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- Questions will be addressed during the 'Question and Answer' portion of the program using the Q&A feature.
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Think Well, Live Well: Brain Health Through a Holistic Lens

Statewide Webinar

December 3, 2025

CARDI·OH

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Welcome

Shari Bolen, MD, MPH
Co-Principal Investigator, Cardi-OH

Case Western Reserve University School of Medicine

About Cardi-OH

CARDI·OH

Ohio Cardiovascular and Diabetes Health Collaborative

Founded in 2017, the mission of Cardi-OH is to improve cardiovascular and diabetes health outcomes and eliminate disparities in Ohio's Medicaid population.

WHO WE ARE: An initiative of health care professionals across Ohio's seven medical schools.

WHAT WE DO: Identify, produce, and disseminate evidence-based cardiovascular and diabetes best practices to primary care teams.

HOW WE DO IT: Online library of best practices resources available at Cardi-OH.org and via our web app, including monthly newsletters, podcasts, webinars, and quality improvement using the Project ECHO® virtual training model.

Learn more at Cardi-OH.org

Special Thanks

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OHIO COLLEGES OF MEDICINE
GOVERNMENT RESOURCE CENTER

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Medicaid Technical Assistance & Policy Program

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  - Use the Q&A feature to submit questions at any point.
  - Questions will be answered during the Q&A portion of the webinar.
- Post-webinar evaluation survey.
  - The survey link will be shared at the end of today's webinar and also sent by email.
  - Please complete by COB Wednesday, December 10.

Disclosure Statements

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- The following speakers have no relevant financial interest or affiliation with any organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of their presentation:
  - Shari Bolen, MD, MPH; Robert B. Saper, MD, MPH; Amy Zack, MD
- The following members of the planning committee do not have any disclosures or financial relationships from any ineligible companies:
  - Gillian Irwin, Elizabeth Littman, Ann Nevar, Devin O'Neill, Claire Rollins, Catherine Sullivan

For more information about exemptions or details, see www.acrme.org/standards.

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- 1.0 *AMA PRA Category 1 Credit™* is available for this webinar.
- Attendees who indicated on the registration form that they were interested in claiming CME credit for this webinar will receive an email from CloudCME next week with more information.
- Complete CME Evaluation and claim credits by Wednesday, March 4, 2026.
- Contact Cathy Sullivan (csullivan1@metrohealth.org) if you do not receive an email to complete your CME evaluation or need other assistance.

The MetroHealth System is accredited by the Ohio State Medical Association to provide continuing medical education for physicians. The MetroHealth System designates this educational activity for a maximum of 1.0 *AMA PRA Category 1 Credit(s)*™. Physicians should only claim credit commensurate with the extent of their participation in the activity. Other Healthcare Professionals: check with your professional association as these credits might be applicable for hours towards licensure renewal.

Agenda

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Topics	Presenter(s)	Timing
Welcome and Overview	Shari Bolen, MD, MPH	5 mins.
Think Well, Live Well: Brain Health Through a Holistic Lens	Robert B. Saper, MD, MPH	40 mins.
Audience Question and Answer	Amy Zack, MD (Moderator) Robert B. Saper, MD, MPH	10 mins.
Next Steps and Wrap Up	Shari Bolen, MD, MPH	5 mins.

Robert B. Saper, MD, MPH
Case Western Reserve University
Cleveland Clinic

Amy Zack, MD (Moderator)
Case Western Reserve University
Cleveland Clinic

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Think Well, Live Well: Brain Health Through a Holistic Lens

Robert B. Saper, MD, MPH

Professor, Cleveland Clinic Lerner College of Medicine

Case Western Reserve University

Nancy J. and Michael F. Roizen Chair of Wellness

Chair, Department of Wellness and Preventative Medicine

Cleveland Clinic

Learning Objectives

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1. Understand the impact of lifestyle and behaviors on cognitive wellness
2. Identify modifiable risk factors for decline in cognitive function
3. Counsel on key lifestyle interventions for the prevention of cognitive decline and protection of brain health

Acknowledgment

Sandra Darling, DO, MPH

Director, Women's Alzheimer's Movement Prevention and Research Center

Cleveland Clinic

What Is a Holistic Lens?
The Biopsychosocial-Spiritual Model

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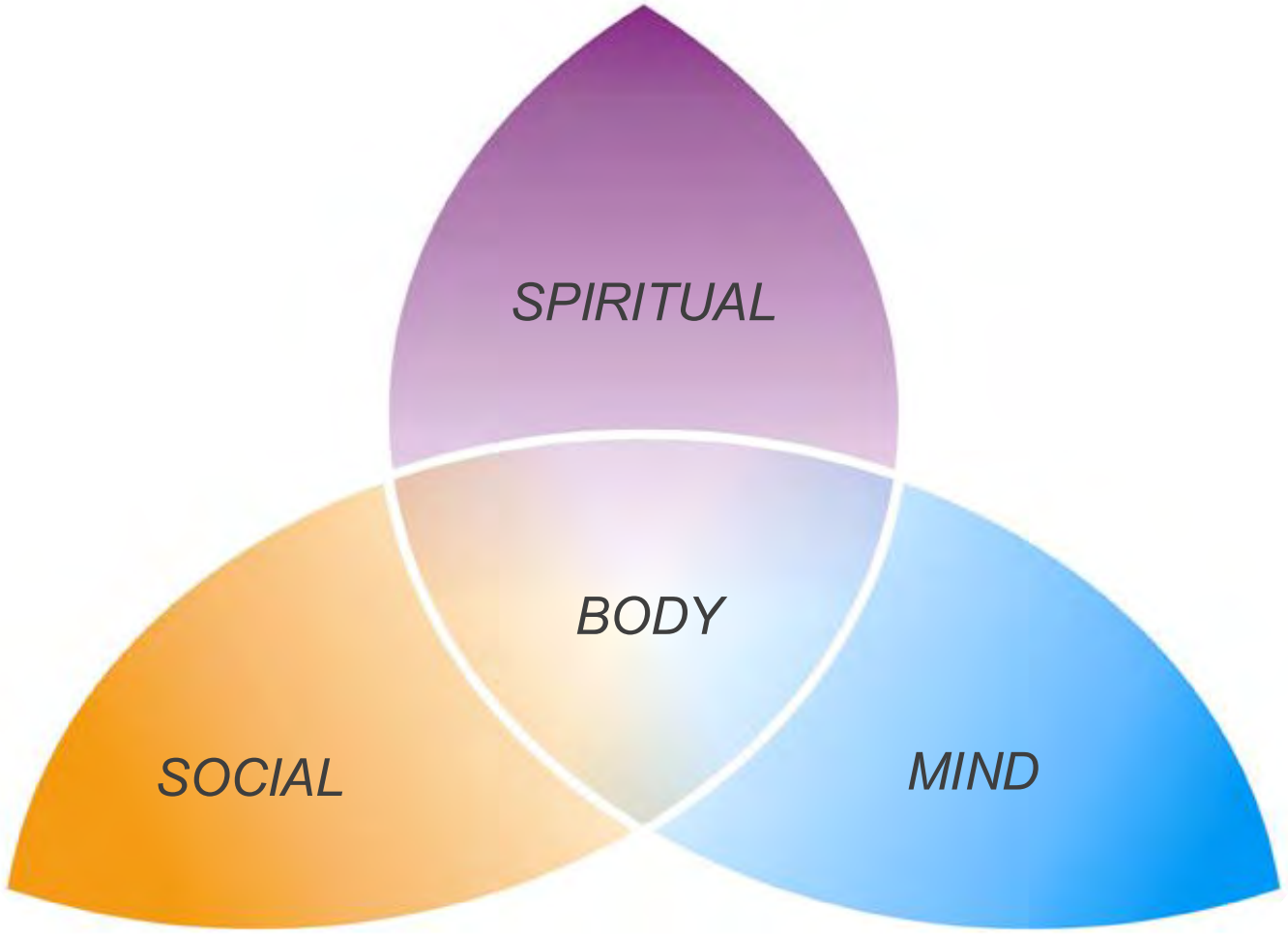
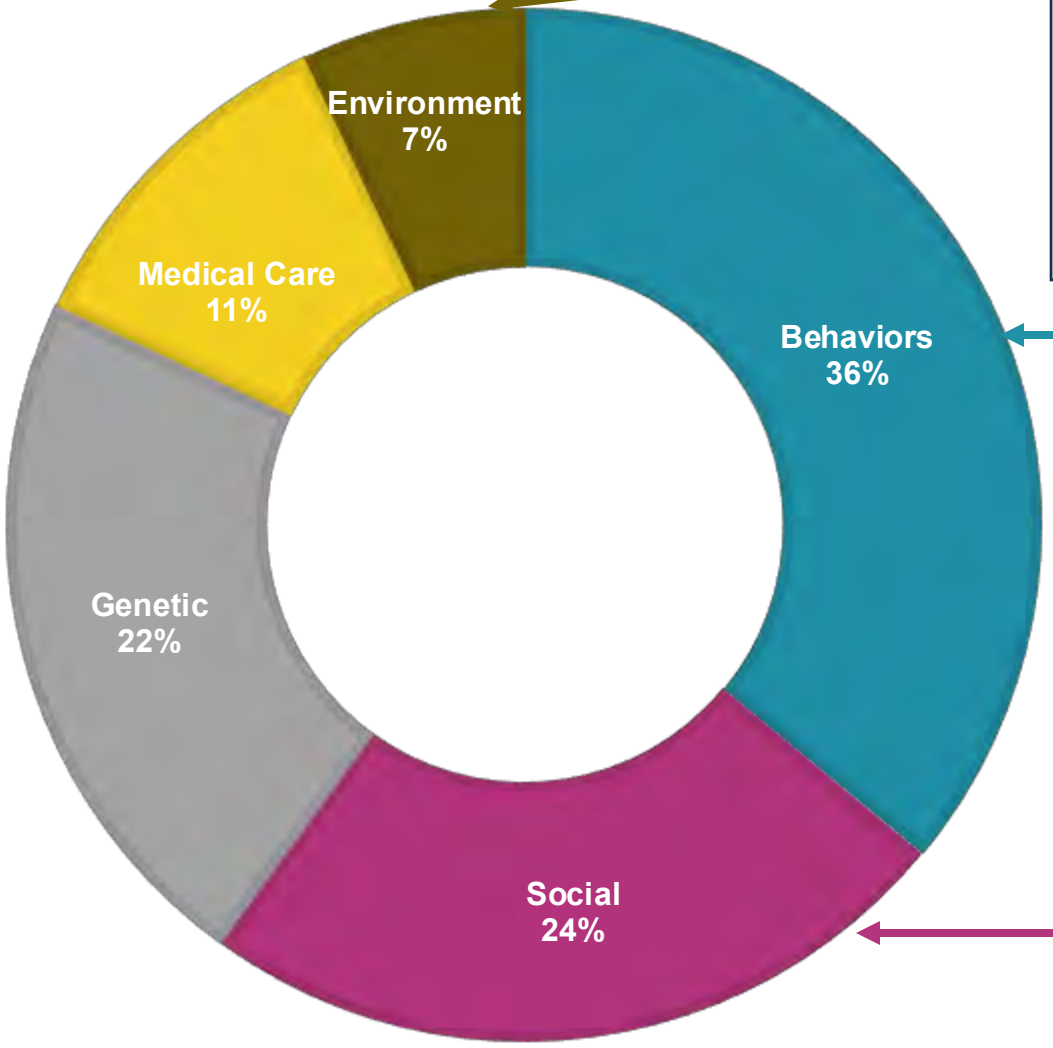


