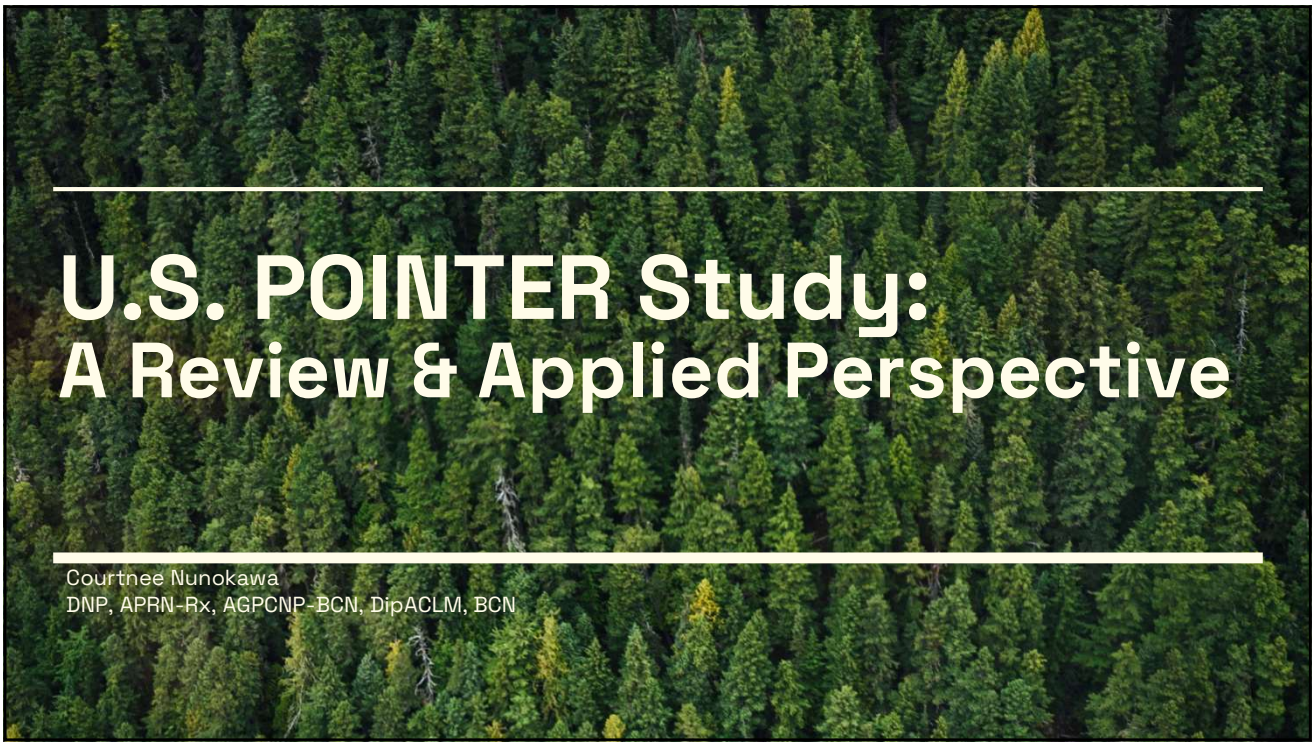


U.S. POINTER Study:
A Review & Applied Perspective

Courtnee Nunokawa
DNP, APRN-Rx, AGPCNP-BCN, DipACLM, BCN

Disclosures

University of Hawaii at Manoa	Brain Health Applied Research Institue	BALANCED BRAIN
Assistant Professor DNP Program Director	Scientific Faculty Co-Founder **B+HARI Method**	Founder, Owner Nurse Practitioner Neurotherapist

Objectives

Understand	Discuss	Apply
● U.S. Study to Protect Brain Health Through Lifestyle Intervention to Reduce Risk (POINTER) Study findings	● U.S. POINTER Study applied to clinical and community based interventions	● Strategies to adopt U.S. POINTER in daily life

Fusae “Bessie” Nunokawa

Onset of Memory Symptoms

~ age 75

Loss of Indepenence. Moved in with my Family.

