



The Wisconsin Idea in Action: Research, Outreach, and Strategies to Enhance Brain Health

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Agenda

- Introductions
- Overview of the Wisconsin Alzheimer's Institute
- Review of the Wisconsin Registry for Alzheimer's Prevention (study design and findings)
- Review of intervention research in Wisconsin related to promoting brain health
- Making Changes: Ideas from Solution-Based Brief Therapy
- Conclusions



Alzheimer's Disease-2014



More than 5 million Americans are living with the disease.



Every 67 seconds someone in the United States develops Alzheimer's.



Alzheimer's disease is the 6th leading cause of death in the US.



Approximately 500,000 deaths each year are due to Alzheimer's.



Almost two-thirds of Americans with Alzheimer's are women.



In 2013, 15.5 million caregivers provided an estimated 17.7 billion hours of unpaid care valued at more than \$220 billion



The Wisconsin Alzheimer's Institute:

- Is an academic center within the UW School of Medicine and Public Health
- Was founded in 1998 under the leadership of Mark Sager, MD (retired March 2014; returned Feb. 2015 on part-time basis)
- WAI is recognized nationally and internationally for innovations in Alzheimer's research, education, outreach, and public health efforts.



Dr. Mark Sager, WAI
Founding Director



Wisconsin Alzheimer's Institute Mission

WAI is committed to creating a public health environment in which:

Alzheimer's disease and related dementias are widely recognized, well understood, aggressively and appropriately treated, and

those who are afflicted and those who care for them receive the education, quality services and support they need to effectively cope with this devastating chronic disease.

WAI will actively support the Wisconsin Idea and be recognized leaders in affecting change by initiating efforts and partnering with others to educate, research, advocate and develop service programs that have excellence, innovation and significant potential to improve current practice.

We will act as a source of information, as a facilitator of collaboration and as a catalyst for efforts to substantially impact the quality of life for persons and families affected by Alzheimer's disease.



WAI Public Health Program

- Overall goal: improving the lives of Wisconsin residents impacted by dementia
- Main programs:
 - Memory Diagnostic Clinic Network
 - Inter-professional healthcare provider education, including annual conference
 - Inter-professional health professions student education
 - Statewide program of physician and provider outreach
 - Translation of research findings for professional and lay audiences
 - Specialized program serving communities of color in southeastern Wisconsin
 - Extensive collaborations with DHS and key statewide partners

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WAI Memory Diagnostic Clinic Network



44 Inter-professional Memory Diagnostic Teams

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Examples of WAI Inter-Professional Student Education: The Next Generation of Providers

- Medical Student Summer Externship Program
- Student Interest Group Program
- Medical student and resident education in family medicine, internal medicine, psychiatry and neurology
- [New Friends Program](#)

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New Friends

- Collaborative program of the WAI and Alzheimer's and Dementia Alliance of WI
- Service learning opportunity for health professional students at UW-Madison
- 8 students matched with a person with dementia (mentor)
- Spend 4 hours/month on social activities of their choosing (Oct. – April)
- WAI staff provide [orientation](#), meet and greet luncheon, [guidance](#) and [monthly debriefings](#) for students and end of year celebration
- Students complete post-visit journal forms



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New Friends

Orientation curriculum:

- Neuropathology of AD and Other Dementia Syndromes
- Encouraging Positive Interactions When Working with People with Cognitive Changes
- Communication Tips and Engaging with a Person with Memory Loss



Additional presentations provided at debriefings:

- Neuropsychiatric Symptoms of Dementia
- Cultural Competency
- WRAP Research Findings

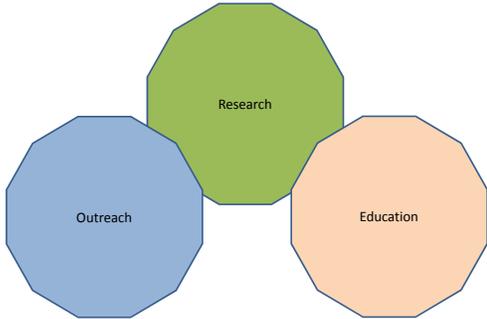
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- Cultural competence and inclusiveness training
- Specialized memory clinic within Federally Qualified Health Center in Milwaukee
- Minority Health Month events in southeastern Wisconsin
- Chorus project, "Milwaukee's Melodies and Memory Chorus" brings patients and caregivers together in a chorus
 - based on work by Mary Mittelman whose pilot study demonstrated that weekly rehearsals followed by a concert were shown to benefit patients and caregivers on several dimensions related to well-being and functioning

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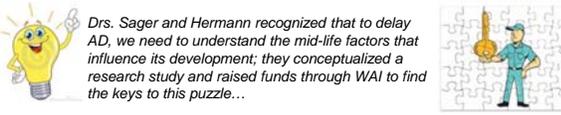
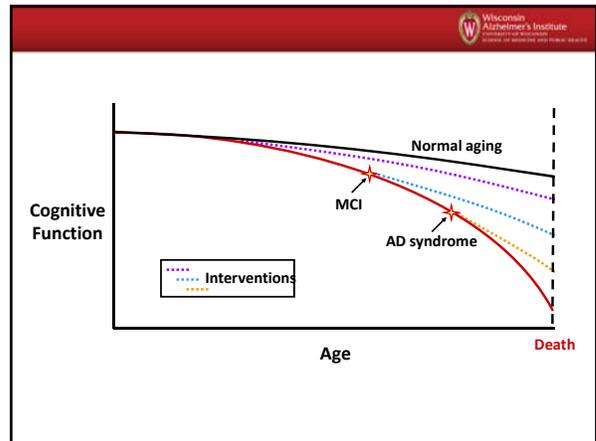
WAI Efforts Overlap: Unified goal is to reduce impact of AD and related dementias!



