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Thursday, August 08, 2019

(Room 3)

14:00 - 16:00 WS #18: Strategies Retiring from Practice

16:30 - 18:30 WS #24: Strategies Retiring from Practice (Repeated)

Retiring from Practice: Successful Ageing.

A/Prof Yoram Barak, MD, MHA>
DSM, Psychological Medicine.

Breaking away from the bleak picture previously painted about a lack of effective ways to prevent dementia, the
National Academies of Sciences, Engineering, and Medicine (USA)
said in a new report that three interventions offer "encouraging" evidence of staving off cognitive decline.



South GP CME General Practice Conference & Medical Exhibition

Prof Y Barak, MD, MHA.

Cure ???

- Currently there are 1,278 clinical trials listed on ClinicalTrials.gov.
- **They will all fail.**
 - In the last 30 years not a single new molecule was approved by the FDA for Alzheimer's disease.
 - In the period 2001-2011 years 1,274 trials **failed**.

Dementia prevention, intervention, and care



Gill Livingston, Andrew Sommerlad, Vasiliki Orgeta, Sergi G Costafreda, Jonathan Huntley, David Ames, Clive Ballard, Sube Banerjee, Alistair Burns, Jiska Cohen-Mansfield, Claudia Cooper, Nick Fox, Laura N Gitlin, Robert Howard, Helen C Kales, Eric B Larson, Karen Ritchie, Kenneth Rockwood, Elizabeth L Sampson, Quincy Samus, Lon S Schneider, Geir Selbæk, Linda Teri, Naaheed Mukadam

www.thelancet.com Published online July 20, 2017 [http://dx.doi.org/10.1016/S0140-6736\(17\)31363-6](http://dx.doi.org/10.1016/S0140-6736(17)31363-6)

Key messages

1 The number of people with dementia is increasing globally
Although incidence in some countries has decreased.

2 Be ambitious about prevention



We recommend active treatment of hypertension in middle aged (45–65 years) and older people (aged older than 65 years) without dementia to reduce dementia incidence. Interventions for other risk factors including more childhood education, exercise, maintaining social engagement, reducing smoking, and management of hearing loss, depression, diabetes, and obesity might have the potential to delay or prevent a third of dementia cases.

3 Treat cognitive symptoms

To maximise cognition, people with Alzheimer's disease or dementia with Lewy bodies should be offered cholinesterase inhibitors at all stages, or memantine for severe dementia. Cholinesterase inhibitors are not effective in mild cognitive impairment.

4 Individualise dementia care

Good dementia care spans medical, social, and supportive care; it should be tailored to unique individual and cultural needs, preferences, and priorities and should incorporate support for family carers.

5 Care for family carers

Family carers are at high risk of depression. Effective interventions, including STrategies for RelaTives (START) or Resources for Enhancing Alzheimer's Caregiver Health intervention (REACH), reduce the risk of depression, treat the symptoms, and should be made available.

6 Plan for the future

People with dementia and their families value discussions about the future and decisions about possible attorneys to make decisions. Clinicians should consider capacity to make different types of decisions at diagnosis.

7 Protect people with dementia

People with dementia and society require protection from possible risks of the condition, including self-neglect, vulnerability (including to exploitation), managing money, driving, or using weapons. Risk assessment and management at all stages of the disease is essential, but it should be balanced against the person's right to autonomy.

8 Manage neuropsychiatric symptoms

Management of the neuropsychiatric symptoms of dementia including agitation, low mood, or psychosis is usually psychological, social, and environmental, with pharmacological management reserved for individuals with more severe symptoms.

9 Consider end of life

A third of older people die with dementia, so it is essential that professionals working in end-of-life care consider whether a patient has dementia, because they might be unable to make decisions about their care and treatment or express their needs and wishes.

10 Technology

Technological interventions have the potential to improve care delivery but should not replace social contact.