~ age 80

Progression to severe dementia. Transfer to 24/7 Care Home

Age 84-85

~ age 78

Diagnosed with Alzheimer’s Dementia

~ age 83

Increase neuropsychiatric symptoms. Transferred to Assisted Living.

age 88

Passed. End stage disease.

Fusae “Bessie” Nunokawa

Onset of Memory Symptoms

~ age 75

Loss of Indepenence. Moved in with my Family.

~ age 80

Progression to severe dementia. Transfer to 24/7 Care Home

Age 84-85

~ 13 year gap in **lifespan** and **healthspan**

~ age 78

Diagnosed with Alzheimer’s Dementia

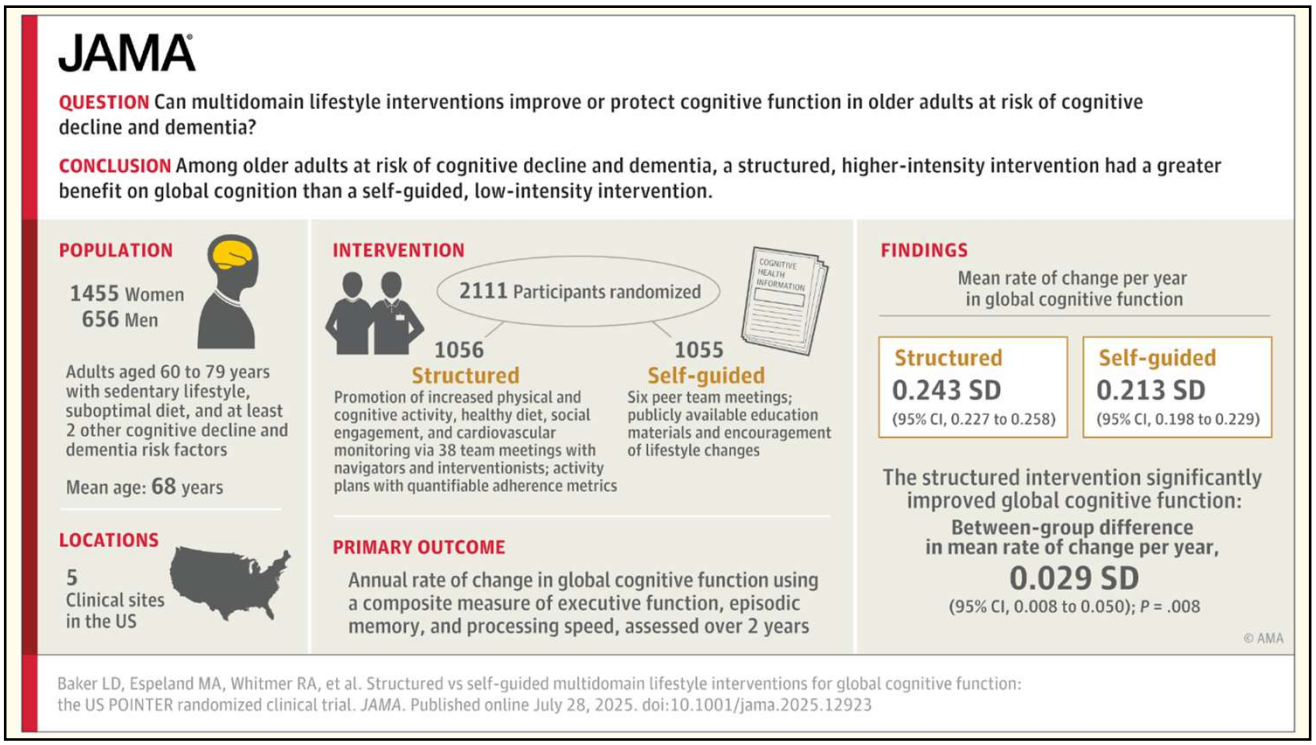
~ age 83

Increase neuropsychiatric symptoms. Transferred to Assisted Living.

age 88

Passed. End stage disease.