Importance of Lowering the Risk of Alzheimer's Disease

- Delaying the onset of AD by 10 years would translate into 3.5 million, instead of the predicted 14.3 million, cases over 50 years
- A 2-year delay would translate into 2 million fewer cases over 50 years

Drs. Sager and Hermann recognized that to delay AD, we need to understand the mid-life factors that influence its development; they conceptualized a research study and raised funds through WAI to find the keys to this puzzle...

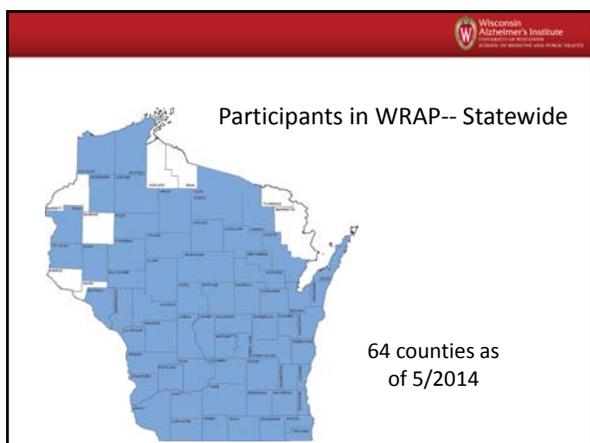



The Wisconsin Registry for Alzheimer's Prevention (WRAP)

- WRAP was **the first** large-scale study to document the unique role that family history plays in AD pathogenesis; WRAP was designated as a project of **High Program Relevance** by the **National Institute on Aging (NIA)**
- Overall goals:
 - To characterize the early cognitive and neurobiological changes consistent with preclinical AD, and
 - To identify health and lifestyle variables that influence disease trajectory (risk and protective factors)

Wisconsin Registry for Alzheimer's Prevention (WRAP)

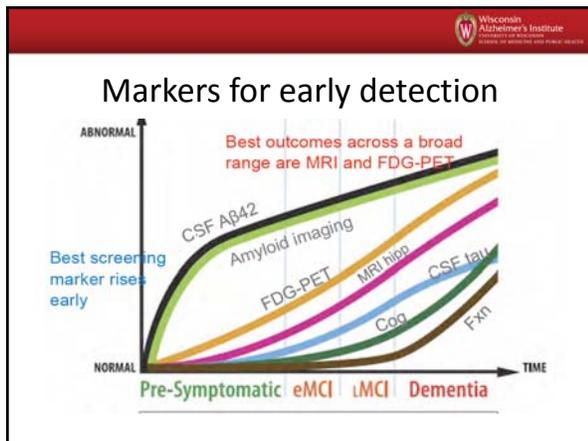
- First participant enrolled in November, 2001
- High percentage of adult children of persons with verified AD
- "Cognitively normal" and between age 40-65 at enrollment
- Agree to follow-up testing and to participate in clinical, epidemiological and genetic research in the area of AD prevention
- Over 1500 participants have completed at least one study visit; average age at baseline assessment was 54 years.



Wisconsin Registry for Alzheimer's Prevention (WRAP)

- Study visits include:
 - Neuropsychological testing
 - APOE genotyping and laboratory testing for suspected risk factors for AD
 - Questionnaires regarding health, lifestyle (diet, activities), sleep, and others.
 - Serum, plasma and DNA are stored at -80° C
 - Neuroimaging and cerebrospinal fluid (CSF) procedures for a subset (supplemental studies)

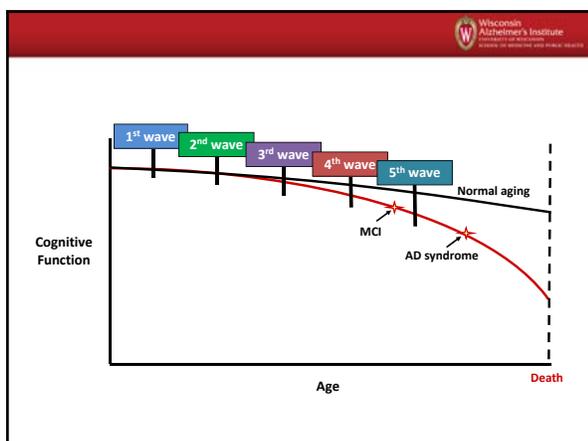
Cognitive Domain	Tests
Intelligence	Fund of knowledge, reasoning
Language and verbal ability	Naming, fluency
Visual spatial	Perception, construction
Learning and memory	Verbal and visual
Executive function and working memory	Attention, problem solving



Current WRAP Volunteer Characteristics

Total enrolled	1542
Age at last visit, mean (range)	62.3 (40-80.3 years)
Women	70.5%
Education, mean (range)	16 (9-28 years)
Race/ethnicity	90% non-Hispanic white
APOE-4	39.5%
Family History +	72%

The second study visit (Wave 2) occurs 4 years after baseline; all subsequent visits occur ever 2 years thereafter until participant develops AD.



