0.83, 95% CI 0.76, 0.90; N = 17)
- ↳ Head and neck (RR: 0.56, 95% CI 0.44, 0.72; N = 9)
- ↳ Respiratory (RR: 0.84, 95% CI 0.76, 0.94; N = 5)
- ↳ Gastric (RR: 0.70, 95% CI 0.61, 0.80; N = 7)
- ↳ Bladder (RR: 0.87, 95% CI 0.76, 0.98; N = 4)
- ↳ Liver cancer (RR: 0.64, 95% CI 0.54, 0.75; N = 4)

Highest Benefit is coming from following the Diet Pattern — NOT a specific food!

Fig. 1 Pooled risk ratios of individual Mediterranean diet components and overall cancer risk



MED DIET: Mainly Anti-Inflammatory

Proposed Mechanisms

- ↳ Dietary pattern that contains foods high in anti-inflammatory bioactive compounds (polyphenols, n-3 f.a...)
- ↳ Higher intake of antioxidants, polyphenols & other bioactive compounds from fruits, vegetables, olive oil, and legumes may reduce risk by quenching free radicals and reducing oxidative damage to DNA
- ↳ MD exerts anti-inflammatory effects, due to the high intake of dietary fibers, mono-unsaturated fatty acids and the low intake of saturated fatty acids, and simple carbohydrates
- ↳ Functional alterations of the endocrine system, decrease in inflammatory events, regulation of genetic transcription
- ↳ Linked to less inflammation and has been shown to reduce inflammatory cytokines (IL-6 and TNF-alpha) and CRP and to enhance anti-inflammatory IL-10

DOCTORING OUR DIET

Policy Tools to Include Nutrition in U.S. Medical Training

INTRODUCTION

Doctors with training in diet and nutrition can have a monumental impact on individual patient health and the public health landscape, generally.¹ Patients rely on physicians to understand the universe of factors that impact good health, prevent illness, and treat chronic diseases, including those related to nutrition and diet.² Unfortunately, many physicians lack basic nutrition knowledge, as nutrition receives little attention in medical school curricula and throughout medical training.

This report demonstrates that even a modest investment in nutrition training for physicians can significantly improve patient outcomes, provide for better population health, and contain costs associated with the most prevalent and preventable diet-related diseases. To make this change, the report proposes a range of policy opportunities available to federal and state governments, as well as other medical accreditation and licensing boards, to include nutrition in each stage of physician education, and briefly analyzes the feasibility of each option.

The Harm and Cost of Diet-Related Disease

Diet is the most significant risk factor for disability and premature death in the United States.³ Heart disease, cancer, stroke, and diabetes,⁴ which are among the leading causes of death nationwide, all have a high correlation to diet and nutrition. Levels of overweight and obesity have increased in the United States in recent decades.⁵ Today, nearly forty percent of adults⁶ and eighteen percent of children are considered obese.⁷ Nearly ten percent of Americans suffer from diabetes, and more than one-third are pre-diabetic,⁸ compared with less than one percent fifty years ago.⁹ Some epidemiologists predict that America's youth may live less healthy and shorter lives than their parents due to the rising prevalence of these and other diet-related diseases.¹⁰

The costs of chronic poor health, including healthcare costs from diet-related diseases, also have risen exponentially.¹¹ According to recent estimates, healthcare costs related to obesity exceed \$200

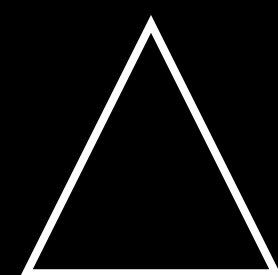
Food is Medicine: Medically Tailored Meals (MTMS)

- ↳ Providing home MTMs to chronically ill, food insecure patients reduces hospitalizations, ER visits, nursing home admits, and costs.
- ↳ Using the 2011-2015 Massachusetts All Payers Database, MTMs:
 - ↳ Hospital admissions: 1 by 49%
 - ↳ Nursing home admits: 1 by 72%
 - ↳ Net savings: \$9,036/year per patient
 - ↳ Number needed to treat (NNT):