What we know now from U.S. POINTER



Self Guided vs. Structured

SG — 6 facilitated peer team meetings over 2 years with general support from study navigator

Education & General Support

Met with study navigator 3 times per year to receive:

- Healthy lifestyle education
- Tangible tools to facilitate self-guided plans
- General support to encourage physical activity, a healthy diet, and cognitive and social stimulation

Health Monitoring

Blood laboratory results and blood pressure measurements were provided at clinic assessment visits

STR — 38 facilitated peer team meetings over 2 years, with education, goal-setting, accountability and support from study interventionist and navigator

Physical Exercise

Aerobic, resistance, and stretching & balance exercise primarily at a community facility

Nutrition

Encouragement to follow the MIND diet, with extra support through telephone contacts with the interventionist

Cognitive and Social Challenge

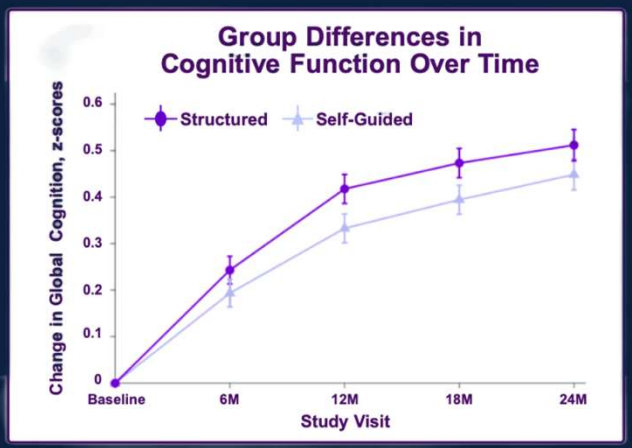
Home-based computer cognitive training and regular participation in intellectually & socially engaging activities

Guideline-Based Health Coaching

Medical advisor appointments every 6 months for goal-setting, and to review monthly blood pressure measurements and blood laboratory results provided at clinic visits

U.S.POINTER
ALZHEIMER'S ASSOCIATION

BOTH groups improved, but…

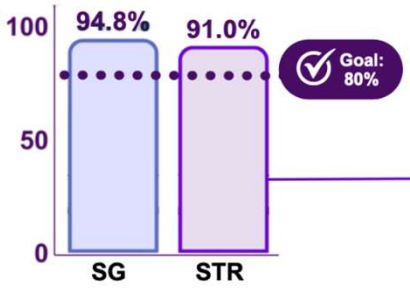


1. Cognitive function improved over time **for both groups***

*Some of this improvement is likely due to practice

No significant difference in men and women

Adherence



Average Team Meeting Attendance (%)

For participants in the Structured intervention:

The average number of very active Fitbit minutes per week was 86 minutes (goal was 90 minutes)

The average MIND diet score was 11 out of 14 points (goal was ≥ 9.5)

If you build it, they will come

U.S.POINTER ALZHEIMER'S ASSOCIATION

If you reinforce it, they will adhere

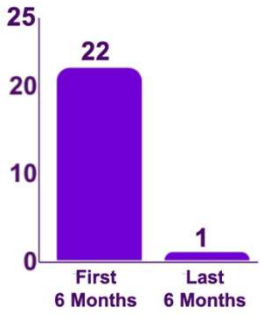
And…

For the Structured group:

In the first 6 months, participants logged on to the cognitive training program (BrainHQ) for 23 of 24 weeks (on average).