Summary of the WRAP Study

Site	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5
Madison	1,037	913	816	585	31
LaCrosse	322	278	196	34	
Milwaukee	183	80	14		
Total	1,542	1,271	1026	619	31

As of Feb. 2, 2015; overall attrition is very low (~10% total over 14 years)



Midlife Amyloid and Brain Health

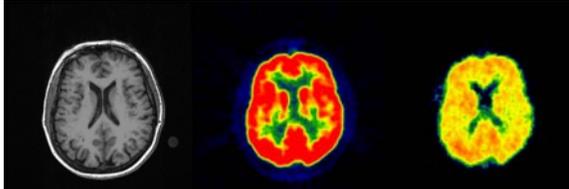
Slides Courtesy of Sterling C. Johnson, PhD



How early do AD changes begin?

Will this person get dementia?

64 year old, cognitively normal, parental history of AD



MRI Glucose PET Amyloid PET

Why study amyloid?

- 100% of AD cases at autopsy are amyloid positive
- Certain forms of amyloid kill brain cells

Key Questions we are addressing

- How early do amyloid changes begin?
- How long does amyloid need to be present before it exerts its toxic effect ?
- Will it be toxic at all? Not everyone who has amyloid in their brain will develop symptoms of AD
 - 30% of normal elderly have amyloid in their brains!

The PREDICT study

- The PREDICT study is an NIH grant linked to the main WRAP NIH grant (only enrolled WRAP participants)
- Principal Investigator (PI): Sterling Johnson
- Visit 1: 178 enrolled and agreed to 2 visits
 - 98 provided cerebrospinal fluid (CSF) (55%)
- Visit2: 146 have returned so far (it is still ongoing)
 - 92 have provided CSF (63%)!
- Many more wanted to participate and we were unable to accommodate due to NIH budget restrictions and cuts.

Some major findings of PREDICT

- ~20% of WRAP are amyloid positive at age ~60
 - Slightly more likely to be older, female and have maternal family history
- So far, amyloid load is **not** related to current cognition

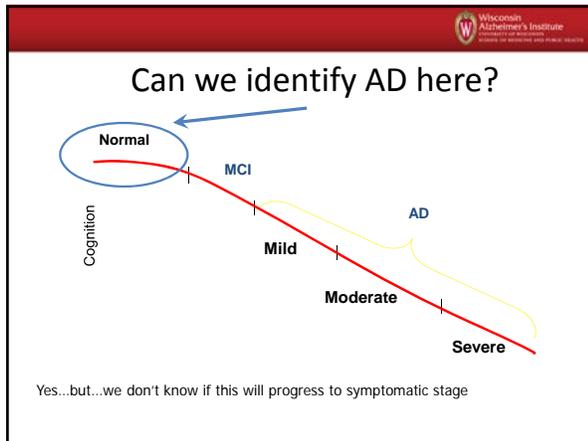
Major findings of PREDICT

Overall (as a group) persons are more likely to have more wide-spread amyloid load on brain imaging if CSF proteins for tau are high.

Amyloid image burden



Relationship to amyloid in CSF Relationship to tau/amyloid in CSF



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Take home points re: amyloid

- Amyloid is necessary **but not sufficient** to cause AD neurodegeneration and cognitive symptoms.
 - The story is incomplete: need info on susceptibility and resilience related to individual differences
 - Plans: We plan to continue the study and re-scan all participants and enroll more; a grant application will go in early 2015.

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Midlife Insulin Resistance and Brain Health

Slides Courtesy of Barbara B Bendlin, PhD

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AD Risk factors

- Genes (APOE4)
- Family History
- Cardiovascular Risk Factors: diabetes, and insulin resistance.

Diabetes at midlife doubles the risk for AD

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What happens to the brain in midlife?

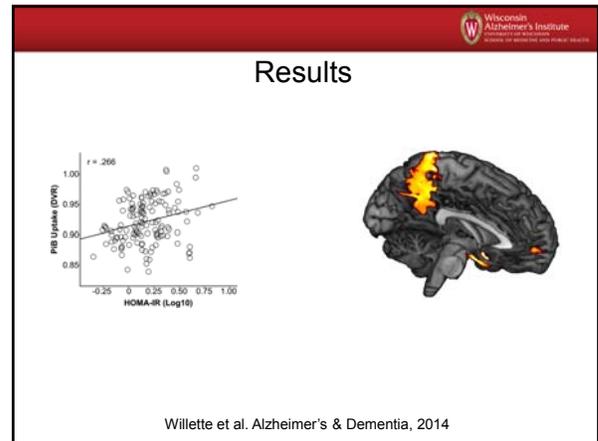
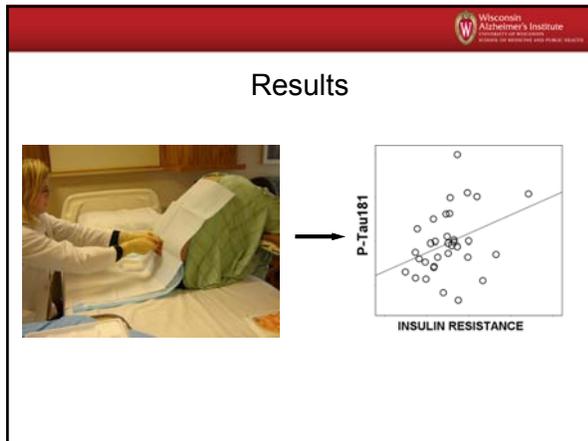
- Imaging and CSF – NIH grants linked to WRAP
- Cognitive testing, blood draw, and brain imaging; WRAP participant subset, mean age 60.25 years
- MRI for structure and blood flow
- Lumbar puncture
- Amyloid imaging
- F18-fluorodeoxyglucose (Radioactive sugar)