Engel GL. Science. 1977; 196(4286):129-36.

Contributors to Health and Wellness Outcomes



Climate
Air quality
Soil
Water
Green space

Nutrition
Physical activity
Sleep
Stress management
Substance use
Violence

Age	Language
Race	Geography
Ethnicity	Income
Gender identity	Employment
Sexual orientation	Transportation
Education	Housing
Health literacy	Religion

Health Policy Brief. Health Affairs, August 21, 2014.

Health and Wellness Equity

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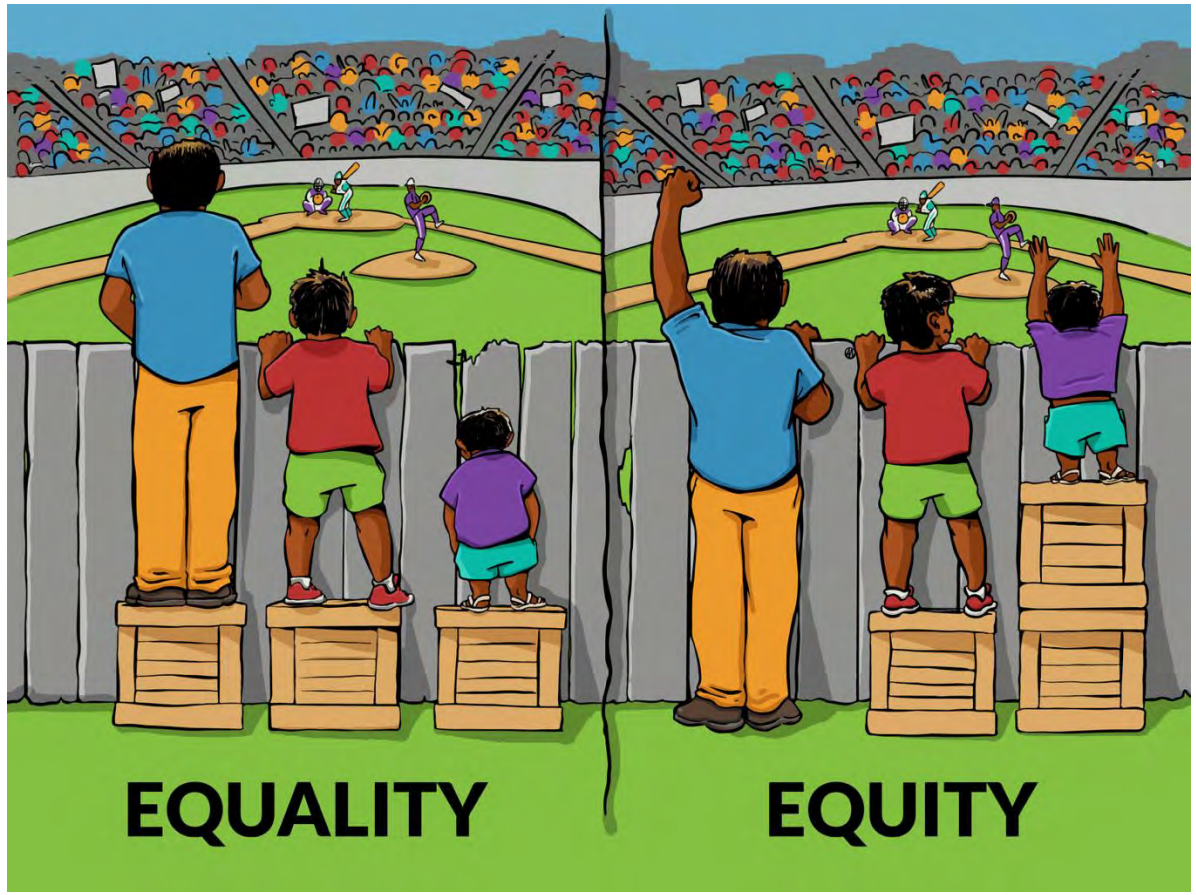
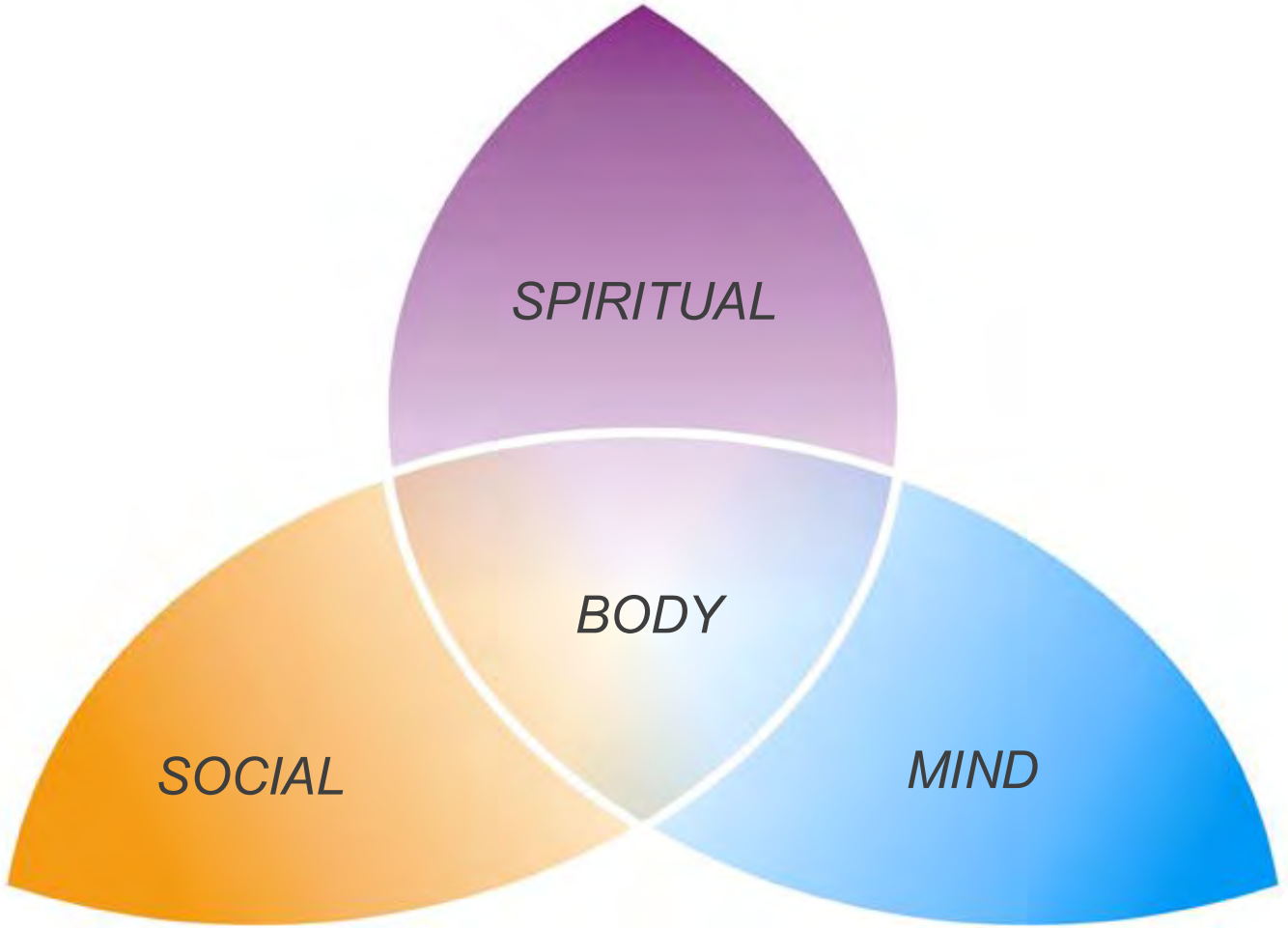
Everyone should have a fair and just opportunity to attain their highest level of health and wellness