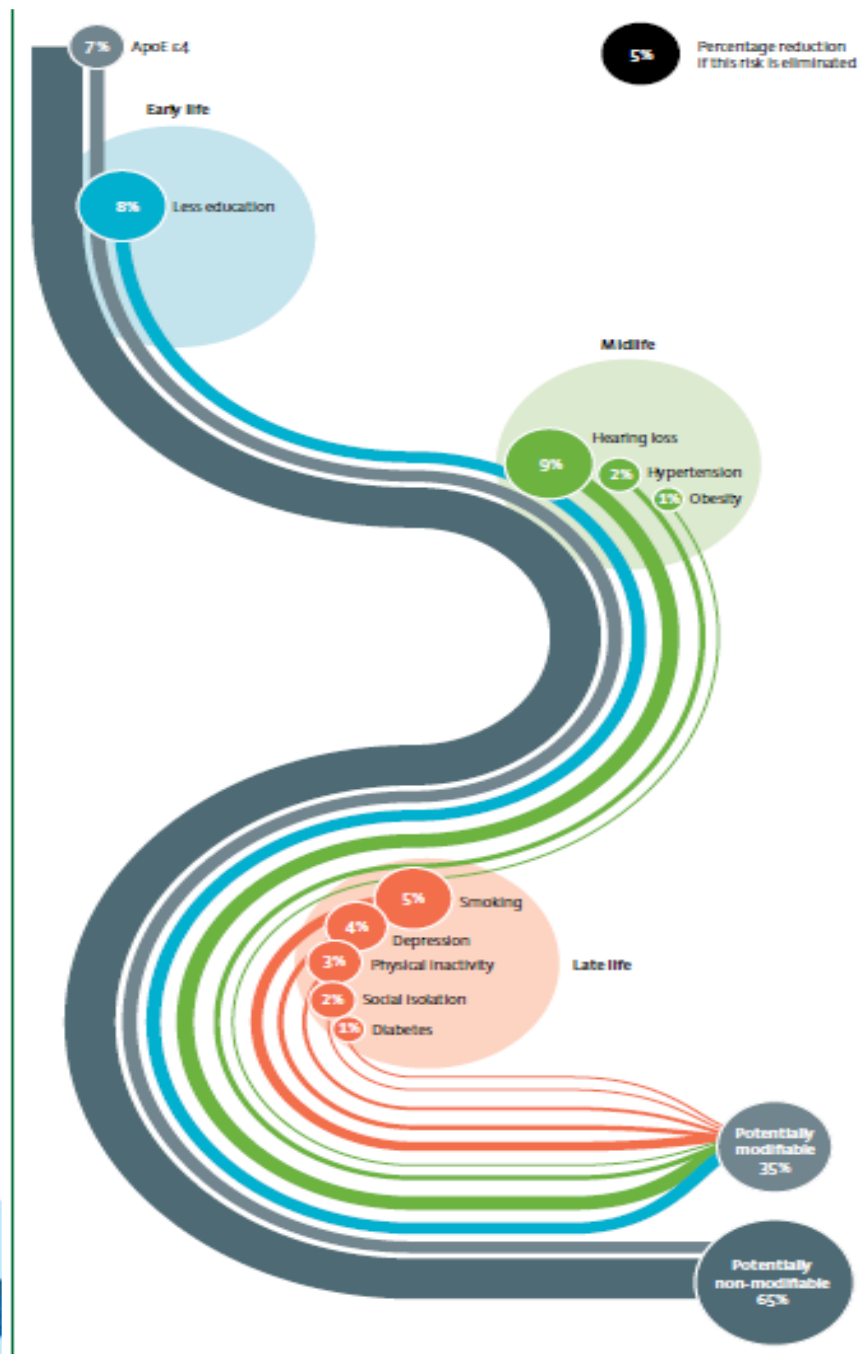


Figure 4: Life-course model of contribution of modifiable risk factors to dementia
Numbers are rounded to nearest Integer. Figure shows potentially modifiable or non-modifiable risk factors.

Loneliness



The “social brain”

- Much of the neurological basis of social relations lies in the limbic and associational cortical and subcortical brain regions.
- These areas of our brain also support episodic memory, semantic memory, and other cognitive functions.
- Thus, it is possible that the cognitive processing that allows people to develop and maintain large social networks provides a reserve against the development of cognitive impairment despite the increasing pathology of Alzheimer’s disease.

Social isolation in old age has been associated with risk of developing dementia.

- Researchers at the Rush Alzheimer's Disease Center, Chicago recruited 823 older persons free of dementia assessing their level of loneliness with a structured rating scale every year for five years.
- The risk of Alzheimer's disease was more than **doubled** in lonely persons.
 - Loneliness did not change significantly over the study period so that lonely elderly in essence remained lonely for many years.





Forever Young(er): potential age-defying effects of long-term meditation on gray matter atrophy

Eileen Luders^{1}, Nicolas Cherbuin² and Florian Kurth¹*

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Primary Prevention of Cardiovascular Disease with a Mediterranean Diet



Estruch R et al.