LIST A	1	2
TRUMPET		
WISKEY		
SHELL		
TEA		
COLLEGE		
CHILD		
BLUE		
FIELD		
BB		
TEACHER		
MOUTH		
CHICKEN		
SOUND		
GARAGE		
LARE		
SCORE		

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Results

Willette et al. Diabetes Care. 2013



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- ## Interpretation
- Mechanisms that underlie diabetes may contribute to Alzheimer's
 - Abnormal levels of insulin or sugar in the brain
 - Blood vessels may be damaged
 - Cell damage is occurring
 - These are **group** findings
 - Will everyone with diabetes get Alzheimer's? No!

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Take-home from Insulin Resistance Studies

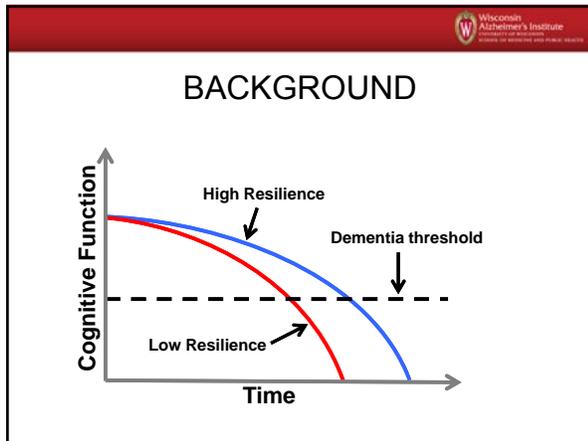
- Interventions for cardiovascular health and diabetes: likely to protect the brain.
- Drugs used to treat diabetes may be used in the future to treat some aspects of AD.

"Eat less, exercise more and alter your genetic code with the DNA of thin parents."

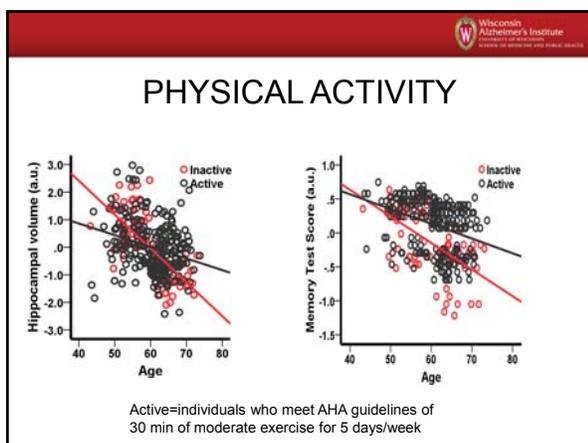
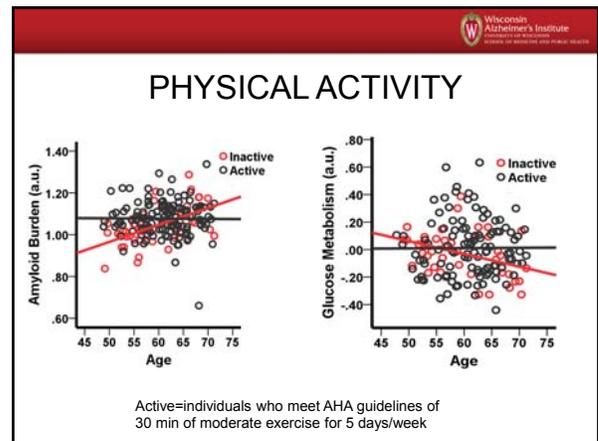
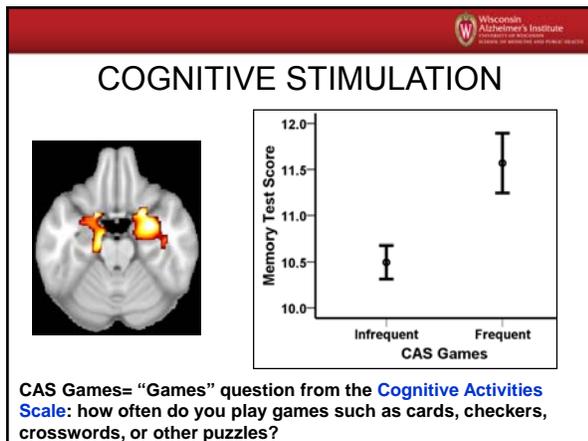
ALZHEIMER'S DISEASE: LIFESTYLE APPROACHES TO RISK REDUCTION