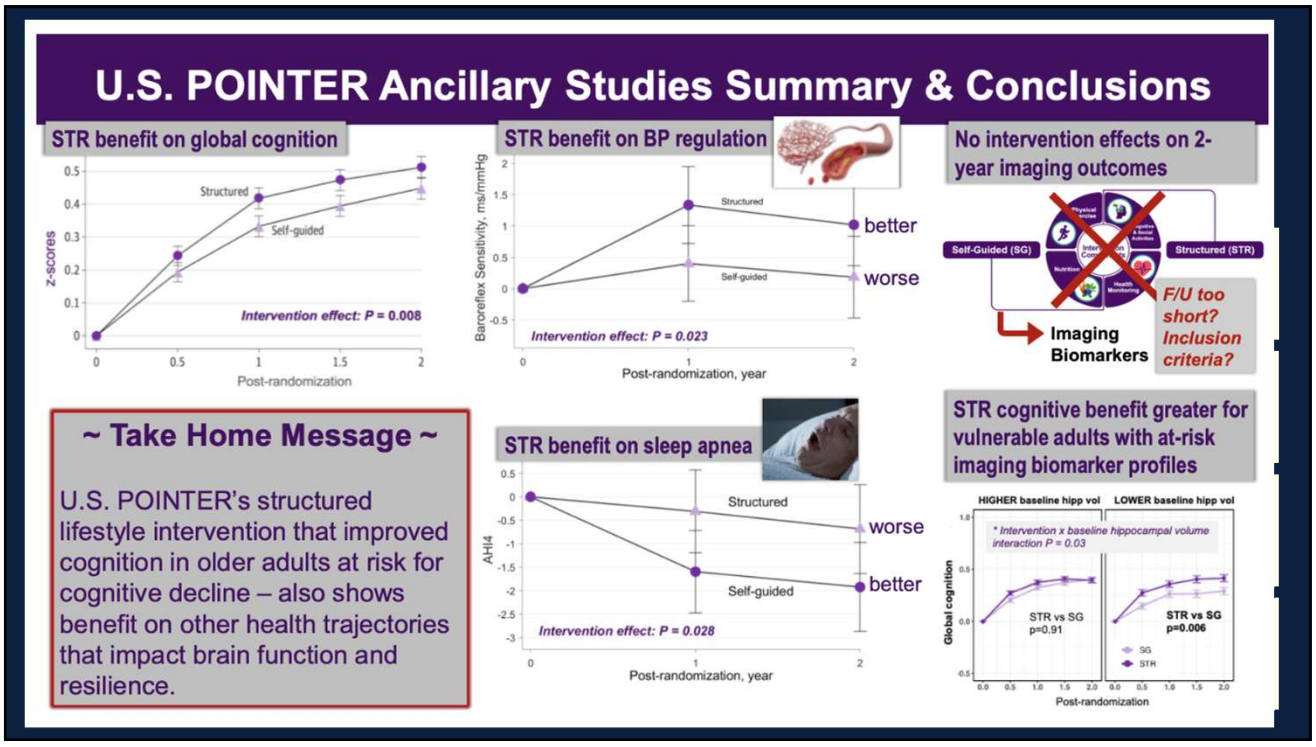
In the last 6 months, participants logged on to the cognitive training program (BrainHQ) for 13 weeks of 24 weeks (on average).

Average BrainHQ Levels Completed per Week



U.S.POINTER ALZHEIMER'S ASSOCIATION

Strong start, and then a drop off.



"She always wanted to go back to Japan after Grandpa passed, but she never got to go"

Back to Grandma

Spouse passed

Onset of Memory Symptoms

~ age 75

Loss of lifelong friends & physical activity

Loss of Indepenence. Moved in with my Family.

~ age 80

Progression to severe dementia. Transfer to 24/7 Care Home

Age 83-85

Youngest grandchild no longer needs caregiving

~ age 78

Diagnosed with Alzheimer's Dementia

~ age 83

Increase neuropsychiatric symptoms. Transferred to Assisted Living.