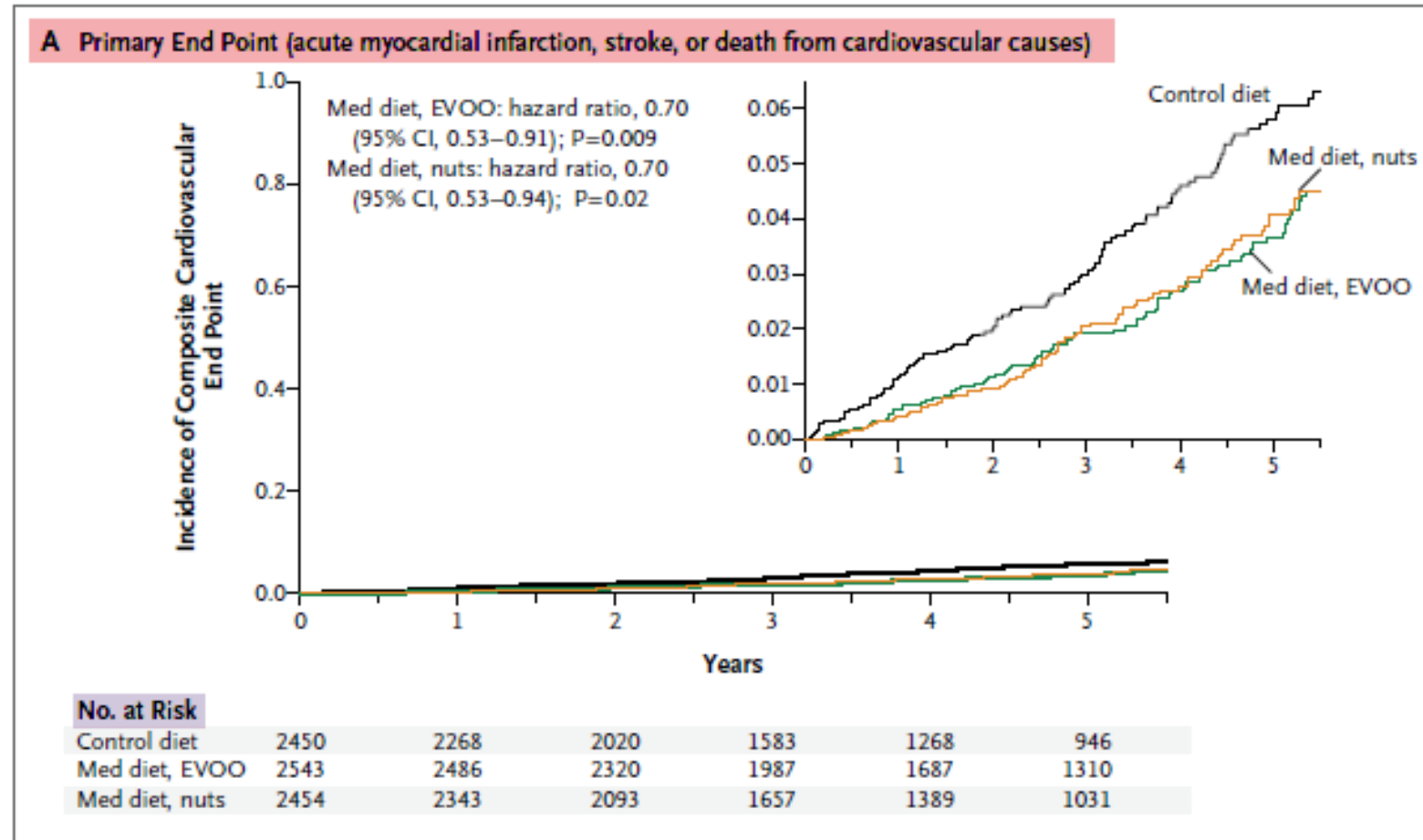
The New England Journal of Medicine, Feb 2013

Table 1. Summary of Dietary Recommendations to Participants in the Mediterranean-Diet Groups and the Control-Diet Group