U.S. Centers for Disease Control and Prevention. https://www.cdc.gov/health-disparities-hiv-std-tb-hepatitis/about/.
Interaction Institute for Social Change. https://interactioninstitute.org/illustrating-equality-vs-equity/.

Dementia: "The Loss of the Self"



Sabat SR, Harré R. Ageing and Society, 1992;12(4):443-461.

Lived Experience

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Alzheimer's Disease and Related Dementias

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- Alzheimer's disease (60-70% of all Alzheimer's disease and related dementias)
- Vascular dementia
- Lewy body dementia
- Frontotemporal dementia
- Normal pressure hydrocephalus
- Many others

National Institute on Aging. https://www.nia.nih.gov/health/alzheimers-and-dementia/what-dementia-symptoms-types-and-diagnosis.

Assessing Cognitive Function

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Feature	C3	MoCA	MMSE	Mini-Cog
Developer	Cleveland Clinic	Nasreddine	Folstein	Borson
Format	iPad-based digital	Paper/digital	Paper	3-word + clock
Primary Purpose	Sensitive tracking	Mild cognitive impairment screen	Dementia screen	Ultra-brief dementia screen
Sensitivity to Early Cognitive Change	High	High	Moderate-Low	Low
Domains	Processing speed, memory, executive function	Multiple domains	Basic domains	Recall + clock
Time	12-15 min	10 min	7 min	3 min

Rao SM, et al. J Alzheimers Dis. 2023;92(3):1051-1066; Nasreddine ZS, et al. J Am Geriatr Soc. 2005; Folstein MF, et al. J Psychiatr Res. 1975;12(3):189-98; Borson S, et al. Int J Geriatr Psychiatry. 2000;15(11):1021-7.

The Spectrum of Cognitive Function

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MoCA	26-30	18-25		10-17	< 10
MMSE	27-30	? 24-26	21-23	10-20	< 10
Mini-Cog	3-5	< 3			

Schweiger JI, et al. Neuropsychopharmacology. 2019;44(3):590-597; Nasreddine ZS, et al. J Am Geriatr Soc. 2005; Folstein MF, et al. J Psychiatr Res. 1975;12(3):189-98; Borson S, et al. Int J Geriatr Psychiatry. 2000;15(11):1021-7.

At This Time, Alzheimer's Disease **Cannot** Be Reversed

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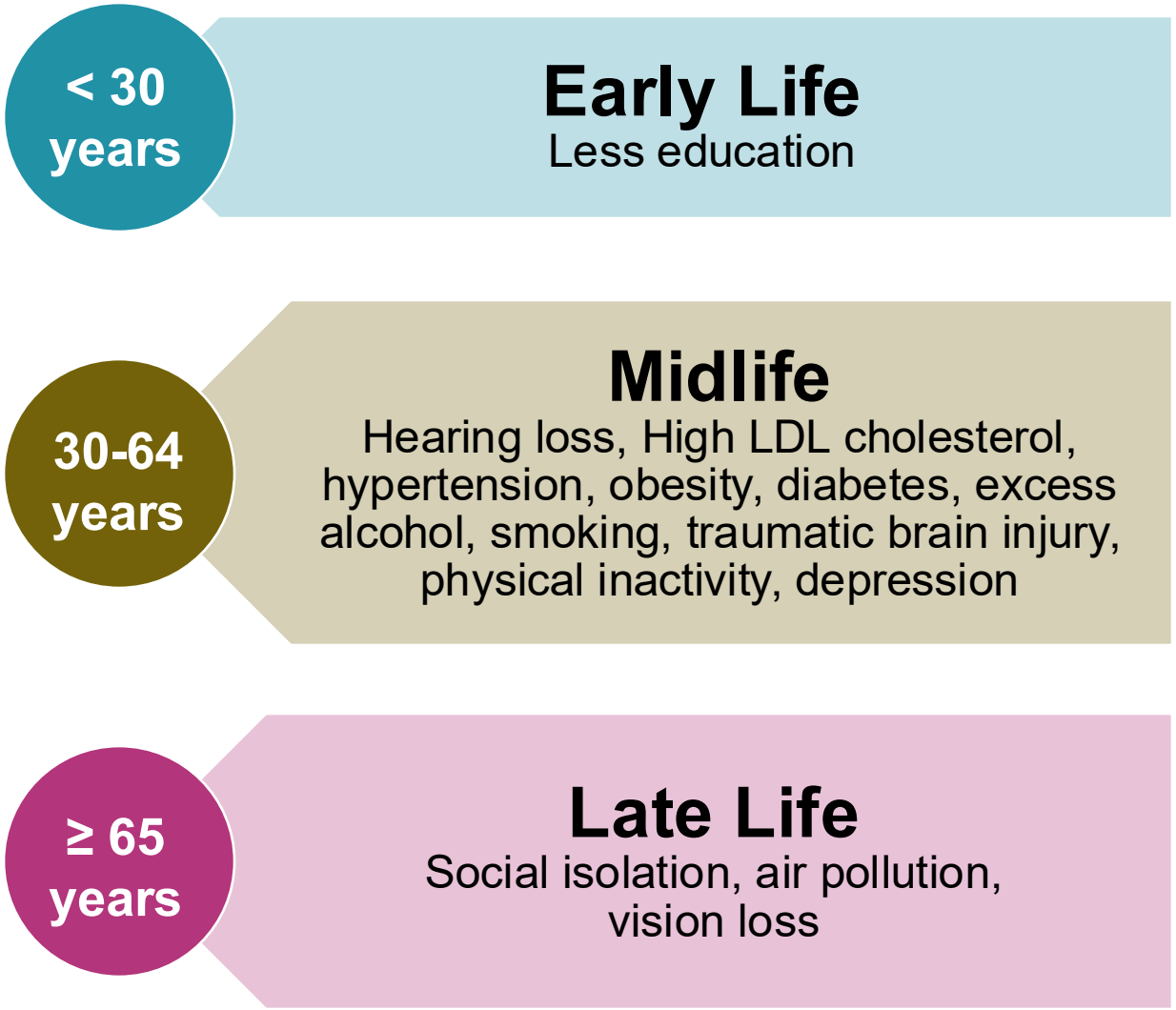
However, progression can likely be delayed through optimization of modifiable risk factors, behavioral, and lifestyle changes, and future medical therapies.