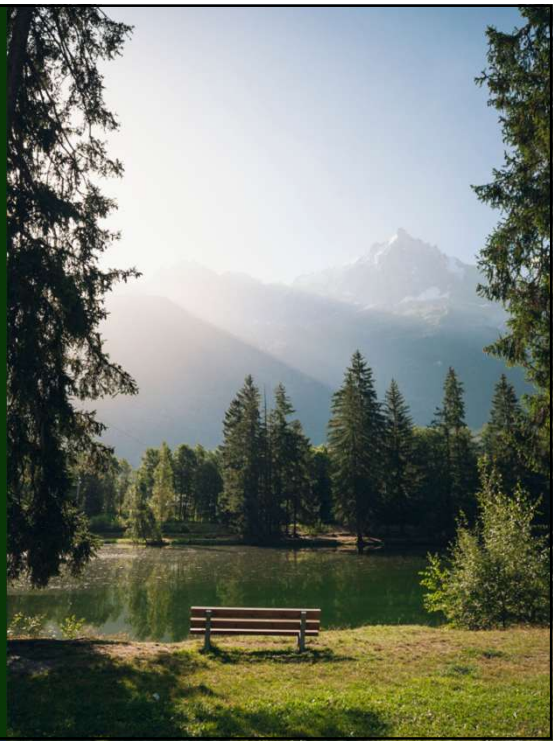
age 88

Passed

Great news.

Worsening cognition and function is ***preventable*** & ***modifiable***.

Now what?



Structured Interventions

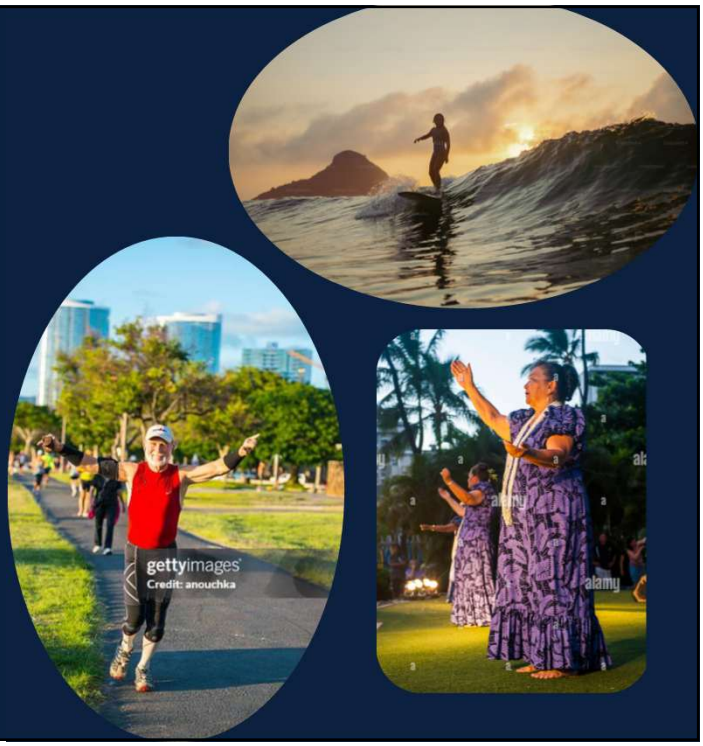
Social connection: 38 peer groups of 10-15 sessions

Physical Activity 3-4 hours/week	• Aerobic training: 4 days per week, 30–35 minutes per session • Resistance training: 2 days per week, 15–20 minutes per session • Flexibility training: 2 days per week, 10–15 minutes per session
MIND Diet Score > 9.5	**+:** Whole grains, green leafy vegetables, other vegetables, berries (with a unique focus on blueberries), nuts, beans, fish (>1 time/week), poultry (>2 times/week), & olive oil as the primary cooking oil **-:** Red meat, butter and margarine, cheese, fast & fried foods, pastries & sweets
Cognitive Training ~ 45-60 mins/week	BrainHQ web-based cognitive training platform **3 times** per week for **15–20 minutes per session.**
Health Care Monitoring	Biannual medical assessment, including blood pressure, laboratory values (hgba1c, cholesterol) and risk reduction counseling

Community

Physical Activity

- The Hawai'i Healthy Aging Partnership offers **EnhanceFitness**, an existing group exercise program for older adults meeting 3x/week with certified instructors offered YWCA
- **Outdoor nature-based activity** (recommended by the Hawai'i Dementia Initiative) is uniquely accessible given the environment
- Parks & Recreation - Zumba, Yoga, Tai Chi



Eat for your brain, the Hawai'i way

MIND Diet · Hawai'i

The MIND diet reduces cognitive decline. Most of these foods grow here, swim here, or are already on kākou's table.