2.0 PER SAVED HOSPITAL ADMISSION
1.1 PER SAVED NURSING HOME ADMIT

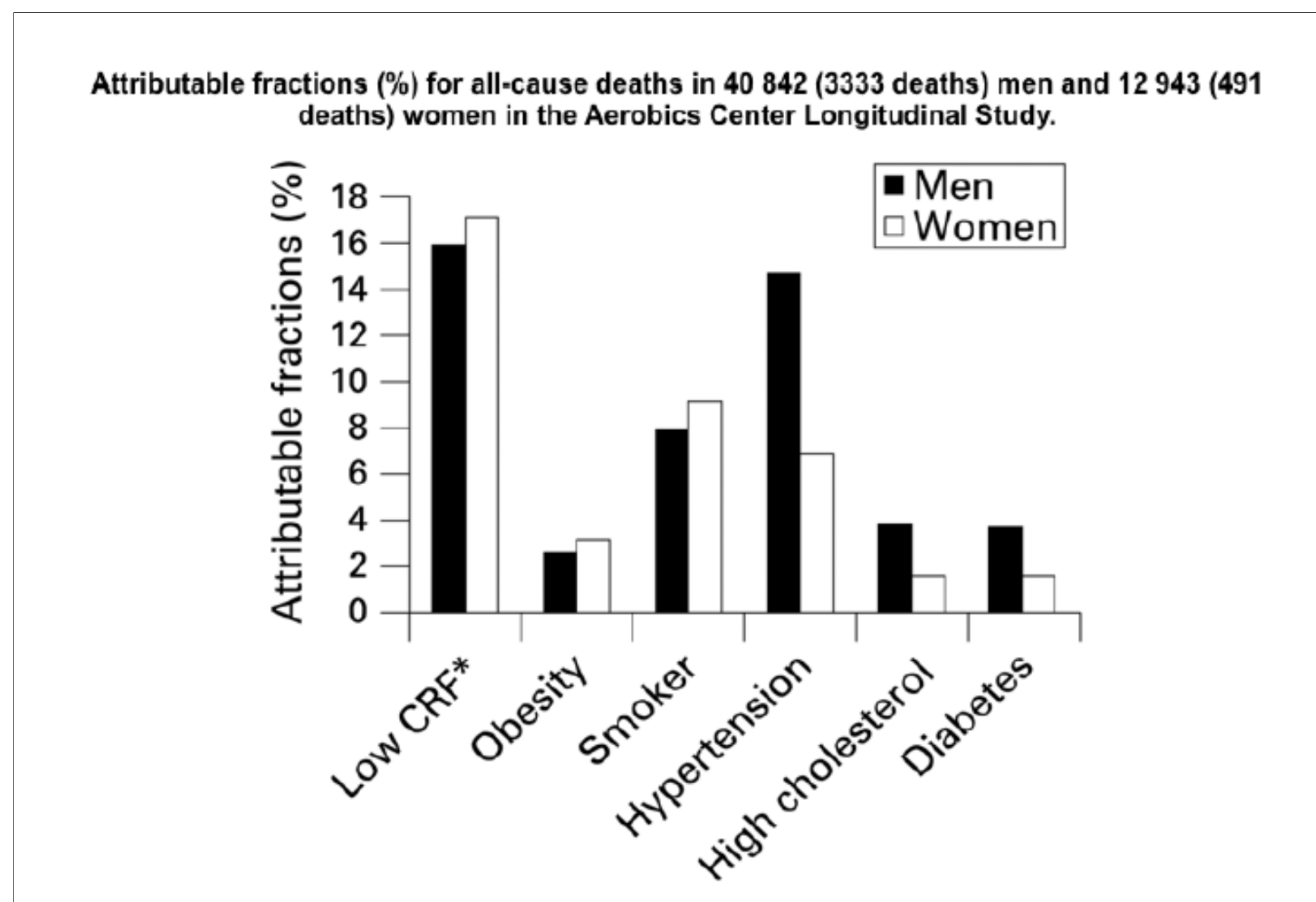
The Pillars of Lifestyle Medicine

↳ Physical Activity

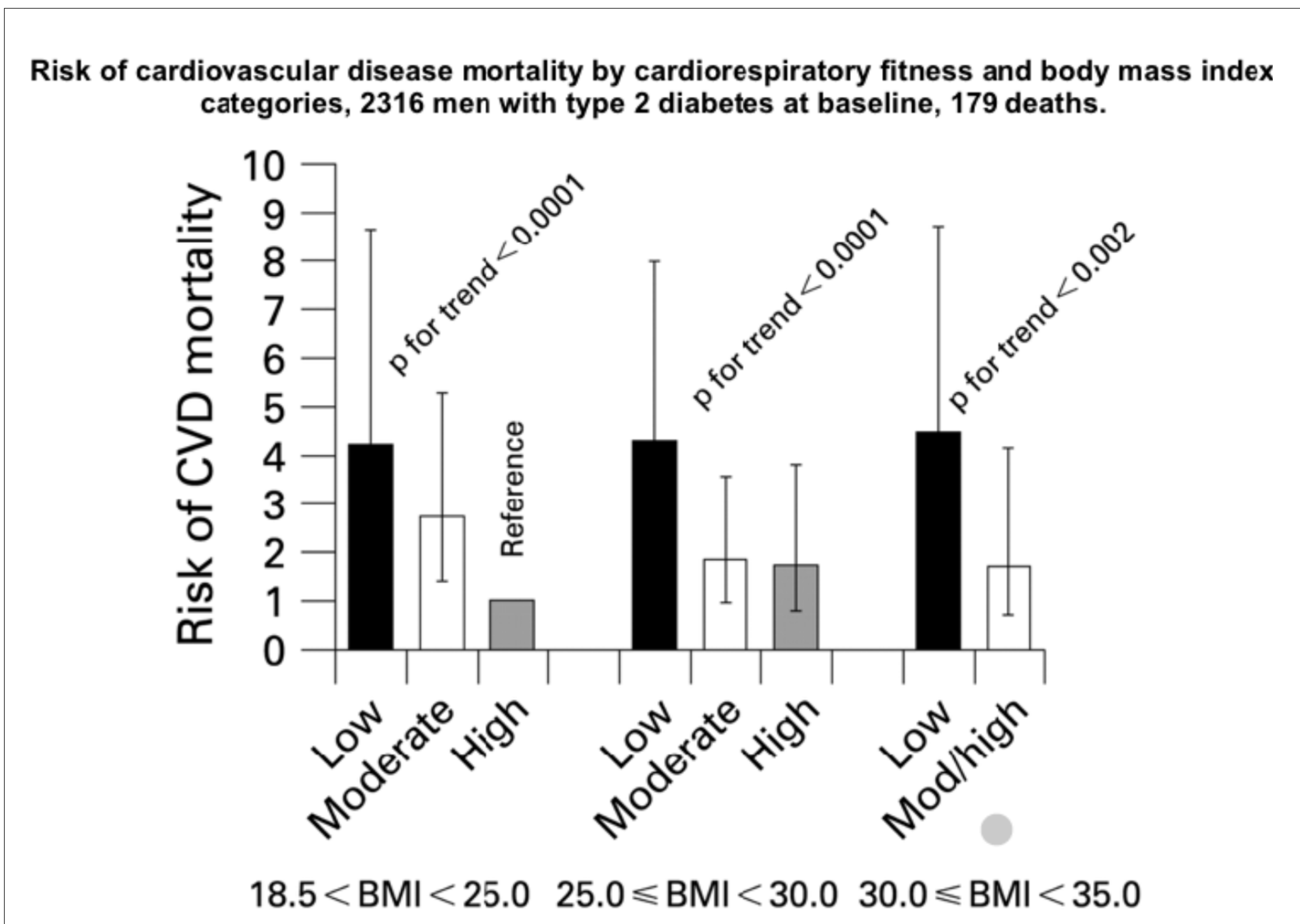


Blair SN Physical Inactivity: The Biggest Public Health Problem of the 21st Century

British Journal
of Sports Medicine
2009;43:1-2



Risk of Cardiovascular Disease Mortality



British Journal
of Sports Medicine
2009;43:1-2

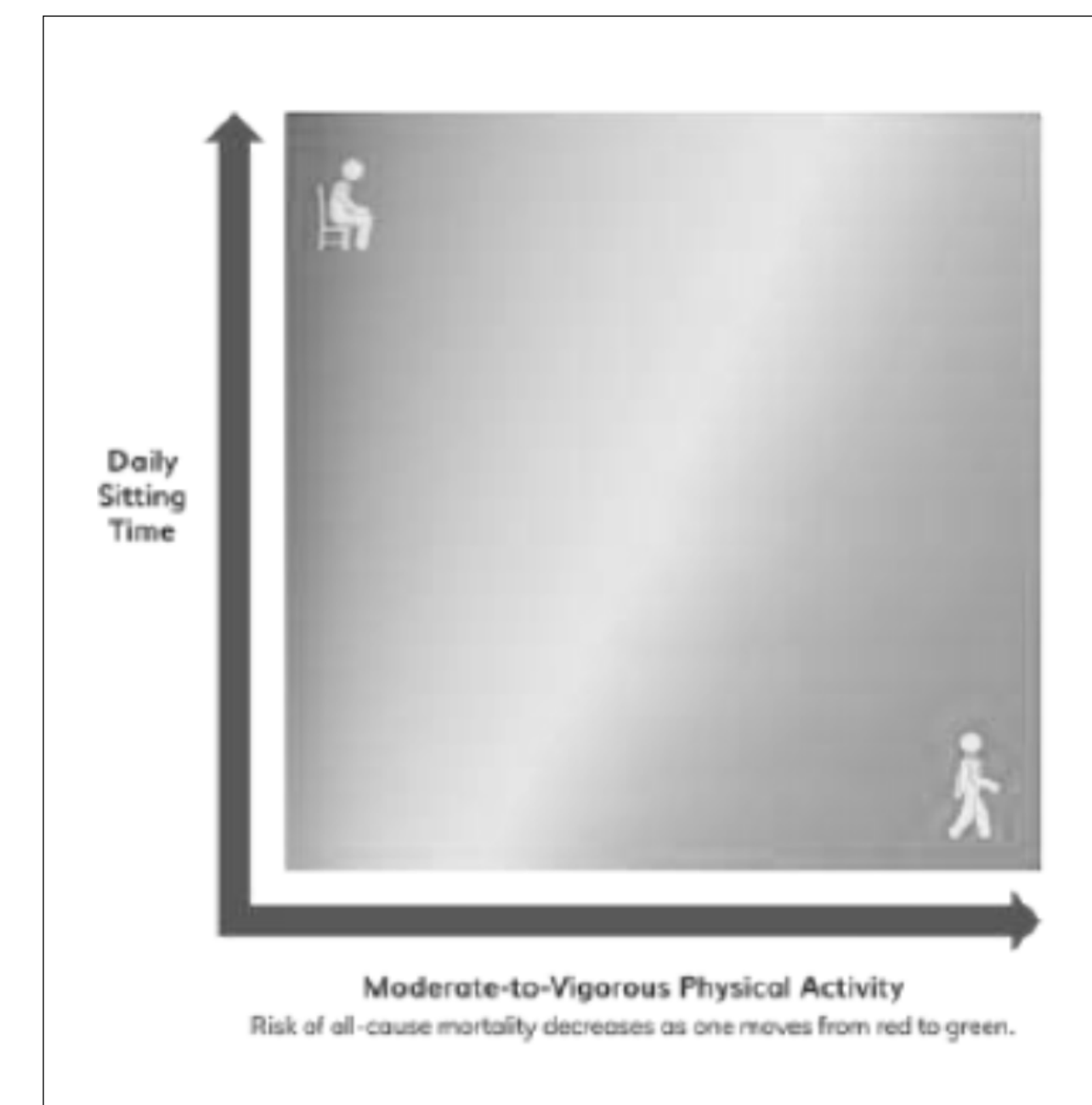


Move More And Sit Less

Relationship Among MVPA,
Sitting Time, and Risk of All -
Cause Mortality in Adults

- Sedentary behavior increases risk of:
- ↳ All-cause mortality
 - ↳ Cardiovascular Disease Mortality
 - ↳ Cardiovascular Disease
 - ↳ Type 2 diabetes
 - ↳ Colon, endometrial, and lung cancers

f



Comparative Effectiveness of Exercise and Drug Interventions on Mortality Outcomes: Meta-epidemiological Study

- Meta-analysis of 16 studies (4 exercise, 12 drug) that compared the effectiveness of exercise interventions vs. drug therapy
- Exercise and drug interventions did **NOT** differ in terms of mortality benefits or in:
 - secondary prevention of coronary heart disease,
 - rehabilitation after stroke,
 - treatment of heart failure, and
 - prevention of diabetes
- In some cases, like *stroke rehabilitation*, exercise intervention was more effective!