National Institute on Aging. https://www.nia.nih.gov/health/alzheimers-and-dementia/what-dementia-symptoms-types-and-diagnosis.

14 Modifiable Risk Factors of Dementia



Livingston G, et al. Lancet. 2024;404(10452):572-628.

Six Pillars of Lifestyle Medicine

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Whole-Food, Plant-Predominant Eating Pattern
Emphasizes minimally processed plant foods

Regular Physical Activity
Move daily for fitness and function

Restorative Sleep
Prioritize quality and quantity off sleep

Stress Management
Build resilience and reduce chronnic stress

Avoidance of Risky Substances
Eliminate or minimizee harmful exposures

Positive Social Connection
Nurture healthy, supportive relationships

American College of Lifestyle Medicine. https://lifestylemedicine.org/.

Dietary Patterns for Alzheimer's Disease Prevention

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- Mediterranean Diet
  - High adherence = **54%** lower risk of Alzheimer's disease
- DASH Diet
  - High adherence = **39%** lower risk of Alzheimer's disease
- Mediterranean-DASH Intervention for Neurodegenerative Delay (MIND) Diet
  - High adherence = **53%** lower risk of Alzheimer's disease

Scarmeas N, et al. Ann Neurol. 2006;59(6):912-21; Morris MC, et al. Alzheimers Dement. 2015;11(9):1007-14.

Comparison of DASH vs. Mediterranean vs. MIND Diets

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Feature	DASH Diet	Mediterranean Diet	MIND Diet
Fat Pattern	Low total fat, low saturated fat	High healthy fats (olive oil)	Moderate, olive oil emphasized
Protein Emphasis	Low-fat dairy, poultry, legumes	Fish, legumes, nuts	Fish, poultry, legumes (fish > poultry)
Sodium	Strict limits (1,500–2,300 mg/day)	No formal limits	No formal limits but naturally low
Dairy	Low-fat dairy encouraged	Moderate dairy (yogurt/cheese)	Low to moderate
Red Meat	Strongly limited	Limited	Strongly limited

Appel LJ, et al. N Engl J Med. 1997;336(16):1117-24; Estruch R, et al. N Engl J Med. 2018;378(25)e34; Morris MC, et al. Alzheimers Dement. 2015;11(9):1007-14.

DASH Diet

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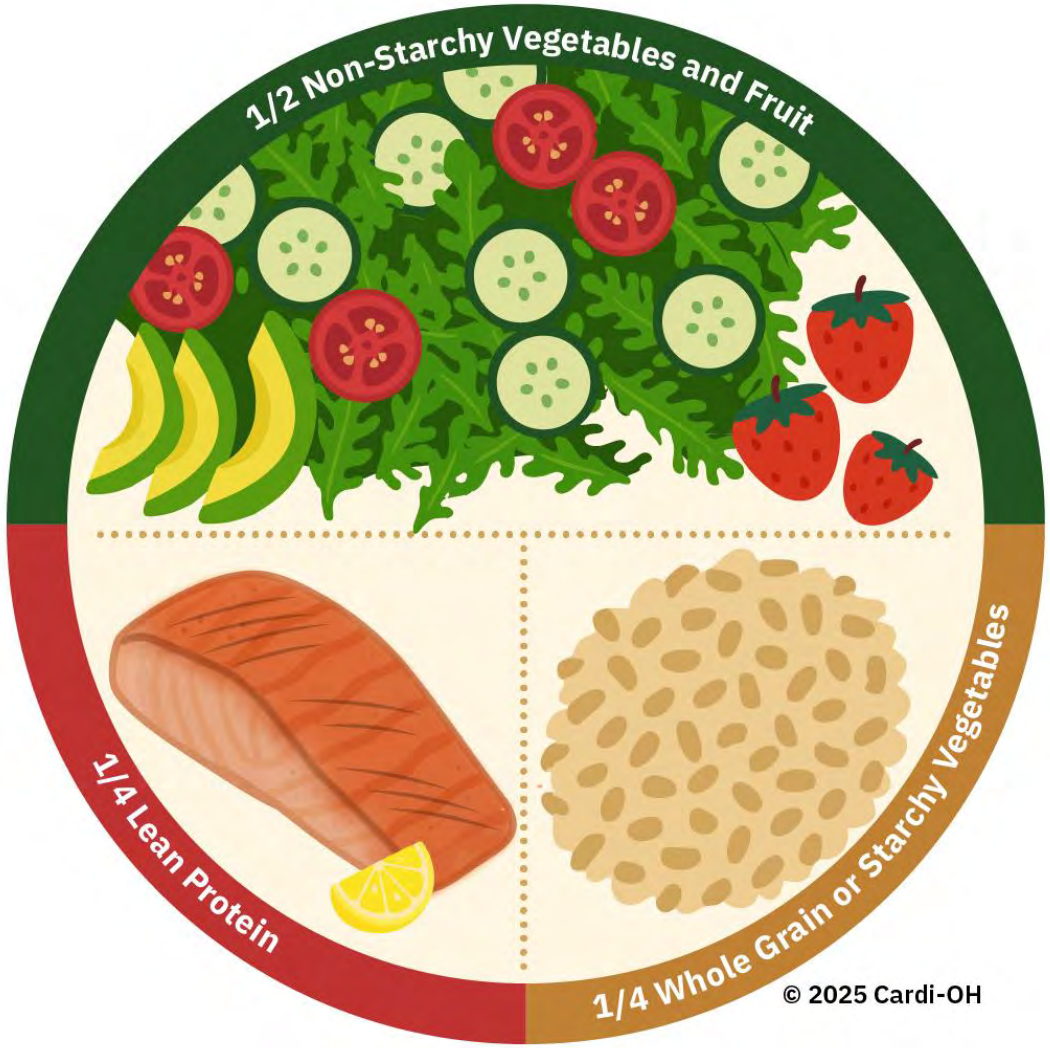

Ohio Cardiovascular and Diabetes Health Collaborative. https://www.cardi-oh.org/resources/building-a-dash-diet-plate.

Mediterranean Diet

Mediterranean Diet food list

Vegetables and tubers	Fruits	Grains	Nuts, seeds and legumes
Acorn squash	Avocados	Barley	Almonds
Artichokes	Apples	Brown rice	Brazil nuts
Arugula	Apricots	Buckwheat	Cannellini beans
Beets	Bananas	Bulgur	Chia seeds
Bell peppers	Blueberries	Couscous	Chickpeas
Broccoli	Cantaloupe	Durum	Fava beans
Brussels sprouts	Cherries	Farro	Green beans
Butternut squash	Clementines	Quinoa	Flaxseed
Cabbage	Dates	Millet	Hazelnuts
Carrots	Figs	Oats	Hemp seeds
Celery	Grapefruit	Polenta	Kidney beans
Cucumber	Grapes	Whole-grain bread	Lentils
Eggplant	Honeydew	Whole-grain pasta	Pine nuts
Kale	Olives	Wild rice	Pistachios
Lettuce	Oranges		Sesame seeds
Okra	Peaches and nectarines		Sunflower seeds
Potatoes *(red, white, sweet)*	Pears		Walnuts
Radishes	Pomegranate		
Zucchini	Raspberries		
	Strawberries		
	Tomatoes		
	Watermelon		

Cleveland Clinic Health Library. https://my.clevelandclinic.org/health.