Slides Courtesy of Ozioma Okonkwo, PhD
Assistant Professor
Wisconsin Alzheimer's Institute
Wisconsin Alzheimer's Disease Research Center
Wisconsin Alzheimer's Institute
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- ## BACKGROUND
- Concept of resilience (or reserve) put forward to explain mismatch between brain pathology and clinical symptoms
 - Brain able to tolerate more pathology before reaching critical threshold for emergence of symptoms
 - Interplay of genetic and environmental factors



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- ## Factors Associated with Resilience
- Education
 - Complex occupation
 - Socioeconomic status
 - Leisure activities
 - Social interaction
 - **Mentally-stimulating activities**
 - **Physical activity**



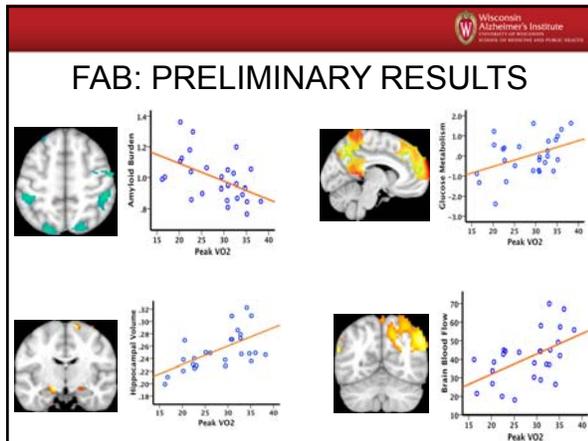
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Fitness, Aging, and the Brain (FAB) Study

- Aerobic fitness and AD biomarkers (pilot study)

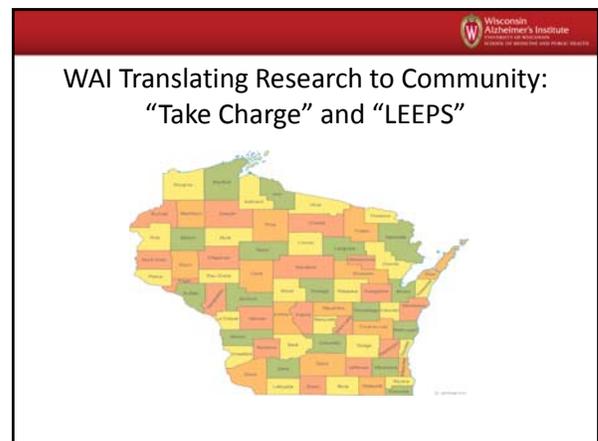
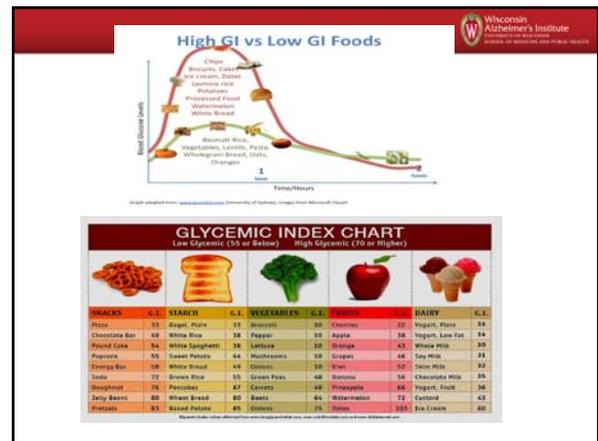
Graded Exercise Test

400-meter Walk Test



- ### Diet and Brain Health
- Preliminary data from collaborations between Barb Bendlin, Sterling Johnson and two researchers at Rush: Martha Clare Morris and Christy Tangney
 - 164-item Food Frequency Questionnaire administered to a subset of WRAP participants (n=489)
 - We investigated the relations of dietary determinants of insulin resistance (glycemic index, fat composition, carbohydrates and fiber) to:
 - cognitive decline
 - MRI total brain and hippocampal/total brain volumes
 - volumetric brain changes over 2 years

- ### Diet and Brain Health Results
- Low dietary consumption of simple carbohydrates was associated with *slower* cognitive decline
 - For example, rates of decline in verbal learning were slower for participants in the *lowest quintile of sugar intake* versus higher quintiles ($\beta=0.0267$, $p=0.03$)
 - High intakes (top 20%) of glycemic load and trans fats were associated with *decreased hippocampal volume* in 188 participants who also had MRI measurements
 - Higher glycemic index score was significantly associated with *greater atrophy* in total brain volume over 2 years ($\beta=0.002$, $p=0.05$) among 154 of these participants who had a follow-up MRI.





Take Charge*

A Memory Wellness Program

Target population

- Individuals 65 and older diagnosed with MCI (n=30)
- Recruited from four memory diagnostic clinics in Wisconsin (3 small cities, 1 rural site)
- Pilot program...open trial design

*La Rue, 2011



Take Charge

Program Structure

- One-year program
- Individualized activity care plans for exercise and cognitive stimulation – **“personal trainer”**
- Supplemented with brief focused education on healthy diet and stress management
- Participation in community-based group activities encouraged as part of activity care plans
- Longitudinal monitoring of exercise, mental activity, everyday cognitive function, subjective memory ratings and mood



“Take Charge”

Time Line & Interventions

- **Intake session**
- **Exercise & Diet Module**
 - 14 weeks (7 bi-monthly sessions)
 - NIA exercise guidelines/AHA diet guidelines
 - short talks and demonstrations on diet
- **Cognitive Activity & Stress Management Module**
 - 16 weeks (8 bi-monthly sessions)
 - cognitive goal – minimum of 30 minutes of novel information processing activity most or all days per week
 - brief stress management training (e.g., “mini-meditation”)
 - three sessions of training in techniques to remember names and faces
- **Minimal intervention phase** (2 to 3 months)
- **Final session** (outcome measures and program evaluation)



Take Charge

Module Choice

What module did participant choose first?