LIMIT

Red meat < 4×/wk
Butter < 1 tbsp/day
Fried food < 1×/wk
Pastries & sweets < 5×/wk

L — 6+ servings/wk — **Leafy greens**
Lū'au leaves, kale, watercress

F — 1+ serving/wk — **Fish**
Fresh ahi, mahi-mahi, 'ōpelu, akule

B — 2+ servings/wk — **Berries**
Strawberry guava, lilikoi, acerola

N — 5+ servings/wk — **Nuts**
Macadamia nuts — grown on island

W — 3 servings/day — **Whole grains**
Brown rice, poi (taro starch), ulu (breadfruit)

B — 4+ meals/wk — **Beans & legumes**
Edamame, tofu, mung beans

P — 2+ servings/wk — **Poultry**
Local free-range chicken & turkey

O — Daily — **Olive oil**
Primary cooking oil; coconut in moderation

V — 1+ serving/day — **Other veggies**
'Ulu, 'uala (sweet potato), bitter melon

Shop SFMNP markets
Kūpuna coupons for fresh local produce

Embrace traditional
Poi, poke & 'ulu align with MIND

Cook with 'ohana
Food prep = social engagement too

The MIND Diet — Asian & Pacific Islander Style

Brain-healthy MIND foods mapped to Asian & Pacific Islander cuisines — the basis of the culturally adapted ORIENT diet. Targets show recommended servings.

MIND category	Asian & Pacific Islander foods
Green leafy vegetables *≥ 6 / week*	Bok choy, gai lan, ong choy (kangkong), napa & mustard greens, perilla, malunggay, well-cooked lū'au (taro) & sweet-potato leaves
Other vegetables *≥ 1 / day*	Daikon, bitter melon, eggplant, okra, seaweed (nori/wakame/limu), shiitake, bamboo shoots, long beans, kimchi (watch sodium)
Berries *≥ 2 / week*	Goji, mulberry, lychee/longan, 'ōhelo, guava, calamansi; anthocyanin-rich ube, purple sweet potato & black rice
Nuts *≥ 5 / week*	Walnuts, peanuts (incl. boiled), cashews, macadamia, sesame seeds, lotus seeds, chestnuts
Beans & legumes *> 3 / week*	Edamame & soy, tofu, tempeh, natto, miso, mung & adzuki beans, dal/lentils, winged beans
Whole grains *≥ 3 / day*	Brown, black & purple rice, barley, millet, buckwheat soba, oats, whole-wheat roti, poi (taro) & 'ulu (breadfruit)
Fish *≥ 1 / week*	Salmon, saba (mackerel), sardines, ahi tuna, ono, mahi-mahi, milkfish (bangus) — steamed, grilled, or as sashimi/poke
Poultry *≥ 2 / week*	Steamed or poached chicken (Hainanese-style), adobo with skin removed, grilled skewers
Olive oil *primary oil*	Olive or canola oil for stir-frying; limit coconut-cream, palm-oil & deep-fried dishes
Wine *optional*	Not required — and not to be started for this purpose (high ALDH2 deficiency in East Asians)

Limit: fried foods, processed/red meats (Spam, char siu, lap cheong), coconut-cream dishes, big white-rice portions, sweets & salty sauces. Benefit varies by group — frame as overall cardiometabolic risk reduction, not proven dementia prevention.

Photo by: Honolulu Magazine

Ahi Poke-Quinoa Brown Rice

2 pc Slice bread, lightly toasted
½ cup avocado mash *
Herb sprigs Dill, Parsley, Cilantro* optional

Avocado Mash
½ Avocado pitted
1tsp evoo
1 tsp lemon juice Pinch salt
Pinch pepper, black

2 pc sliced smoked salmon

Method:

Scoop out the avocado into a small bowl. Add the remaining ingredients and mash with a fork till fully incorporated.
Lay the smoked salmon onto the toasted bread.
Spoon over the mashed avocado. Garnish and serve.