Ultra-Processed Foods (UPFs)

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UPFs are independently associated with all-cause and vascular dementia, but not Alzheimer's disease.

- Prospective observational study (n = 72,083), mean age 62 years, median follow-up of 10 years
- 1st quartile 8.6% of diet is UPFs vs. 4th quartile 27.8%
- Hazard ratios 4th vs. 1st quartiles
- All-cause dementia 1.51 (1.16-1.96) $p < 0.001$
- Alzheimer's disease 1.14 (0.81-1.61) $p = 0.51$
- Vascular dementia 2.19 (1.21-3.96) $p < 0.01$

Li H, et al. Neurology. 2022;99(10):e1056-e1066.

Counseling: Behavioral Change is HARD!

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- Always plant the seed; be patient
- Don’t underestimate the power of our relationships with our patients to create trust and willingness to follow our recommendations
- Try to understand ‘what matters’ to the patient and link that to the behavioral change
- Food label literacy
- Buy from the periphery of the supermarket

Nutrition Resources Examples

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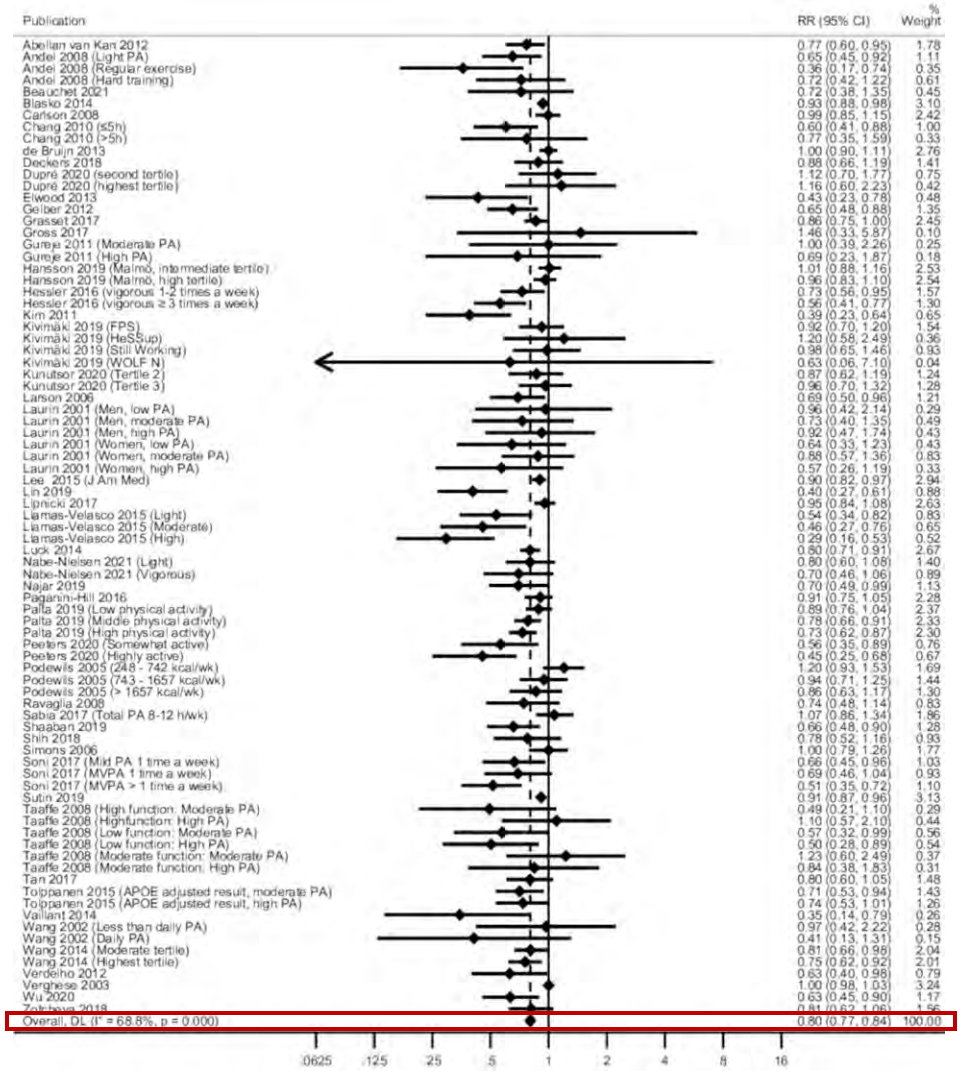
- Refer to local nutritionist or cooking classes
- In-person or virtual nutritionist or culinary medicine through Cleveland Clinic Wellness (216-448-4325)
- Embed smart phrases into EMR
- Mediterranean Diet
  - Cleveland Clinic
  - National Lipid Association
- Recipes
  - Cleveland Clinic
  - Ohio SNAP-Ed Celebrate Your Plate
- MIND Diet Tools

Physical Activity



- Meta-analysis 58 prospective cohort studies measuring cognition and physical activity
- Mean follow-up 12.9 years
- Mean baseline age 67.0
- Relative risks
  - All-cause dementia 0.80
  - Alzheimer's disease 0.86
  - Vascular dementia 0.79

Iso-Markku P, et al. Br J Sports Med. 2022;56(12):701-709.

Physical Inactivity or Sedentary Behavior

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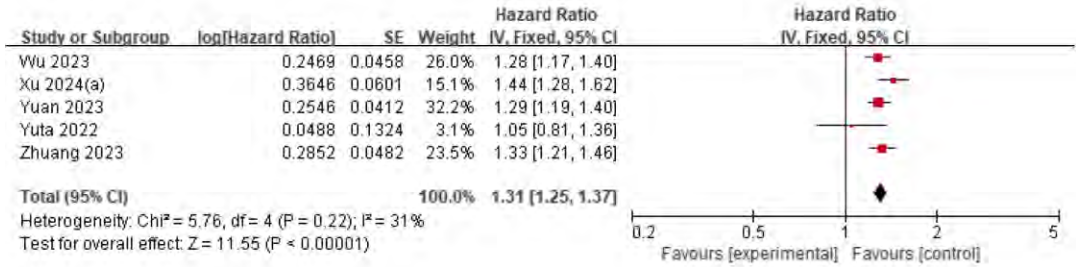
Any activity while awake with energy expenditure ≤ 1.5 METs in a seated or reclined position such as watching TV, driving, or using e-devices

Tremblay MS, et al. Int J Behav Nutr Phys Act. 2017;14(1):75.

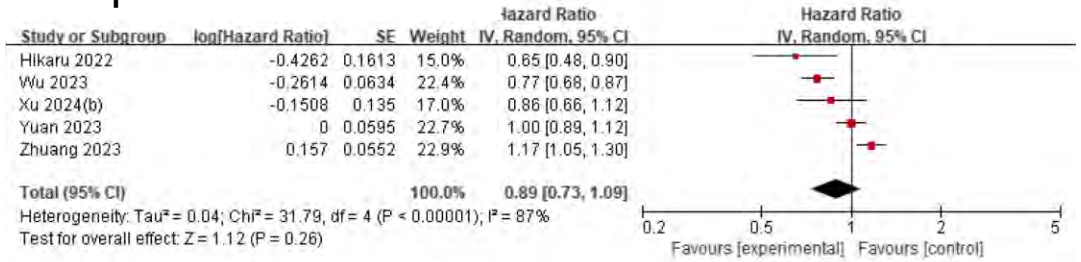
Meta-Analysis of 10 Cohort Studies

Sedentary behavior defined as:

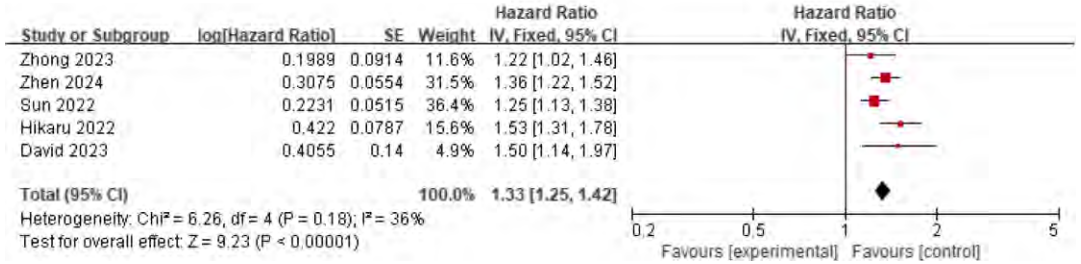
TV viewing



Computer work



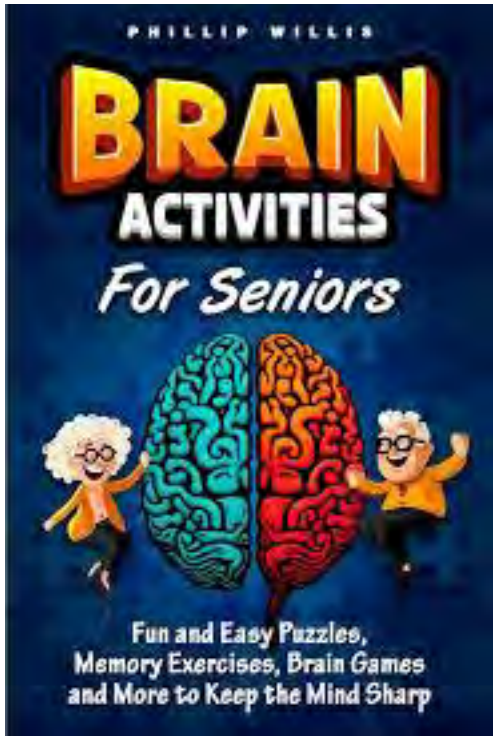
Other definitions



Luo J, et al. BMC Psychiatry. 2025;25(1):451.

Cognitive Exercise

- AHRQ systematic review of 11 randomized controlled trials (RCTs) for cognitive training in older adults with normal cognition or mild cognitive impairment.
- In healthy older adults, training improved the domain that was trained but did *not* consistently generalize to other domains.
- In mild cognitive impairment, results were mixed and overall low/insufficient strength of evidence.
- "Evidence regarding prevention or delay of cognitive decline or dementia is insufficient."



Butler M, et al. Ann Intern Med. 2018;168(1):63-68.

Counseling

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- Find a buddy
- Write an exercise prescription using the **FITT** Principle:
  - **F**requency
  - **I**ntensity
  - **T**ime
  - **T**ype
- Okay to start small!
- “What physical activity gave you joy when you were younger?”

Physical Activity Resources Examples

- Low cost or free classes at local YMCAs, Senior Centers, Community Centers
- YouTube: SeniorShape Fitness With Lauren, Better5.com, SilverSneakers, Yoga With Adriene
- Free live-streamed classes from Wellness Tools For You
- Free Cleveland community yoga classes

Sleep Disorders Impact Cognition

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- Insufficient sleep syndrome (< 7 hours) decreases memory formation (small effect size 0.29)
- Irregular sleep-wake rhythm associated with worse executive function and working memory
- Insomnia is associated with 24% and 94% greater risk of dementia at mid-life and later-life, respectively
- Obstructive sleep apnea (OSA) is associated with onset of mild cognitive impairment and Alzheimer's disease; treatment improved cognitive function in older adults with OSA and Alzheimer's disease

Crowley R, et al. Neurosci Biobehav Rev. 2024;167:105929; Okuda M, et al. Sci Rep 2021;11(1):7039; Salinas J, et al. JAMA Netw Open. 2021;4(8):e2121122; Sindi S, et al. Alzheimers Dement. 2018;14(10):1235-1242; Bubu OM, et al. Sleep Med Rev. 2020;50:101250.

Counseling and Resources

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- Epic SmartPhrases for sleep hygiene

  "Good sleep habits include maintaining as much as possible a regular bedtime and wake up schedule; keeping the room cool; doing some non-stimulating nonelectronic wind down activity for 30 to 60 minutes before bed; no naps during the day; and no caffeine after 12 noon. Try not to eat for 3 hours before bed, no alcohol for 2 hours before bed, and no electronics for 1 hour before bed. If you cannot fall asleep or back to sleep after 15 minutes, get out of bed, go to a different room, read a book or magazine quietly for 10-15 minutes and then return to bed. Repeat this cycle until you fall asleep."

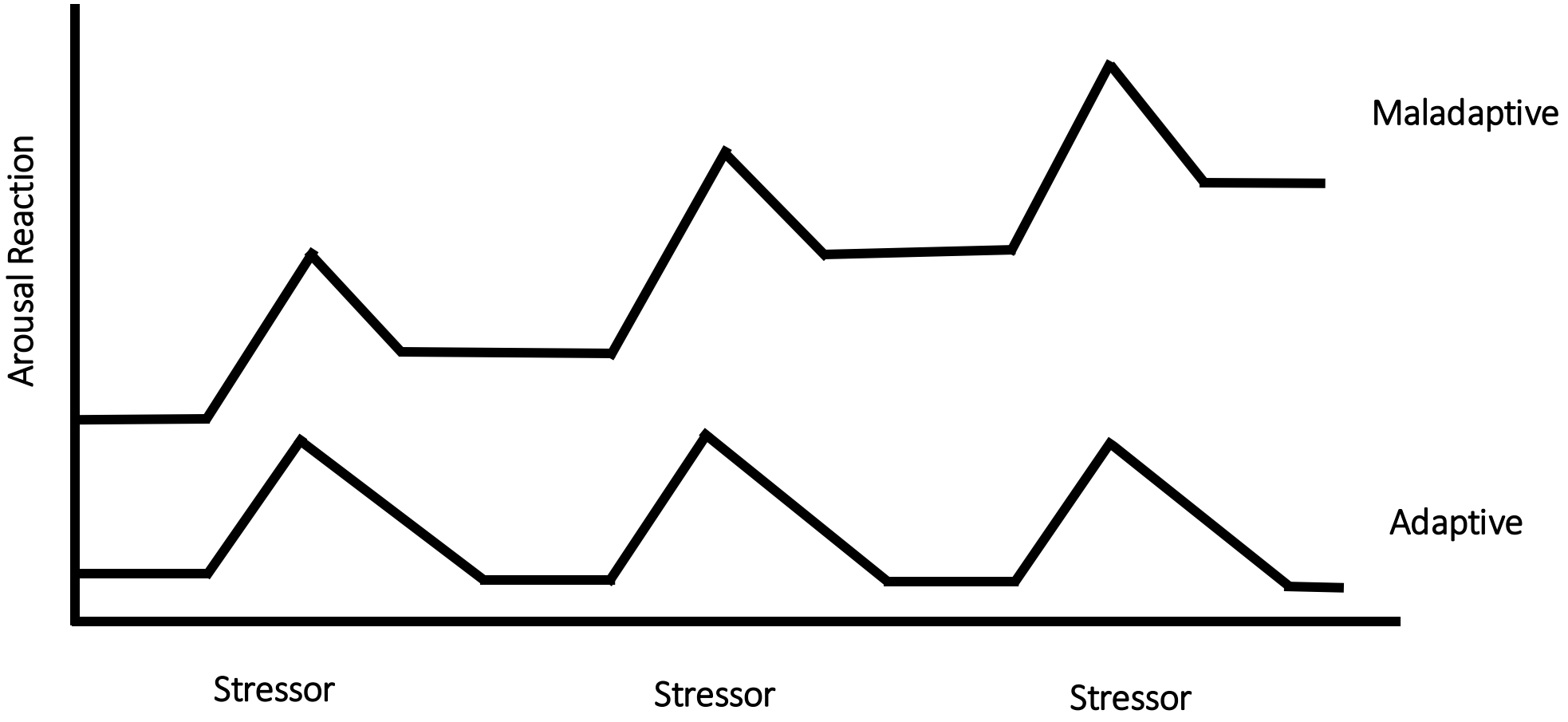
- Insight Timer, Calm, Headspace: great for wind down (e.g., relaxing music, nature sounds, progressive muscle relaxation, Sleepcasts)

Stress

- Stressor: an event or action that causes a state of stress
  - External or internal
  - Controllable or not controllable
- Stress: the experience of or the response to the stressor
  - Often controllable
- Acute stress is not always harmful
- Chronic stress
  - Associated with multiple mental and health conditions
  - May be linked to maladaptive coping mechanisms

Cleck JN, et al. J Clin Invest. 2008;118(2):454-61.