- Cognition & Stress: 22 of 30 (73%)
- Exercise & Diet: 8 of 30 (27%)



Take Charge

Cognition & Stress module

<p><u>Participants' ratings</u></p> <ul style="list-style-type: none"> • Module helpful? <ul style="list-style-type: none"> – Yes - 93% • Increased brain activity? <ul style="list-style-type: none"> – Yes - 87% • Helped name/face recall? <ul style="list-style-type: none"> – Yes, a lot - 36% – Yes, a little - 56% – No/not sure - 8% 	<p><u>Novel Information Processing</u> median # activities per day</p> <p>Start of module: 2.5 activities End of study: 4.0 activities Median change: + 1 activity</p> <p>No change in ratings of everyday cognition (self or informant reports) at 1 year</p>
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Take Charge

Exercise & Diet module

<p><u>Participants' ratings</u></p> <ul style="list-style-type: none"> • Module helpful? <ul style="list-style-type: none"> – Yes - 66% • Increased physical activity? <ul style="list-style-type: none"> – Yes - 38% • Helped me eat better? <ul style="list-style-type: none"> – Yes - 59% 	<p><u>Vigorous physical activities</u>: median hours per day</p> <p>Start of module: 0 hours End of study: 0.5 hours Median change: 0 hours</p>
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Take Charge

Overall Participant Satisfaction

Would you recommend Take Charge to others?

- Yes - 96%
- No - 4% (1 person)

What did you like best?

- Coming to sessions/staff person/talking/1 on 1 - 60%
- Increased awareness/knowledge - 23%
- Specific knowledge or training - 13%

What did you like least?

- Nothing - 57%
- Logs/forms - 23%
- "Fact that I'm a candidate" - 7%
- Other (including 1 "coming so often") - 13%

LEEPS*

- *Language Enriched Exercise Plus Socialization
- Participants were diagnosed with MCI or mild dementia
- Collaboration between Wisconsin Alzheimer's Institute and State Department of Health Services (DHS)
- Modeled after a similar program by Arkin (2001): Alzheimer rehabilitation by students: interventions and outcomes. *Neuropsychol Rehabil* 2001;11:273-317
- Focus on a 9-county area of Southwestern Wisconsin aimed at targeting a more rural population

LEEPS: The Intervention

- Language stimulation, embedded within an exercise session, was delivered by volunteers, 1 x week, 1.5 hour session (**LANGUAGE ENRICHED EXERCISE**)
- Companions/caregivers were encouraged to do a second exercise-only session within the week
- Once weekly social (visiting a farm, library, restaurant) or volunteer (reading to schoolchildren, helping at church) outings (**SOCIALIZATION**)

LEEPS

<p>Participants</p> <ul style="list-style-type: none"> • n = 42 • Aged 72 and older • MCI or mild dementia • 60% female • 95% non-Hispanic White • 78% at least high school diploma 	<p>Volunteers</p> <ul style="list-style-type: none"> • n = 19, all female • 47% graduate students • 42% retired older adults • 11% employed
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LEEPS: Preliminary Results

Baseline and 1-Year Follow-up Scores for Eight LEEPS Participants

	Baseline, Mean (SD)	Follow-up, Mean (SD)	% Same or Improved
Mini-Mental State	21.75 (4.80)	22.13 (5.72)	62.5
Geriatric Depression Scale	6.63 (3.16)	6.63 (5.18)	62.5
Quality of Life	41.25 (4.86)	39.38 (6.50)	37.5
Arm Curls (no. in 2 min)	14.63 (5.01)	17.63 (5.15)	75.0

LEEPS, Preliminary Conclusions

- Participants *remained stable for one year*, which is a positive outcome for individuals with Alzheimer's Disease
- Programs such as these which involve the community are a win-win situation, and may benefit not only the individual but also the community
- Challenges and future research:
 - Recruiting enough volunteers for participants
 - Recruiting underserved communities of color
 - Overcoming obstacles for rural communities in particular with respect to community involvement

Applying it

- WRAP recap: factors such as cognitive activities, exercise, and diet have been shown to affect the health of people's brains.
- "Take Charge" and "LEEPS" (among numerous other studies) demonstrate that structured interventions can lead to positive changes or maintenance of skills.
- How can we use this knowledge in our own choices?