Food	Goal
Mediterranean diet	
<u>Recommended</u>	
Olive oil*	≥ 4 tbsp/day
Tree nuts and peanuts†	≥ 3 servings/wk
Fresh fruits	≥ 3 servings/day
Vegetables	≥ 2 servings/day
Fish (especially fatty fish), seafood	≥ 3 servings/wk
Legumes	≥ 3 servings/wk
Sofrito‡	≥ 2 servings/wk
White meat	Instead of red meat
Wine with meals (optionally, only for habitual drinkers)	≥ 7 glasses/wk
<u>Discouraged</u>	
Soda drinks	< 1 drink/day
Commercial bakery goods, sweets, and pastries§	< 3 servings/wk
Spread fats	< 1 serving/day
Red and processed meats	< 1 serving/day
Low-fat diet (control)	
<u>Recommended</u>	
Low-fat dairy products	≥ 3 servings/day
Bread, potatoes, pasta, rice	≥ 3 servings/day
Fresh fruits	≥ 3 servings/day
Vegetables	≥ 2 servings/wk
Lean fish and seafood	≥ 3 servings/wk
<u>Discouraged</u>	
Vegetable oils (including olive oil)	≤ 2 tbsp/day
Commercial bakery goods, sweets, and pastries§	≤ 1 serving/wk
Nuts and fried snacks	≤ 1 serving /wk
Red and processed fatty meats	≤ 1 serving/wk
Visible fat in meats and soups¶	Always remove
Fatty fish, seafood canned in oil	≤ 1 serving/wk
Spread fats	≤ 1 serving/wk
Sofrito‡	≤ 2 servings/wk

Ramón E, et al. N Eng J Med, 2013

Figure 1.
Kaplan–Meier Estimates of the Incidence of Outcome Events in the Total Study Population



Conclusion

- Among persons at high cardiovascular risk, a Mediterranean diet supplemented with extra-virgin olive oil or nuts reduced the incidence of major cardiovascular events.
 - The multivariable-adjusted hazard ratios were 0.70 (95% CI, 0.54 to 0.92) for the group assigned to a Mediterranean diet with extra-virgin olive oil.

DOES THAT EFFECT COGNITION ?

Mediterranean Diet and Age-Related Cognitive Decline A Randomized Clinical Trial

DESIGN, SETTING, AND PARTICIPANTS

Parallel-group randomized clinical trial of 447

cognitively healthy volunteers from Barcelona, Spain mean age, 66.9 years, at high cardiovascular risk.

INTERVENTIONS

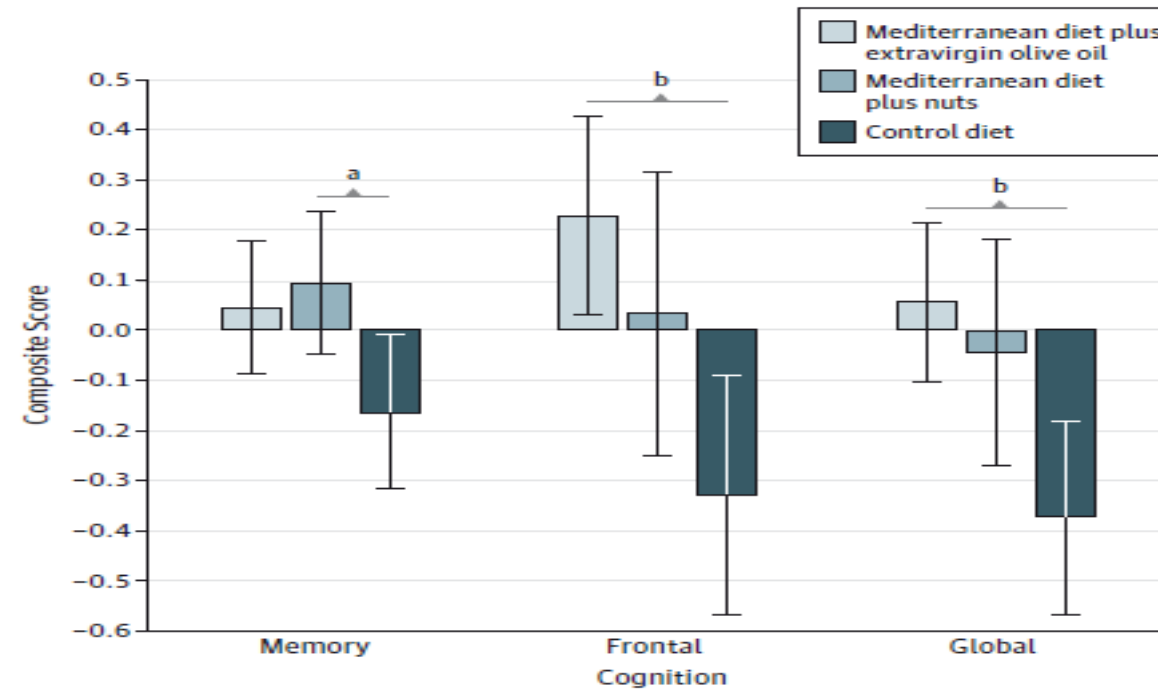
Nutrition intervention trial from 2003, through 2009.

Mediterranean diet supplemented with extra virgin olive oil (1 L/wk)

Mediterranean diet supplemented with mixed nuts (30 g/d)

A control diet (advice to reduce dietary fat).