Acute and Chronic Stress



Yerkes RM, et al. Journal of Comparative Neurology and Psychology. 1908; McEwen BS. N Engl J Med. 1998;338(3):171-9.

Stress and Cognition

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Level of Evidence	Key Source	Population	Finding
Level 1a – Meta-analysis	Peavy, et al, Psychoneuroendocrinology, 2012	18 human studies	Higher cortisol → worse memory
Level 1 – Systematic review	Lupien, et al., Nat Rev Neurosci, 2009	Across lifespan	Chronic stress → hippocampal atrophy, memory loss
Level 2 – Prospective cohort	Johansson, et al, BMJ Open, 2013	Midlife women	Repeated stress → ↑ dementia risk
Level 3 – Imaging / mechanistic	Lupien, et al, PNAS, 1998	Older adults	Cortisol predicts hippocampal shrinkage and memory decline

Stress Response and Management

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- Mediated by the hypothalamic-pituitary-adrenal axis and the autonomic nervous system
- Stress management techniques (e.g., deep breathing, meditation, yoga, progressive muscle relaxation) likely all work through common pathways
- Small, individual RCTs show benefit in cognition in healthy patients, subjective cognitive impairment, mild cognitive impairment, and patients with dementia
- Safe and reasonable to recommend

Bhattacharyya KK, et al. Arch Gerontol Geriatr. 2021;93:104319.

What Is Mindfulness?

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"Paying attention in a particular way:
on purpose, in the present moment, and non-judgmentally."

-Jon Kabat-Zinn, PhD

Mind Full or Mindful?

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Effects of Mindfulness Practice

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Enhances

- **Cognition and focus**
- Creativity
- **Working memory**
- **Attention**
- Compassion

Decreases

- **Stress**
- **Depression and anxiety**
- Implicit age and race bias
- **Distractions**
- Emotional reactivity

Salminen T, et al. Front Hum Neurosci. 2012;6:166; Conversano C, et al. Front Phychol. 2020;11:1683; Greenberg J, et al. PLoS One. 2012;7(5):e36206; Hoge EA, et al. J Clin Psychiatry. 2013;74(8):786-92; Kuyken W, et al. Lancet. 2015;386(9988):63-73. Lueke A, et al. Soc Psychol Personal Sci. 2014; 6(3):284-291; Kerr CE, et al. Front Hum Neurosci. 2013;7:12; Lin Y, et al., Front Hum Neurosci, 2016;10:451.

Counseling

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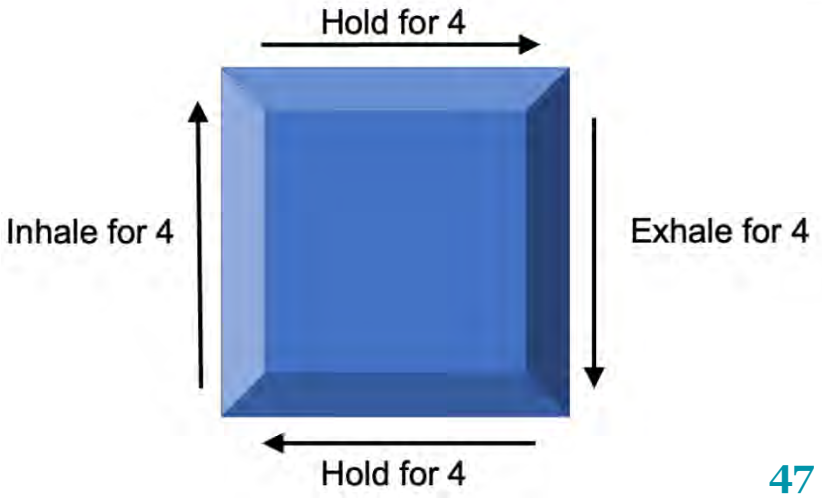
- 'Stress' is a term all patients can relate to
- Particularly for subjective cognitive impairment, educate patients on how stress and multi-tasking can result in common forgetfulness
- Educate about the two arms of the autonomic nervous system
- Provide experiential education through leading the patient through slow, deep breathing or one-minute box breath



Stress Management Resources Examples

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- Yoga videos specifically created for individuals at risk for neurological disorders
- Tai Chi and meditation videos
- Mindfulness handout
- Apps: Insight Timer, Calm, Headspace
- Mindfulness-Based Stress Reduction (MBSR) courses

Avoidance of Risky Substances

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Tobacco

- Multiple large cohort studies show increased risk of dementia in people who smoke

Alcohol

- Meta-analyses of large cohorts show clear association between heavy drinking and all-cause dementia
- Whitehall Study - 550 adults followed for 30 years. Compared to abstainers, moderate and heavy drinkers had 3x and 6x odds of hippocampal atrophy, respectively

PLOS ONE Staff. PLoS One. 2015;10(4):e0126169; Otuyama LJ, et al. Aging Ment Health. 2020;24(11):1796-1806; Xu W, et al, Eur J Epidemiol. 2017;32(1):31-42; Anstey KJ, et al. Am J Geriatr Psychiatry. 2009;17(7):542-55; Topowala A, et al. BMJ. 2017;357:j2353.

Social Connectedness

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- The experience of belonging to a social relationship or network
- Strong human desire for connection
- Disruption or absence impairs functioning
- One-fourth of adults ≥ 65 years old are socially isolated

Lee RM, et al. J Couns Psychol. 1995;42(2): 232–241; Donovan NJ, Blazer D. Am J Geriatr Psychiatry. 2020;28(12):1233-1244.

Loneliness

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- Feelings of isolation, disconnectedness, and not belonging
- Subjective vs. Objective
  - Can experience loneliness when with people at work or home
- 2018-2020: Percent of U.S. adults who reported feeling ‘always’ or ‘often lonely’ increased from 11% to 13.8%

McGinty EE, et al. JAMA. 2020;324(1):93-94.

Likely Associated With Cognitive Decline

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- Meta-analysis of 34 cohort studies showing odds ratio of cognitive decline = 1.12 (1.05-1.20)
- High loneliness, infrequent contact, and low group participation increases dementia risk by ~50% on average

Piolatto M, et al. BMC Public Health. 2022;22(1):278; Donovan NJ, Blazer D. Am J Geriatr Psychiatry. 2020;28(12):1233-1244.

Social Prescribing

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- Healthcare professionals refer people to a range of vetted, non-clinical community services and activities catered around their interests to support their health and wellness
- Volunteer activities, community groups, exercise groups, arts, nature, purpose-focused activities
- Shifts the conversation from “what is the matter with you?” to “what matters to you?”
- UK has made social prescribing national policy
- Reduced loneliness and improved quality of life

Foster A, et al. Health Soc Care Community. 2021;29(5):1439-1449.

Social Prescribing Volunteer Bank Resources Examples

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Statewide Options
- United Way 211: statewide volunteer and service directory
- VolunteerMatch: interest-based opportunities

Cleveland
- Greater Cleveland Volunteers
- Business Volunteers Unlimited (BVU)
- Greater Cleveland Food Bank
- Cleveland Metroparks

Cincinnati
- United Way Volunteer Connection
- Cincinnati Cares (Inspiring Service)
- Freestore Foodbank
- Cincinnati Parks

Columbus
- HandsOn Central Ohio
- Besa
- Mid-Ohio Food Collective
- Columbus Recreation and Parks Department

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Multi-Component Lifestyle Intervention Studies

Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability (FINGER)

RCT n = 1,260 adults 60-77 yrs old w/ CAIDE Dementia Score ≥ 6

Intervention group (n=631)
Diet, exercise, cognitive training, vascular risk monitoring

Control group (n=629)
Regular health advice

Primary outcome:
Change in cognition measured by Neuropsych Testing. The improvement in NTB score after 2 years was 25% higher in intervention group

Secondary outcomes:
Improvements in executive functioning (p=0.039) and processing speed (p=0.029) in intervention vs controls.
Improvements in BMI, dietary habits, and physical activity

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Ngandu T, et al. Lancet. 2015;385(9984):2255-63.