Simmered Island Vegetables

2 pc Slice bread, lightly toasted
½ cup avocado mash *
Herb sprigs Dill, Parsley, Cilantro* optional

Avocado Mash
½ Avocado pitted
1tsp evoo
1 tsp lemon juice Pinch salt
Pinch pepper, black

2 pc sliced smoked salmon

Method:

Scoop out the avocado into a small bowl. Add the remaining ingredients and mash with a fork till fully incorporated.
Lay the smoked salmon onto the toasted bread.
Spoon over the mashed avocado. Garnish and serve.

Steamed Island Style Opakapaka

2 pc Slice bread, lightly toasted
½ cup avocado mash *
Herb sprigs Dill, Parsley, Cilantro* optional

Avocado Mash
½ Avocado pitted
1tsp evoo
1 tsp lemon juice Pinch salt
Pinch pepper, black

2 pc sliced smoked salmon

Method:

Scoop out the avocado into a small bowl. Add the remaining ingredients and mash with a fork till fully incorporated.
Lay the smoked salmon onto the toasted bread.
Spoon over the mashed avocado. Garnish and serve.

B+HARI NEURO-NUTRITION CULINARY CENTER

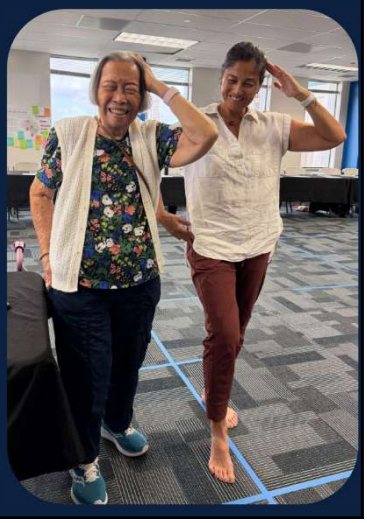
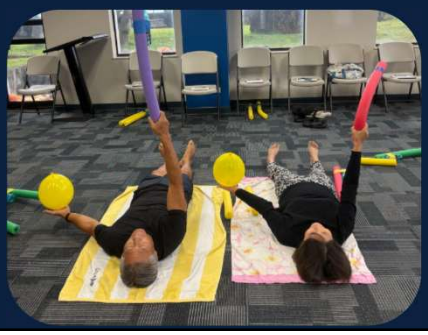
Cognitive & Social Training

- Alu Like's Ke Ola Pono No Nā Kūpuna program Hula Program
- Rehab Hospital of the Pacific Creative Arts Program
- Brain HQ ($14/month)
- CogniFit (19.99/month)
- YWCA
- Parks & Recreation
- HoMA