Figure 2. Changes in Cognitive Function Measured With Composites by Intervention Group



Error bars indicate 95% CIs. *P* values by analysis of covariance were adjusted for sex, baseline age, years of education, marital status, *APOE* ε4 genotype, ever smoking, baseline body mass index, energy intake, physical activity, type 2 diabetes mellitus, hyperlipidemia, ratio of total cholesterol to high-density lipoprotein cholesterol, statin treatment, hypertension, use of anticholinergic drugs, and time of follow-up, with the Bonferroni post hoc test. For each cognitive composite, the changes between the 2 Mediterranean arms were not statistically different ($P > .99$ for all). The changes for memory between the Mediterranean diet plus olive oil and control groups and for frontal and global cognition between the Mediterranean diet plus nuts and control groups had values of $P < .25$.

^a $P < .05$.

^b $P < .01$.

Mediterranean Diet and Age-Related Cognitive Decline: A Randomized Clinical Trial

CONCLUSIONS AND RELEVANCE

In an older population, a Mediterranean diet supplemented with olive oil or nuts is associated with improved cognitive function.

JAMA Intern Med. 2015;175(7):1094-1103.

Hope at last !



Your mind matters. Here's how to stay sharp.

The secret to increasing brain function is growing neurons. 'More neurons means a better ability to learn and to remember,' says Max Cynader of Vancouver's Djavad Mowafaghian Centre for Brain Health.



Get quality rest

One way to grow neurons? During the day, while you learn, you grow neural connections in your brain. Then at night, you replay the day's memories while you sleep, helping neurons to wire and fire together.



How Long to Nap



10 to 20 Minutes

This power nap is ideal for a boost in alertness and energy, experts say. This length usually limits you to the lighter stages of non-rapid eye movement (NREM) sleep, making it easier to hit the ground running after waking up.

30 Minutes

Some studies show sleeping this long may cause sleep inertia, a hangover-like groggy feeling that lasts for up to 30 minutes after waking up, before the nap's restorative benefits become apparent.

60 Minutes

This nap is best for improvement in remembering facts, faces and names. It includes slow-wave sleep, the deepest type. The downside: some grogginess upon waking up.

90 Minutes

This is a full cycle of sleep, meaning the lighter and deeper stages, including REM (rapid eye movement) sleep, typically likened to the dreaming stage. This leads to improved emotional and procedural memory (i.e. riding a bike, playing the piano) and creativity. A nap of this length typically avoids sleep inertia, making it easier to wake up.

Take the blues seriously

A 2010 study published in Cognitive, Affective & Behavioral Neuroscience showed people with depression performed worse on cognitive tasks than their non-depressed counterparts. 'Treat the depression and you can improve the cognitive function,' says Aaron Newman, a neuroscientist and associate professor at Halifax's Dalhousie University.



Manage stress

When we're agitated, our bodies flood our brains with cortisol. The hormone attaches to receptors in our neurons, which allows more calcium to pass through their membranes. Neurons overloaded with calcium fire too rapidly. That hyper firing kills neurons.



Play

Research from the Berlin-based Max Planck Institute for Human Development and two other German institutions showed that regularly playing Super Mario 64 increased study participants' brain volume in the regions that control memory and spatial thinking.



Break a sweat

One-hour weightlifting sessions, twice a week, have been shown to slow the progress of mild cognitive impairment



Drink your coffee

Coffee contains polyphenols, antioxidant compounds that may protect the hippocampus and the cortex, areas that are important for memory. Three to five cups a day is ideal.



Monitor your hearing

A 2013 Johns Hopkins study concluded that cognitive decline progressed 30% to 40% faster for people with hearing loss than for those with normal hearing. Treating impairment can improve cognitive ability.



Don't count on superfoods

Studies have shown that turmeric, for example, breaks up brain plaque (which has been linked to Alzheimer's), but it's no cure-all. 'It's not the food that's beneficial; it's the chemicals in it,' says Newman. It's impossible to get a high enough concentration of those chemicals in your diet to recreate lab results.



Avoid smoking

The cortex, the bumpy surface layer of the brain, naturally thins as we age. Smoking hastens this thinning, which is associated with cognitive decline.



Build friendships

As little as 10 minutes of socializing a day improves cognitive performance.



Get Zen

Meditating for half an hour a day, for eight weeks, has been shown to grow grey matter in the hippocampus, which may improve memory and learning.



Thank you for your attention....

Successful old-age may lie not so much in our stars and genes as in ourselves.