Effects of Intensive Lifestyle Changes on the Progression of Mild Cognitive Impairment or Early Dementia Due to Alzheimer's Disease

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- 1:1 multicenter RCT 51 adults ages 45-90 with mild cognitive impairment or early dementia due to Alzheimer's disease
- MoCA ≥ 18
- 20-week intervention, 4 hours/session, 3 days/week
- Primary outcomes
  - Clinical Global Impression of Change
  - Alzheimer's Disease Assessment Scale
  - Clinical Dementia Rating–Sum of Boxes
  - Clinical Dementia Rating Global

Ornish D, et al. Alzheimers Res Ther. 2024;16(1):122.

Ornish Intensive Lifestyle Intervention

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- Whole food, plant-based diet, high in complex carbohydrates. Meals and snacks sent to patient and partner 2x/week
- Supplements: Omega-3s, multivitamin, CoQ10, vitamin C, vitamin B12, magnesium, Lion's Mane, probiotic
- Aerobic exercise (e.g., walking) 30 mins/day and mild strength exercises 3x/week
- Stress management: meditation, gentle yoga, progressive relaxation, breathing, imagery 1 hour/day
- 1 hour support group 3 days/week
- 1 hour lifestyle lecture 3 days/week

Ornish D, et al. Alzheimers Res Ther. 2024;16(1):122.

Results and Limitations

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- Post-intervention between-group differences
  - Clinical Global Impression of Change (p = 0.001)
  - Clinical Dementia Rating–Sum of Boxes (p = 0.032)
  - Clinical Dementia Rating Global (p = 0.037)
  - Alzheimer's Disease Assessment Scale - Cog test (p = 0.053).
- Limitations
  - Lack of blinding
  - No adjustment of statistical significance for four primary outcomes
  - Lack of CONSORT diagram

Ornish D, et al. Alzheimers Res Ther. 2024;16(1):122; Grill JD, et al. Alzheimers Res Ther. 2025;17(1):32.

Ongoing Lifestyle Prevention Trials

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- World-Wide FINGERS
- The AUstralian multidomain Approach to Reduce dementia Risk by prOtecting brain health With lifestyle intervention study (AU-ARROW)
- Canadian Therapeutic Platform Trial for Multidomain Interventions to Prevent Dementia (CAN-THUMBS UP)
- U.S. POINTER trial

Kivipelto M, et al. Lancet Neurol. 2018;17(1):27; Gardener SL, et al. Alzheimers Dement (N Y). 2024;10(2):e12466; Feldman HH, et al. J Prev Alzheimers Dis. 2023;10(4):875-885; Baker LD, et al. Alzheimers Dement. 2024 Feb;20(2):769-782.

Resource: Cleveland Clinic Brain Health & Wellness Shared Medical Appointment

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Evidence-based lifestyle program to slow cognitive decline and lower Alzheimer's risk

- 6 group visits, every other week
- Virtual and in-person, reimbursable
- Topics:
  - MIND diet
  - Physical activity
  - Meditation and stress management
  - Sleep hygiene
  - Mental activities
- Medical management and group activity

Ohio patients can call the Department of Wellness & Preventive Medicine at 216-448-4325.

Summary

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- Dementia has many causes, can be devastating to the patient and family, and currently cannot be cured
- Lifestyle and behavioral changes may lower dementia risk and slow cognitive decline
- This may be mediated through modifiable risk factor optimization and/or possible direct mechanisms to date unknown
- Prescribe lifestyle modification to patients at risk of dementia and those with subjective cognitive impairment or early mild cognitive impairment

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Audience Question and Answer

Amy Zack, MD

Case Western Reserve University School of Medicine

Speakers

REMINDER:
Submit questions using the 'Q&A' feature

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Robert B. Saper, MD, MPH
Case Western Reserve University
Cleveland Clinic

Amy Zack, MD (Moderator)
Case Western Reserve University
Cleveland Clinic

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Next Steps and Wrap Up

Shari Bolen, MD, MPH
Case Western Reserve University School of Medicine

CME Reminder

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- Registration is required for CME credit:

URL in chat window **OR** Use QR Code

We Want to Hear from You!

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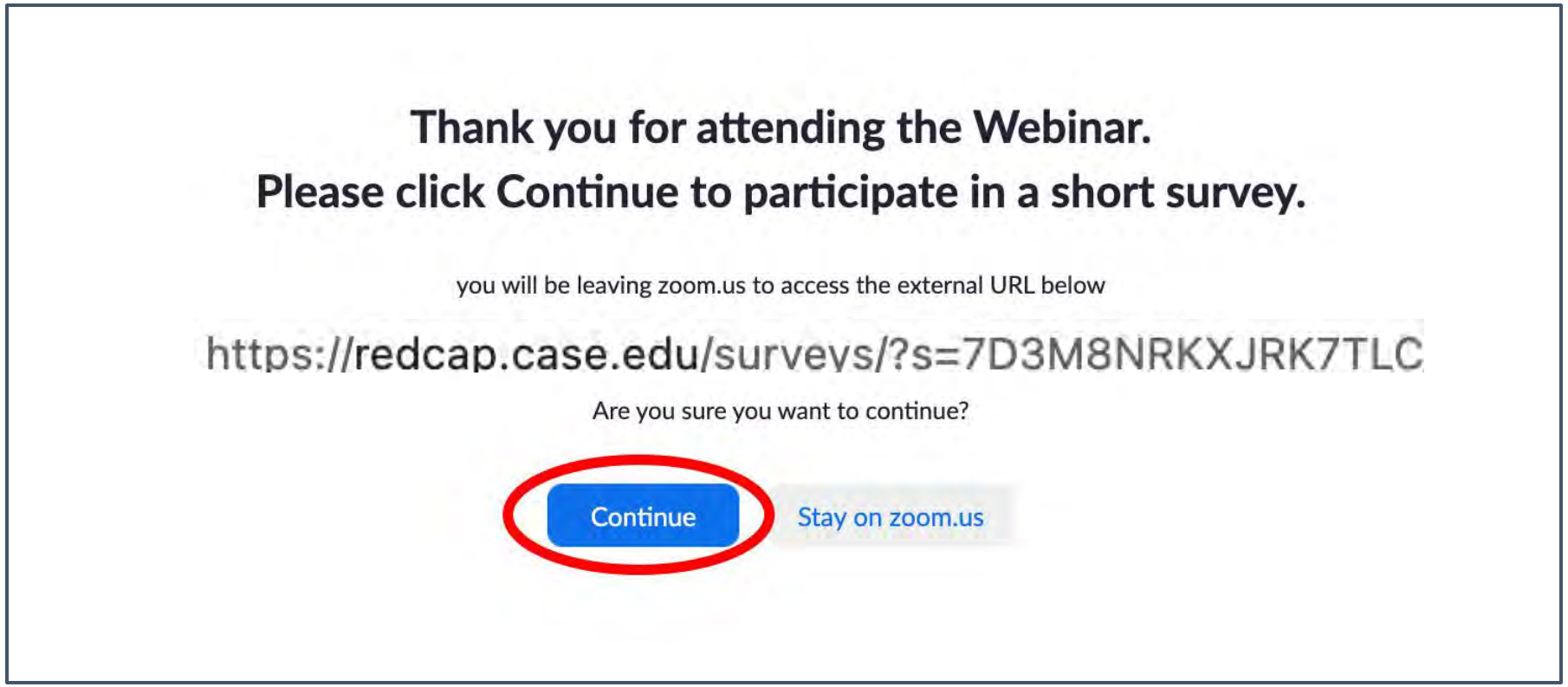

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The survey link will also be emailed to you.

Statewide Webinar

From Prescription to Practice: Tackling Adherence Challenges in Clinical Care

Wednesday, February 25, 2026 | 12-1 p.m. ET

KEYNOTE SPEAKER

M. Robin DiMatteo, PhD
Distinguished Professor, Psychology
University of California, Riverside

OBJECTIVES

- Identify key components of successful treatment adherence
- Understand barriers to treatment adherence
- Employ practice and communication changes to improve overall treatment adherence in patient panels

Register at Cardi-OH.org

CME Credit Available

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THANK YOU!

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