Naci H, Ioannidis JP.
Br J Sports Med. 2015 Nov;49(21):1414-22.



Their Conclusion



- Exercise and many drugs are similar in terms of their benefits
- Exercise interventions **SHOULD** be considered as a viable alternative to, or alongside, drug therapy
- **PHYSICAL ACTIVITY** needs to become the prescribed “PILL” of the future!

Naci H, Ioannidis JP.
Br J Sports Med. 2015 Nov;49(21):1414-22.



“What if there was **one prescription** that could **prevent and treat** dozens of diseases, such as diabetes, hypertension and obesity? Would you prescribe it to your patients? **Certainly!**”

Robert E. Sallis, MD, FACSM
EIM Advisory Board Chair



Exercise is Medicine® Fact Sheet

The benefits of physical activity extend across a variety of medical conditions and populations. The following sampling of research findings illustrates the breadth of the impact of regular physical activity.

Disease Prevention

- **Cancer:** Higher levels of leisure-time physical activity are associated with a reduced risk of developing 13 cancers, including esophageal adenocarcinoma, liver, lung, kidney, gastric cardia, endometrial, myeloid leukemia, myeloma, colon, head and neck, rectal, bladder and breast.⁹
- **Alzheimer's disease:** Strong evidence suggests that physical activity can reduce the risk of developing Alzheimer's disease and other dementias, as well as improve cognition.¹⁰
- **Stroke:** Regular physical activity lowers the risk of stroke by 34 percent and up to 58 percent among older adults.¹¹
- **Mental health:** Exercise has been shown to prevent the incidence of depression and anxiety as effectively as medication or behavioral therapy.¹²
- **Cardiovascular disease:** Physical activity or fitness reduces the risk of cardiovascular disease (CVD), with a magnitude of risk reduction comparable to that of not smoking.¹³
- **Back pain:** An international review of randomized clinical trials (RCTs) showed that exercise performed 2 to 3 times/week, including strengthening and either stretching or aerobic exercise, can prevent lower back pain.¹⁴
- **Mortality:**
 - A low level of fitness is a bigger risk factor for mortality than being overweight or obese. It is better to be fit and overweight than unfit with a lower percentage of body fat. Substantial reductions in chronic diseases can be achieved via lifestyle changes with little, if any, weight loss.¹⁶
 - Adults with better muscle strength have a 20 percent lower risk of mortality (33 percent lower risk of cancer-specific mortality) than adults with low muscle strength.¹⁵

Disease Management

- **Cancer:**
 - Recreational physical activity after a diagnosis of colorectal cancer is associated with a reduced risk of colorectal cancer-specific and overall mortality.¹⁷
 - Resistance training improves chemotherapy completion rates in breast cancer patients receiving therapy.¹⁸
- **Renal disease:** Moderate-intensity aerobic training is beneficial to physical functioning and quality of life for those with end stage renal disease.¹⁹
- **Sleep apnea:** Regular exercise decreases the severity of obstructive sleep apnea, independent of changes in body weight.²⁰
- **Osteoarthritis (OA):** Regular aerobic and resistance exercise is the number one recommendation for first line non-pharmacologic treatment for knee and hip OA.²¹ Exercise can also decrease the pain and stiffness associated with OA with higher-intensity exercise having a more positive effect on pain and function.²²
- **Hypertension:** Individuals participating in exercise interventions experienced consistent modest reductions in systolic blood pressure similar to what may be achieved with commonly prescribed anti-hypertensive medications according to a meta-analysis of randomized controlled trials.²³



Guidelines for Adults



You know you need physical activity to stay healthy.
But did you know it can help you feel better right away?



Boost your mood



Sharpen your focus



Reduce your stress



Improve your sleep

So get more active — and start feeling better today.

How much activity do I need?

Moderate-intensity aerobic activity

Anything that gets your heart beating faster counts.

at least
150
minutes
a week

AND

at least
2
days
a week



Muscle-strengthening activity

Do activities that make your muscles work harder than usual.

Tight on time this week? **Start with just 5 minutes.** It all adds up!

Or get the same benefits in half the time. If you step it up to **vigorous-intensity** aerobic activity, aim for at least **75 minutes** a week.

Is it moderate or vigorous? Use the "talk test" to find out.

When you're being active, just try talking:

- If you're breathing hard but can still have a conversation easily, it's **moderate-intensity activity**
- If you can only say a few words before you have to take a breath, it's **vigorous-intensity activity**

What counts?

Whatever gets you moving!



Even things you have to do anyway



Even things that don't feel like exercise

You can get more active.

No matter who you are, where you live, on your own, or together.
You can find a way that works for you.



And over time, physical activity can help you live a longer, healthier life.

- ✓ Lower your risk of diseases like type 2 diabetes and some cancers
- ✓ Control your blood pressure
- ✓ Stay at a healthy weight

So take the first step. Get a little more active each day. **Move your way.**

Find tips to get moving and build a weekly activity plan.
health.gov/MoveYourWay/Activity-Planner



Guidelines for Older Adults



Physical activity can make daily life better.

When you're active and strong, it's easier to:



Do everyday tasks, like chores and shopping



Keep up with the grandkids



Stay independent as you get older

And it has big health benefits, too.

- ✓ Less pain
- ✓ Better mood
- ✓ Lower risk of many diseases

How much activity do I need?

Moderate-intensity aerobic activity

Anything that gets your heart beating faster counts.

at least
150
minutes
a week

AND

at least
2
days
a week



Break it up over the whole week however you want!

Physical activity can help manage many health problems.

- ✓ Reduce symptoms of arthritis, anxiety, and depression
- ✓ Help keep diabetes and high blood pressure under control

Just getting started?

No problem — start slow and do what you can. Even a 5-minute walk has real health benefits. Build up to more activity over time.

Mix in stretches and activities to improve your balance, too! Keep your body flexible and help lower your risk of falls.

And all sorts of activities count.



Even things you have to do anyway



Even things that don't feel like exercise

You can get more active.

No matter your age, you can find a way that works for you.



So take the first step. Get a little more active each day. **Move your way.**

Find tips to get moving and build a weekly activity plan.
health.gov/MoveYourWay/Activity-Planner



Guidelines for Kids



You know how sometimes it's really, really hard to sit still?

YEP.

When you're young, your body **wants** to move — naturally! (Adults, not so much.)



So get active every day — and feel great!

Moving more can give you a boost — in lots of ways.

SUCH ENERGY! SO SELF-CONFIDENT!

VERY RELAXED! AMAZING GRADES!

* It's true — physical activity can actually help you do better in school.

How much activity do I need?

If you're between age 6 and 17, you need at least **60 minutes** of activity each and every day.



So, what kind of activity do I need?

Get a mix of activity. Do things that:



Strengthen your bones



Build your muscles



Make your heart beat faster



Um, strengthen my bones?

Sounds weird, right? But bones need pressure to get stronger. So hit the ground running! Jump, sprint, or do a cartwheel.

60 minutes all at once? I'm pretty busy.

Not a problem! Split up your 60 minutes over the day however you want — it all adds up!