Optimizing Brain Health: The Power of Small Change

Kate Kowalski, MSSW

Associate Director for Public Health, Education, and Outreach
Administrator



Foundations of Solution-Focused Approach

- Solution-Focused Brief Therapy (SFBT)...like, WRAP, is a Wisconsin innovation
- Developed by Milwaukee-based team of therapists at the Brief Family Therapy Center (BFTC) in late 1970's and 1980's
- Now internationally recognized and accepted as a highly viable method for promoting positive change
- One of the first "strengths based" approaches



Key Tenets of Solution-Focused Approach

- Focused on solution-building rather than problem-solving
- Future-oriented approach to thinking about change
- Emphasis placed on understanding one's desired future rather than on past or current problems



Key Tenets of Solution-Focused Approach

- Emphasis on tapping the wealth of resources all of us have within us
- Recognizes, appreciates, and values the uniqueness of each individual
- No "one size fits all" prescriptions for how change should or will happen...different for each individual
- Builds on and utilizes each individual's unique qualities, frame of reference and world view

Key Tenets of Solution-Focused Approach

- Even the most entrenched habits or patterns have "exceptions". Key to change is noticing, highlighting and doing more of the exceptions
- Don't rush it...the best way to get there quickly is to take things slowly

Key Tenets of Solution-Focused Approach

- Complex problems don't always require complex solutions
- If it's not broke, don't fix it...just do more of it!



Key Tenets of Solution-Focused Approach

- Ripple effect...a change in one area can lead to changes in another
- Small changes lead to larger changes...snowball effect...best to focus on small, meaningful, attainable changes, and let them build



Optimizing Brain Health: Building a Road Map Towards Cognitive Health

- Question: How does one optimize brain health?
- Response: By living a rich, full, healthy, engaged life.
- The journey starts with identifying what this means for each of us.
- In practice, it means different things to different people, depending on individual interests, activities and life circumstances.
- But, there are some general guidelines.

General Guidelines for Optimizing Brain Health

- Dementia prevention vs optimizing brain health
- 7 potentially modifiable risk factors:
 - Diabetes
 - Midlife hypertension
 - Midlife obesity
 - Smoking
 - Depression
 - Cognitive inactivity/low education
 - Physical inactivity

General Guidelines for Optimizing Brain Health: Nutrition

- Nutrition/Healthful Eating
 - In general, what's good for your heart is good for your brain
 - Lowering the risk of diabetes, hypertension, obesity, and heart disease lowers the risk for dementia
 - Mediterranean-type diet associated with decreased cognitive decline, heart-disease, and diabetes
 - Moderate alcohol intake...maximum 2 drinks per day for men and 1 drink per day for women

General Guidelines for Optimizing Brain Health: Nutrition

- Foundations of a Mediterranean Diet:
 - Includes fatty fish (eg: salmon, tuna, mackerel, lake trout, herring, sardines)...at least 2 servings per week (sorry, Friday fish fry doesn't count!)
 - Emphasis on plant-based foods, such as vegetables and fruits, nuts, legumes, and whole grains
 - Focus on complex carbohydrates over simple carbohydrates
 - Increase use of healthy fats, such as extra-virgin olive oil, avocados, nuts, dark chocolate

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General Guidelines for Optimizing Brain Health: Nutrition

- Most convincing support for AD protection is for foods rich in:
 - **Antioxidants, especially vitamin E** (leafy green vegetables, avocados, apples, melon, whole grains, egg yolk)
 - **Omega-3 fatty acids** (≥ 1 fish meal/week)
 - **Unhydrogenated, unsaturated fats, or MUFA's-monounsaturated fatty acids** (eg: olive oil, avocados, nuts)
 - **B Vitamins, especially folate and B₁₂**

Morris, Proc Nutr Soc, 2012

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General Guidelines for Optimizing Brain Health: Physical Activity

- Aerobic – aim for 30 minutes a day of any exercise that raises your heart rate and makes you breathe faster (e.g., brisk walking, swimming, dancing, cycling, etc.)
- Other important aspects of exercise
 - Muscle strength and endurance
 - Flexibility
 - Balance
 - May be less directly related to brain health but are important for overall wellness and reducing risk of injury

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General Guidelines for Optimizing Brain Health: Cognitive Activities

- Make time for cognitively stimulating activities that you've always enjoyed
- Add some new cognitive challenges, as your time and enjoyment permit
- Aim to engage in cognitively stimulating activities several times a week or more
- There is no one cognitive activity, or combination of activities, that is uniquely good for reducing AD risk
- Social interactions can be a great way to stimulate the mind

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Applying Solution-Focused Ideas to Optimizing Brain Health: Self-Strategies

- Step 1...Start with envisioning your desired state. Ask yourself the following:
 - What does it mean **to me** to live a rich, full, engaged, cognitively healthy life? What does that look like?
 - On a scale from 1 to 10, with 1 being low and 10 being high, to what extent am I living the cognitively healthy life I want to lead? Let's say your reply is "5", then ask, What would I be doing differently if I could honestly respond 6 or 7? What else would I be doing? What would I not be doing?
 - Be specific and realistic based on your individual interests and life circumstances.

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Applying Solution-Focused Ideas to Optimizing Brain Health

- Step 2...Identify your internal resources and strengths.
- Ask yourself: What do I know about myself and my ability to make positive changes in my life?
- Think about previous times you've made a significant lifestyle change. How did you do it? How did you overcome any barriers you might have faced? How did you resist the temptation to quit?

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Applying Solution-Focused Ideas to Optimizing Brain Health: Self-Strategies

- Step 3...Identify "exceptions."
- In what ways am I already doing things that optimize my brain health?
- If helpful, write it down; if not, take a moment to identify, acknowledge and appreciate the steps you're already taking.
- People are motivated to make change when they believe they can, and believe they will succeed. Important to acknowledge existing positive behaviors and successes.