Before school

Walk to school or the bus stop!
Dance around the living room!

At recess

Play with your friends!
Swing on the monkey bars!

After school

Walk your dog!
Go to basketball practice!

So get moving! Do activities you enjoy!

Be a good role model for your parents. Even better, go home and get them moving, too.

Walk. Run. Dance. Play. What's **your** move?

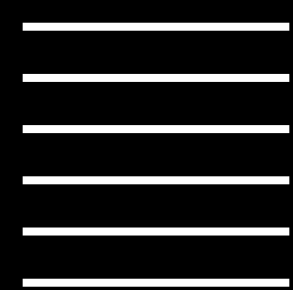


Συνοψίζοντας

- ↳ Τουλάχιστον 150' την Εβδομάδα
Άερόβια Άσκηση Μέτριας Έντασης
- ↳ Τουλάχιστον 2 Φορές την Εβδομάδα
Μυική Ενδυνάμωση
(Όχι Συνεχόμενες Μέρες)
- ↳ Διατάσεις Καθημερινά (τουλ. 20'')
- ↳ Extra tip: Ασκήσεις Ισορροπίας!

The Pillars of Lifestyle Medicine

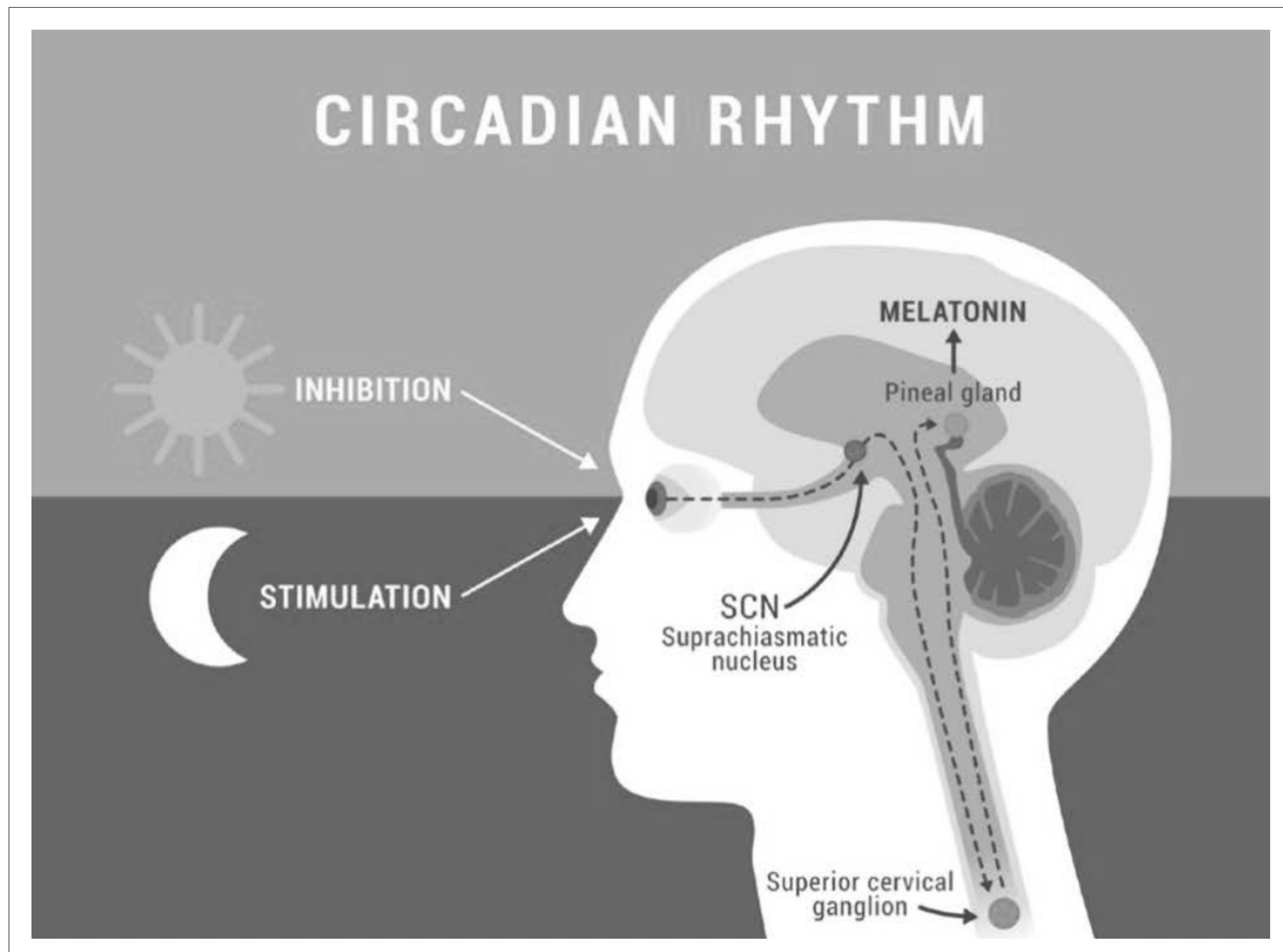
↳ Sleep



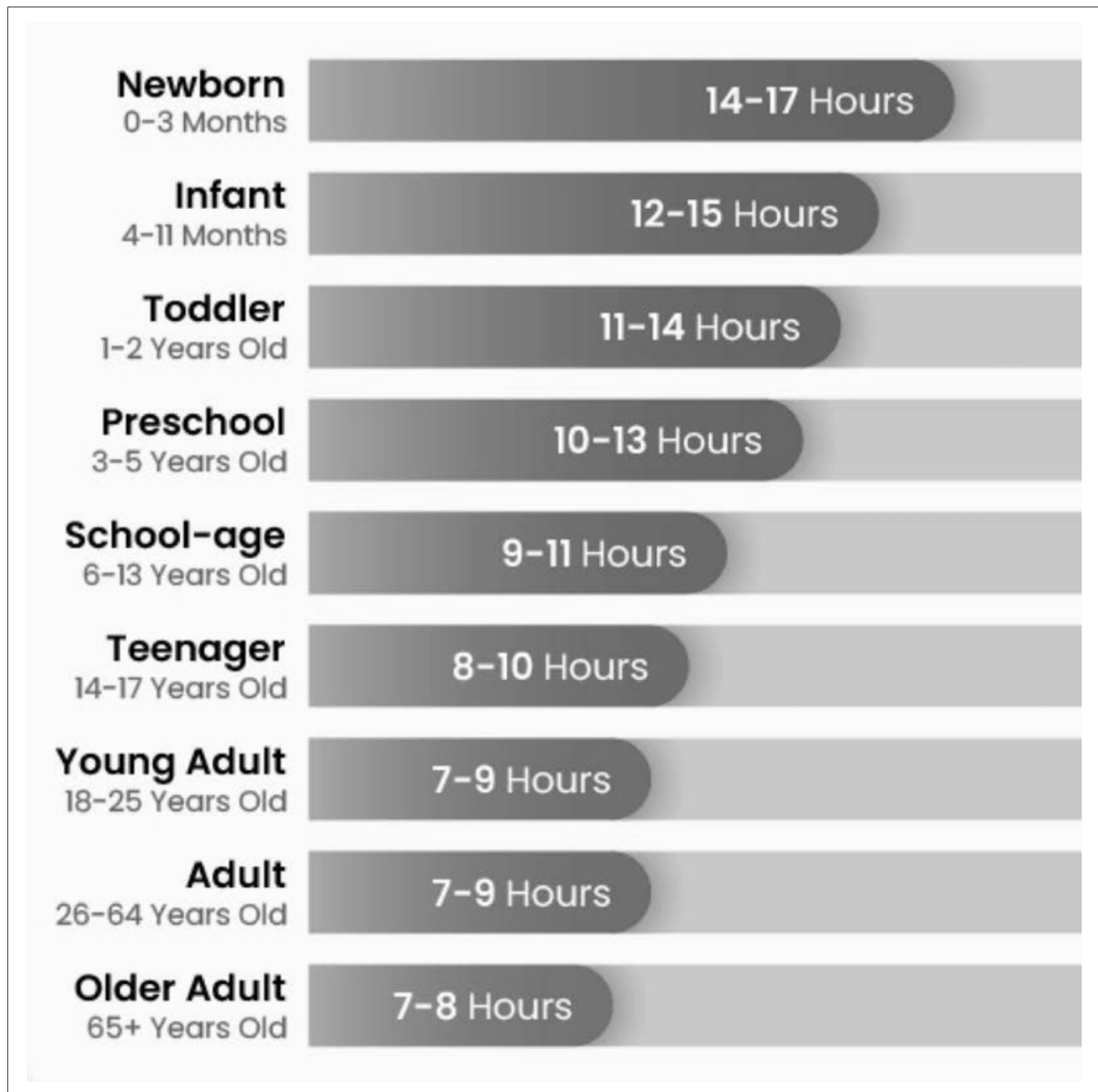
Τι είναι ο Ύπνος;

- ↳ Περίπλοκη Διαδικασία
Ανανέωσης & Επανόρθωσης
- ↳ Σημαντικός Πυλώνας
για την Υγεία & την Ευεξία
- ↳ Υποτιμάται ο ρόλος του

Ο Ύπνος Είναι Επιστήμη



Πόσο Ύπνο χρειαζόμαστε;



Why We Sleep?

- ↳ Repair and Restoration Theory
- ↳ Evolutionary (Adaptive) Theory
- ↳ Information Consolidation Theory
- ↳ Clean Up Theory

What Happens Without Enough Sleep?



Fast Company: How Insufficient Sleep Makes You Fat, Stupid, And Dead



If you need a reason to shut off your screens for a night, consider your waistline, your working life, and beyond.

f

The Guardian: Good Quality Sleep Can Add Years to People's Lives, Study Suggests



Researchers say findings indicate quantity of sleep alone is not enough to benefit; quality is key.

Good Sleep Was Based on 5 Different Factors:

- ↳ Ideal sleep duration of seven to 8 hours a night
- ↳ Difficulty falling asleep no more than 2 times a week
- ↳ Trouble staying asleep no more than 2 times a week
- ↳ Not using any sleep medication
- ↳ Feeling well rested after waking up at least 5 days a week

The Findings Suggested That About 8% of Deaths From Any Cause Could Be Attributed to Poor Sleep Patterns

The researchers included data from *172,321 people* with an average age of 50, 54% of whom were women, who participated in the National Health Interview Survey between 2013 and 2018. The survey looked at the health of the US population and included questions about sleep and sleep habits.

The study found that, compared with people who had zero to one favourable sleep factors, those who had all five were 30% less likely to die for any reason, 21% less likely to die from cardiovascular disease, 19% less likely to die from cancer, and 40% less likely to die of causes other than heart disease or cancer.

The Pillars of Lifestyle Medicine

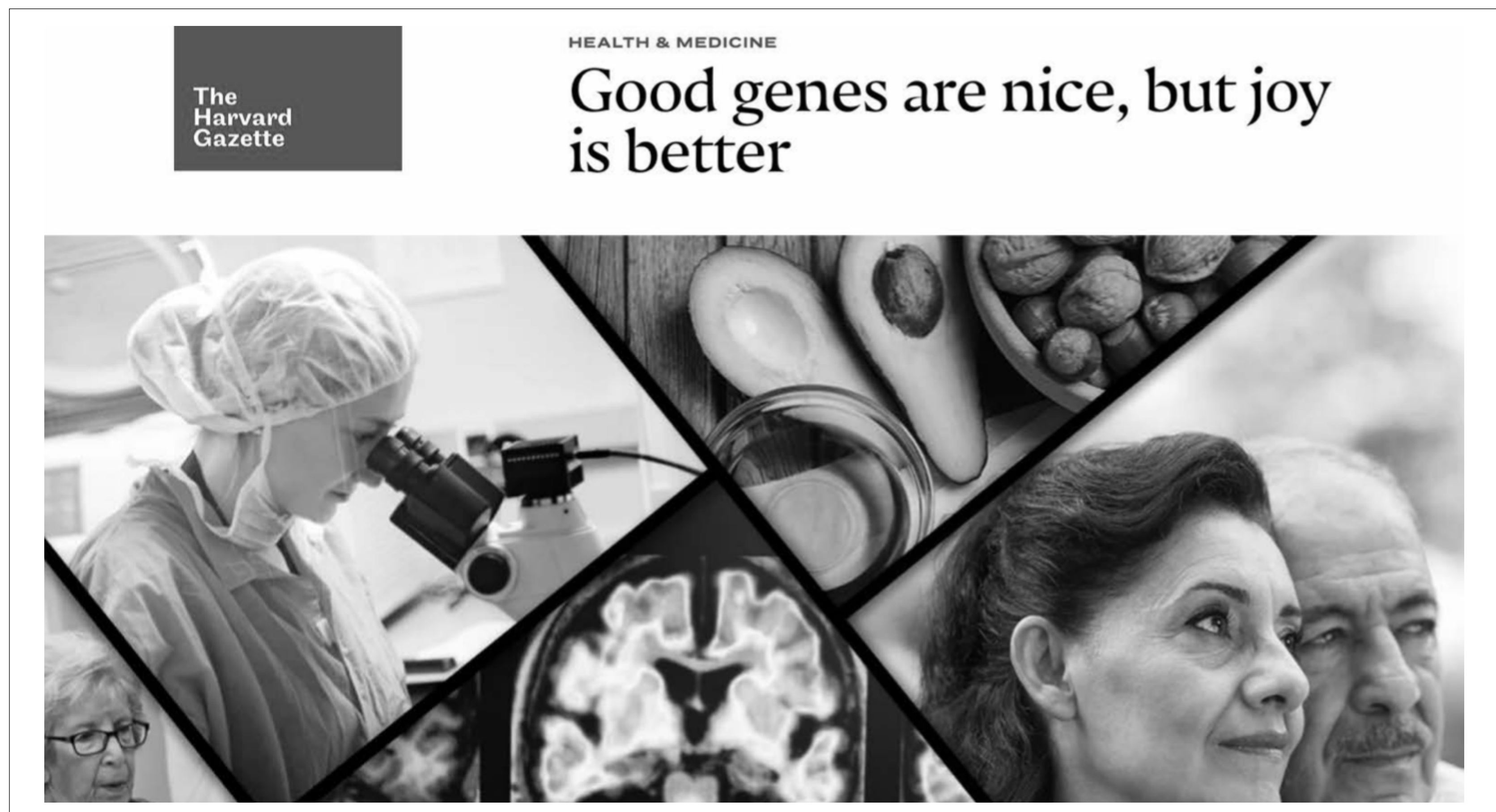
↳ Healthy Relationships



Harvard Second Heneration Study



The Harvard Gazette: Good Genes Are Nice, But Joy Is Better



Research Spotlight

Social isolation: a predictor of mortality comparable to traditional clinical risk factors.

[Pantell M¹](#), [Rehkopf D](#), [Jutte D](#), [Syme SL](#), [Balmes J](#), [Adler N](#).

⊕ Author information

Abstract

OBJECTIVES: We explored the relationship between social isolation and mortality in a nationally representative US sample and compared the predictive power of social isolation with that of traditional clinical risk factors.

METHODS: We used data on 16,849 adults from the Third National Health and Nutrition Examination Survey and the National Death Index. Predictor variables were 4 social isolation factors and a composite index. Comparison predictors included smoking, obesity, elevated blood pressure, and high cholesterol. Unadjusted Kaplan-Meier tables and Cox proportional hazards regression models controlling for sociodemographic characteristics were used to predict mortality.

RESULTS: Socially isolated men and women had worse unadjusted survival curves than less socially isolated individuals. Cox models revealed that social isolation predicted mortality for both genders, as did smoking and high blood pressure. Among men, individual social predictors included being unmarried, participating infrequently in religious activities, and lacking club or organization affiliations; among women, significant predictors were being unmarried, infrequent social contact, and participating infrequently in religious activities.