Applying Solution-Focused Ideas to Optimizing Brain Health: Self-Strategies

- Step 4...Identify ways to build on what's already working for you. Think about the specific ways you are already living in a way that fits with your desired state.
- How are you making that happen?
- Notice, acknowledge and appreciate steps you're already taking to enhance your cognitive resilience.
- When you do something that is consistent with a healthy lifestyle, ask yourself, "how did I do that?". Especially when making a difficult change, it is important to notice, acknowledge and appreciate your actions.

Applying Solution-Focused Ideas to Optimizing Brain Health

- Step 5...Identify further steps you wish to take. Ask yourself:
 - Based upon the information shared today, what one small change would I like to make?
 - Why do I want to make this change? What difference do I hope it will make?
 - What will be the most challenging aspect of making this change? What strategy will I use to meet this challenge? What tells me that I'll be able to do it?
 - Have I made a similar lifestyle change in the past? If yes, how did I do it?

Applying Solution-Focused Ideas to Optimizing Brain Health

- Step 6...Identify signs of success. Daily task:
 - Each day, notice and appreciate the times you are succeeding in making your desired lifestyle change.
 - How do you feel about yourself knowing that you're succeeding in this way?
 - How difficult is it? If not difficult, why not? Many people find making these types of changes very challenging. If difficult, how are you doing it in spite of the challenges?
 - What do you need to do in order to keep it going?

Applying Solution-Focused Ideas to Optimizing Brain Health

- Step 7...Locking it in. Ask yourself:
 - On a scale from 1 to 10, how confident am I that I can keep this change going?
 - If confidence is low, what are the barriers to continuing? How might you overcome the barriers?
 - If confidence is high, great...keep it going.

Applying Solution-Focused Ideas to Optimizing Brain Health

- Step 8...Notice any additional changes you're making without even planning to do so. Remember the ripple effect notion.
- Oftentimes, a change in one area of our lives will lead to changes in other areas.



Applying Solution-Focused Ideas to Optimizing Brain Health

- Step 9...Identify the next small change you wish to make.
- Remember to keep it manageable and achievable.





Applying Solution-Focused Ideas to Optimizing Brain Health

- Step 10...Congratulate yourself! Give yourself credit for the steps you're taking and will take to optimize your brain health.





Applying Solution-Focused Ideas to Optimizing Brain Health

- Closing tips
 - Strive not to be perfect
 - Keep it small and manageable
 - Build on your existing accomplishments
 - Stay focused on the future
 - You don't have to do it all at once
 - Allow yourself to build on your successes
 - Expect occasional lapses...it's okay
 - Plan for getting back on track



NIA WEBSITE FOR PHYSICAL ACTIVITY

<http://go4life.nia.nih.gov/>



- General Information
- Helpful Tips
- Online Coaching
- Free Resources
 - Booklets, CDs



Acknowledgements

Huge Thanks to our Colleagues: The WAI Team and Collaborators 2015

<p>WAI Staff -- Madison</p> <p>Lisa Bluder Shawn Bolin Suzanne Bottum-Jones Lindsay Clark, PhD Emily Groth Amy Hawley Laura Hegge Bruce Hermann, PhD Naveena Jaspal Sterling Johnson, PhD Rebecca Kosciak, PhD Kate Kowalski Kimberly Mueller Heidi Pophal Mark Sager, MD Susan Schroeder Danielle Schuld Judy Smith</p>	<p>WAI Staff -- Madison (cont'd)</p> <p>Kathleen O. Smith Kristine Thompson Allen Wenzel Diane Wilkinson Pam Winne</p> <p>WAI Staff -- Milwaukee</p> <p>Gina Green-Harris Stephanie Houston Nia Norris</p> <p>WAI Staff -- LaCrosse</p> <p>Carolyn Flock Joanne Nordeen Deb Schultz</p> <p>Brain Donor Program</p> <p>Jay Fruehling Rachel Krause</p>	<p>WRAP Collaborators</p> <p>Barbara Bendlin, PhD Ozioma Okonkwo, PhD Corinne Engelman, PhD Cynthia Carlsson, MD, MS Sanjay Asthana, MD Kirk Hogan, MD Rick Chappell, PhD Thomas Loeppfe, MD Soryal Soryal, MD</p> <p>Neuroimaging Group Collaborators</p> <p>Sandra Harding Caitlin Cleary Nancy Davenport-Sis Chuck Illingworth Jordan Larson Jennifer Oh Stephanie Schultz</p>
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And, Thanks to our Funders for Their Current Financial Support

- National Institutes of Health
- Lou Holland Fund
- Bader Philanthropies
- State of Wisconsin Department of Health Services
- Administration on Aging and Alzheimer's Disease Support Services Program
- Wisconsin Geriatrics Education Center
- UW School of Medicine and Public Health
- Generous Individual Contributors



THANK YOU!!!

- To learn more about the Wisconsin Alzheimer's Institute
 - Visit the WAI Website: <http://wai.wisc.edu/>
- If you would like to get involved:
 - Raise awareness/spread the word
 - Contact legislators to encourage research funding
 - Volunteer in your local community
 - Become dementia capable/dementia friendly
 - Fundraising team
 - Brain bank