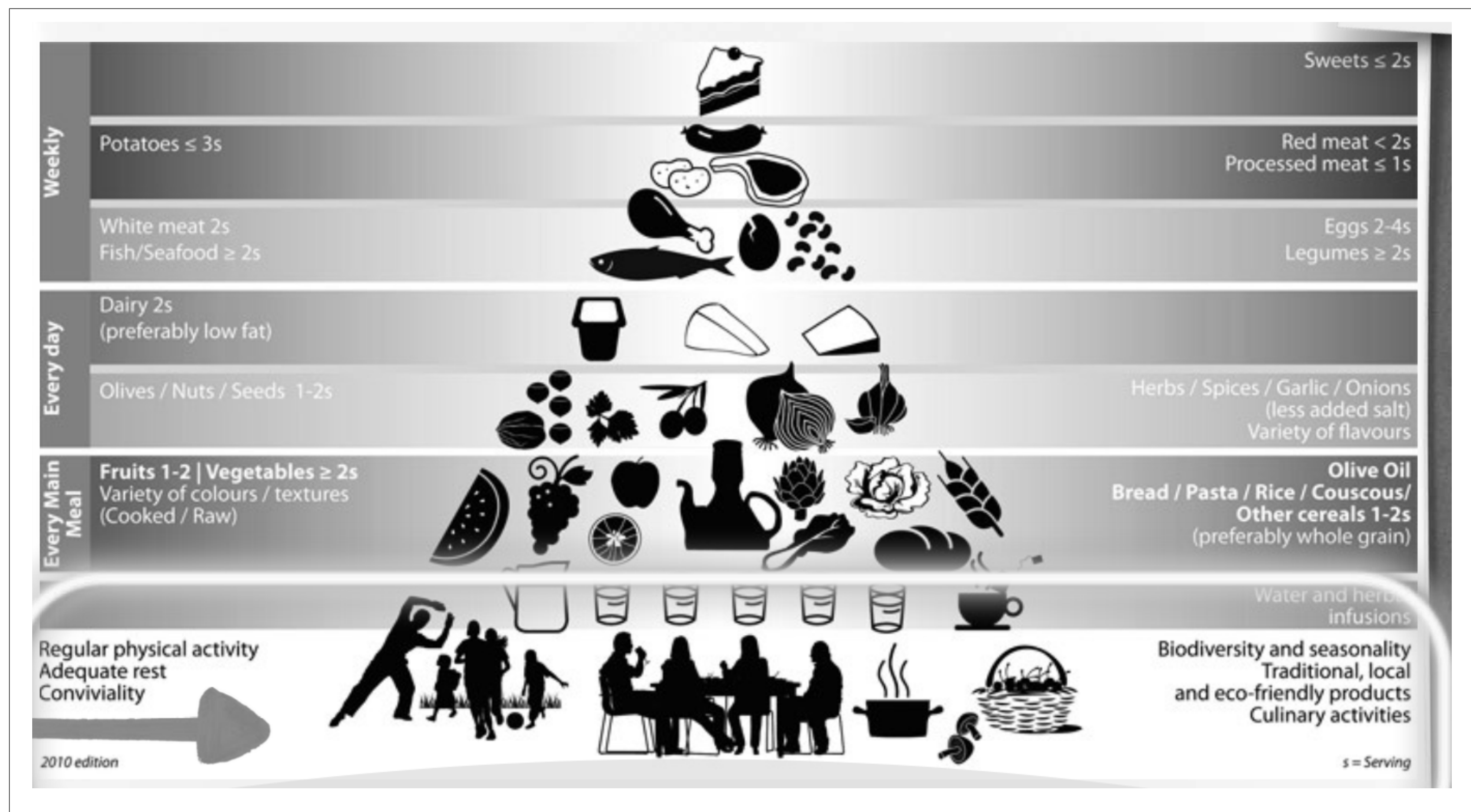
CONCLUSIONS: The strength of social isolation as a predictor of mortality is similar to that of well-documented clinical risk factors. Our results suggest the importance of assessing patients' level of social isolation.

Low Quality and Quantity of Social Ties Linked With:

Umberson D,
Karas Montez J.
Social Relationships and
Health: A flashpoint For Health
Policy. Journal of Health and
Social Behavior.
2010;51 (1 _suppl):554-566.

- ↳ Development and progression of cardiovascular disease
- ↳ Recurrent heart attack
- ↳ Atherosclerosis
- ↳ High blood pressure
- ↳ Cancer
- ↳ Delayed cancer recovery
- ↳ Slower wound healing

The New Mediterranean Diet Pyramid

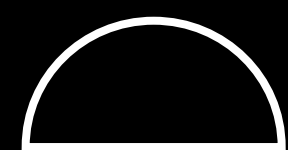


Απολαμβάνω το φαγητό με παρέα.
Το φαγητό μέρος χαράς και γιορτής.



The Pillars of Lifestyle Medicine

↳ Minimizing Harmful Substances



Ποιες Συμπεριφορές Είναι Εξαρτητικές;

Ο Άνθρωπος μπορεί να αναπτύξει συμπεριφορές εξάρτησης όχι μόνο με τις ουσίες.

Εξαρτητικές μπορεί να είναι και οι σχέσεις του με:

- ↳ Άλλους ανθρώπους
- ↳ Μέλη της οικογένειάς του
- ↳ Τη δουλειά του
- ↳ Το φαγητό
- ↳ Τα τυχερά παιχνίδια
- ↳ Τον ηλεκτρονικό υπολογιστή

✂

Ποιες Συμπεριφορές Είναι Εξαρτητικές;

Όταν ερχόμαστε στη ζωή και κατά τα πρώτα χρόνια, βιώνουμε καταστάσεις εξάρτησης που είναι λειτουργικές και εξυπηρετούν ανάγκες της δεδομένης ηλικιακής φάσης.

Έχει σημασία κατά το μέγάλωμά του το άτομο να έχει τη δυνατότητα να καλλιεργήσει και να αναπτύξει χαρακτηριστικά που θα του επιτρέπουν να ζει αυτόνομα και να δημιουργεί λειτουργικές σχέσεις, οι οποίες εμπειριέχουν την αλληλοεξάρτηση αλλά όχι την απόλυτη εξάρτηση.

World Health Organization

↳ Alcohol

VORIA: Τζόγος, Ένας Ύπουλος Εθισμός

Τζόγος, ένας ύπουλος εθισμός: Ιστορίες ανθρώπων που έφτασαν στο χείλος του γκρεμού



Θανάσης Μυλωνάς

02/12/2021

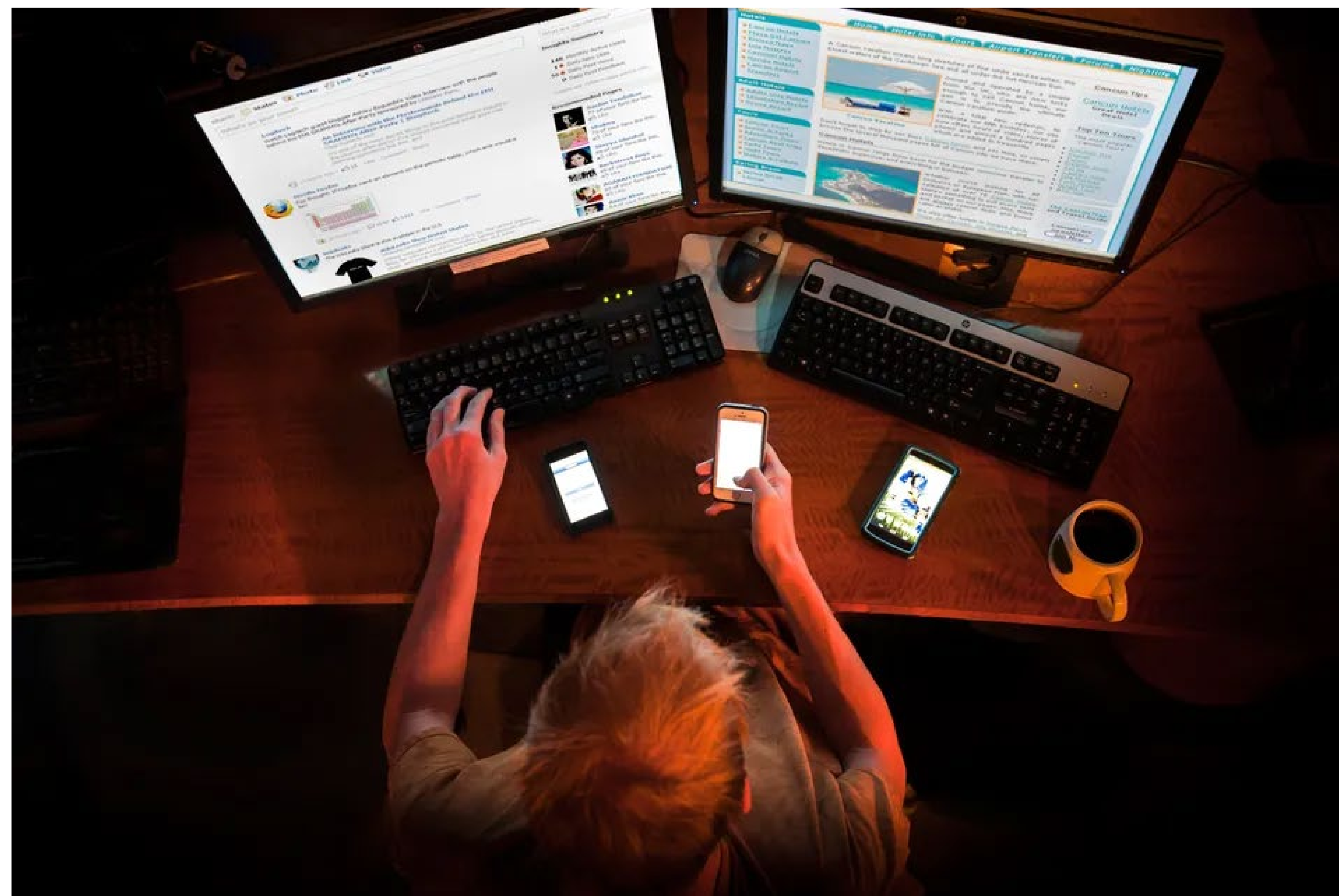
06:09

«Έχω δει άρρωστες καταστάσεις, άνθρωπο 60 χρονών να ορκίζεται στο νεκρό παιδί του ότι δεν θα παίξει ξανά και να μην κρατά την υπόσχεσή του...»

Ο Τζίρος της Αγοράς Τυχερών Παιγνίων το 2022

- ↳ ΟΠΑΠ 6 δις.€
- ↳ Λαχεία 326,4 εκατ.€
- ↳ Ιππόδρομος 34 εκατ.€
- ↳ Διαδικτυακές Εταιρίες 21,3 δις.€
- ↳ Καζίνο 2,5 δις.€


The New Yorker Is Internet Addiction A Real Thing?



Forbes


FORBES > LEADERSHIP > CAREERS


7 Signs You May Be A Workaholic

Amy Morin Former Contributor 
 Psychotherapist and international bestselling mental strength author

Sep 18, 2014, 02:18pm EDT

TWEET THIS

 workaholism has b <https://www.forbes.com/sites/amymorin/2014/09/18/7-signs-you-may-be-a-workaholic/?sh=1e643fda70d7>

 until now, there hasn't been a definitive way to differentiate a "hard worker" from a "workaholic."

Although "workaholism" has been studied for nearly 45 years, today's digital world really adds a new dimension to the concept of work addiction. Technology - like smartphones, laptops, and tablets - provides opportunities to work from anywhere anytime and for some people, that means working all the time. The ability to take work home blurs the line between work and leisure as many people feel compelled to continue working long past the official quitting time. Often, there's an expectation that people will be available during evenings, weekends, and even vacations.

High-pressure work environments, rapidly-approaching deadlines, and a fast-paced world means longer work hours for most people, but for entrepreneurs,

Being a workaholic shouldn't be a status symbol - instead it should be treated as a serious condition.

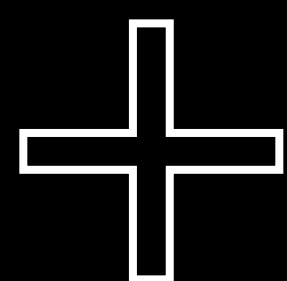
Tobacco — Key Facts

- ↳ *Tobacco kills up to half of its users.*
- ↳ *Tobacco kills more than 8 million people each year. More than 7 million of those deaths are the result of direct tobacco use while around 1.2 million are the result of non-smokers being exposed to second-hand smoke.*
- ↳ Over 80% of the world's 1.3 billion tobacco users live in low- and middle- income countries.
- ↳ In 2020, 22.3% of the global population used tobacco, 36.7% of all men and 7.8% of the world's women.
- ↳ To address the tobacco epidemic, WHO Member States adopted the WHO Framework Convention on Tobacco Control (WHO FCTC) in 2003. Currently 182 countries have ratified this treaty.
- ↳ The WHO MPOWER measures are in line with the WHO FCTC and have been shown to save lives and reduce costs from averted healthcare expenditure.

“Το Αντίθετο του Εθισμού δεν είναι η
Νηφαλιότητα, είναι η Σύνδεση.”

The Pillars of Lifestyle Medicine

↳ Mental Well-being



Lifestyle Risk Factors That Are a Workforce Issue

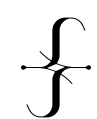
First reported in
Staying@Work™ Report:
The Business Value
of a Healthy Workforce
by
©Willis Towers Watson.

	Tobacco use	Lack of physical activity	Obesity	Poor nutrition	Stress	Substance abuse	Presenteeism
Brazil	7	2	3	5	1	4	6
Canada	6	2	3	4	1	7	5
Mexico	6	2	3	4	1	7	5
U.S.	5	3	2	4	1	7	6
Europe	2	3	4	7	1	6	5
China	3	1	4	7	2	5	6
India	4	2	3	6	1	7	5
Southeast Asia	5	2	3	6	1	7	4

Lifestyle risk factors that are a workforce issue.

Note. Ranking by employers of most important issues affecting health of their employees.

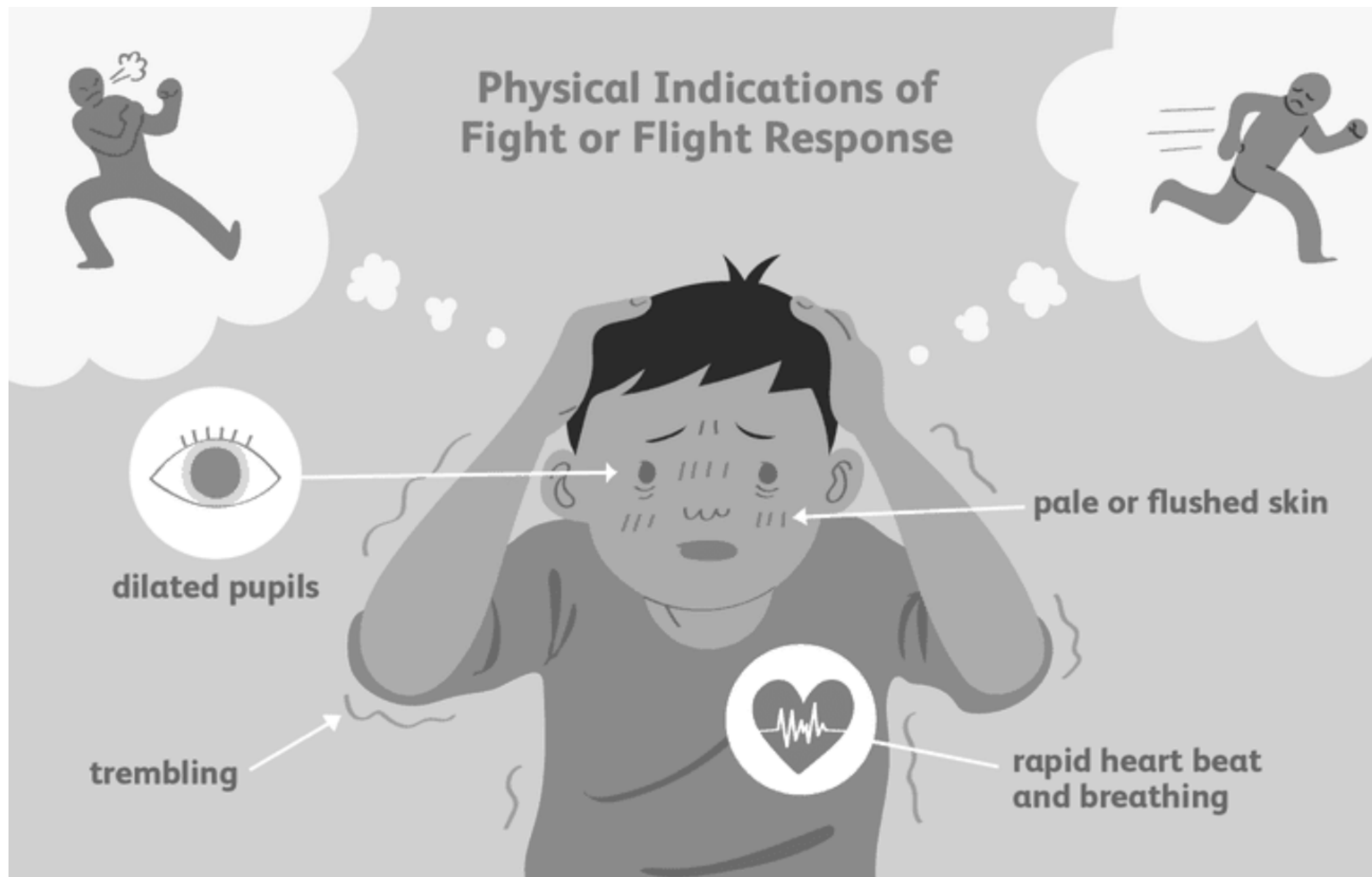
Ranking of 1 is the issue of greatest concern.



Andrew
J.
Bernstein

“Το Στρες δεν προέρχεται από το τι συμβαίνει στη ζωή μας.
Προέρχεται από τις σκέψεις μας για το τι συμβαίνει στη ζωή μας”

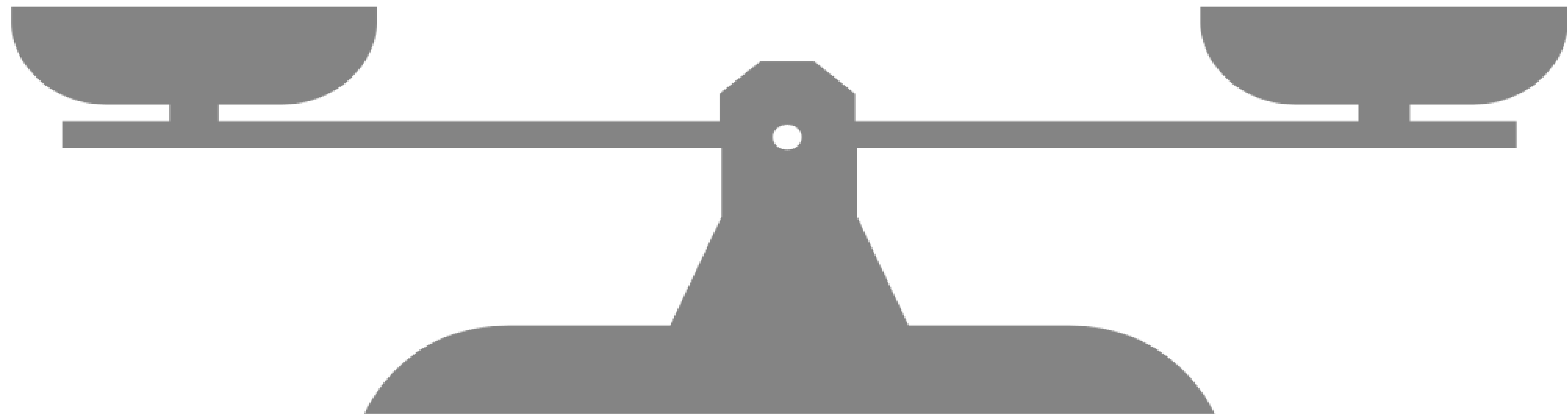
Fight or Flight?



Διαχείριση Stress

↳ Αποφυγή Στρεσογόνων
Ερεθισμάτων

↳ Εξάσκηση Πρακτικών
Ανακούφισης του Stress



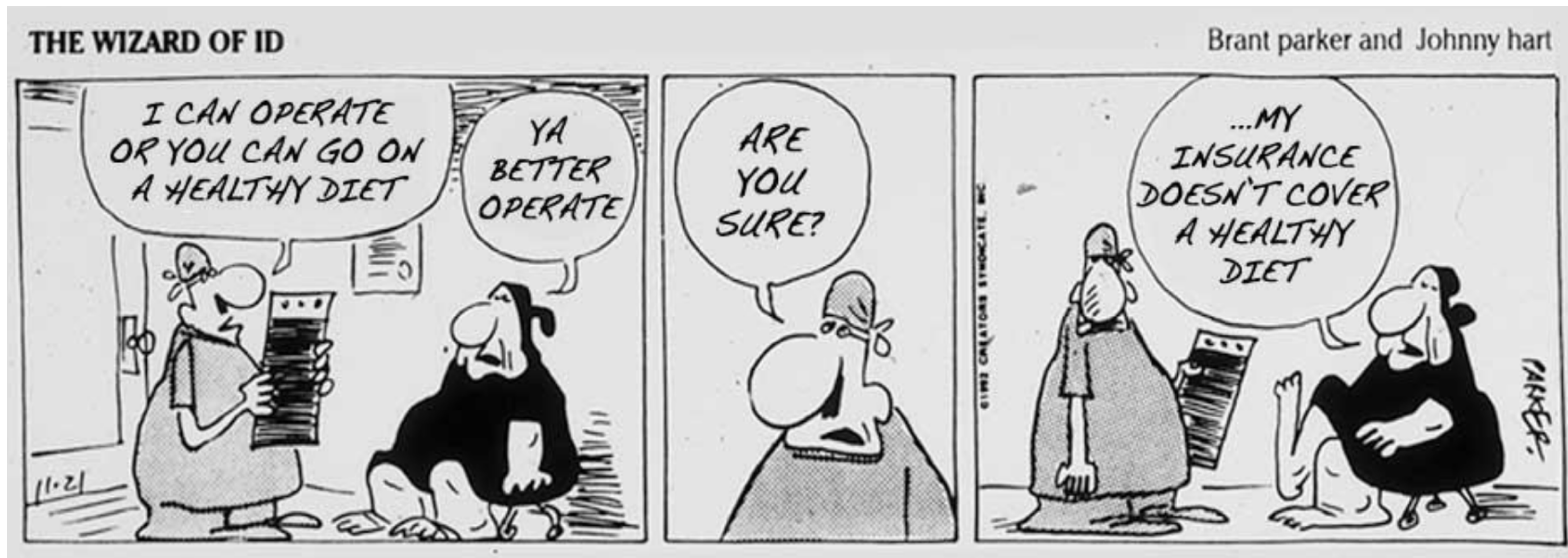
Πόσοι Γιατροί Χρειάζονται για να
Αλλάξει Μία Λάμπα;

Ένας, Αρκεί η Λάμπα να Θέλει να
Αλλάξει!

Η Γνώση από Μόνη της
↳ Δεν Αλλάζει τη Συμπεριφορά!

Motivational Interviewing

Why Don't We Use This Powerful Tool?



Thank
You!

Who Wants to Live Forever?



DR. KALLIOPI KALAITZI