brainHQ from Posit Science

Brain First Solutions

B+HARI

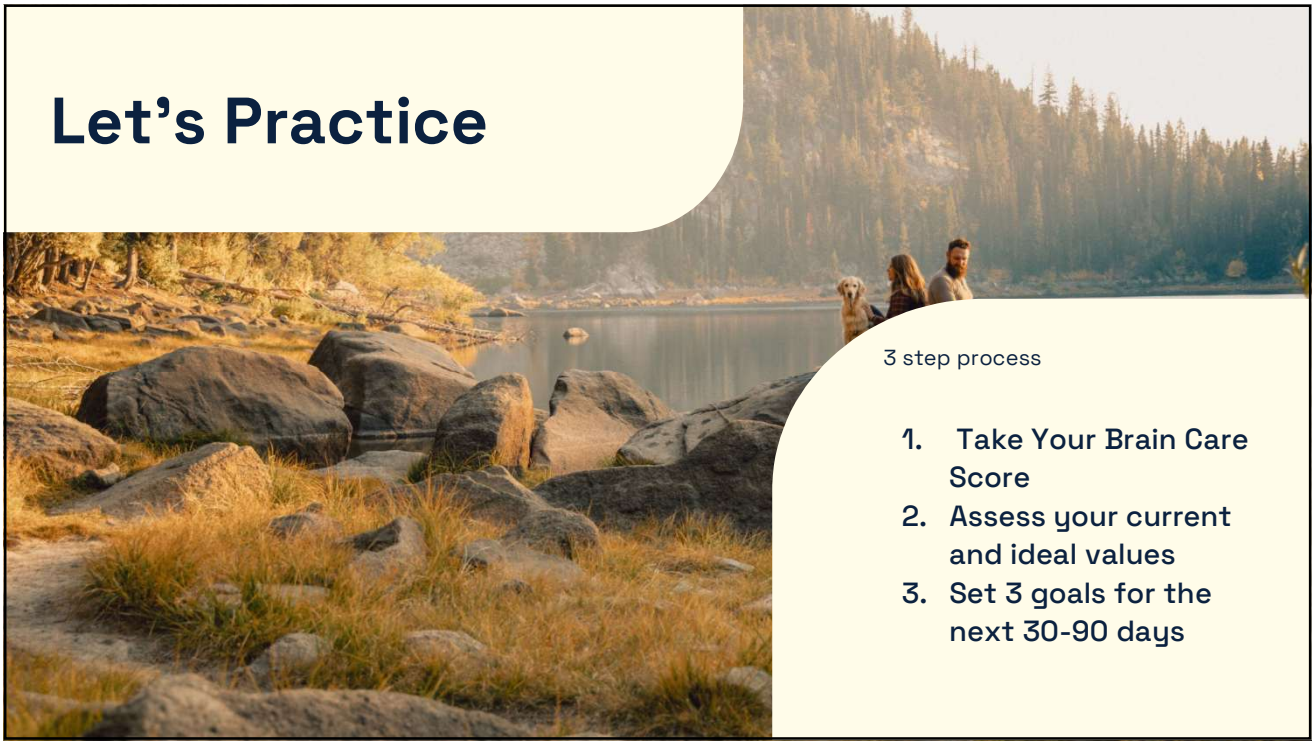



At B+HARI Method we use our body
to activate our brain with joy,
novelty, & meaningful failure with friends we love.

Key ingredients to neuroplasticity
& cognitive resilience.

Individual

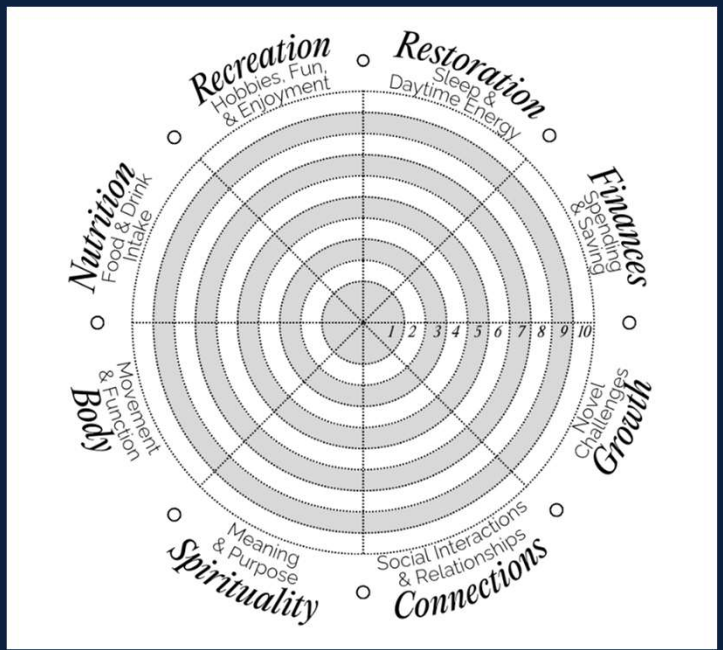
Let's Practice



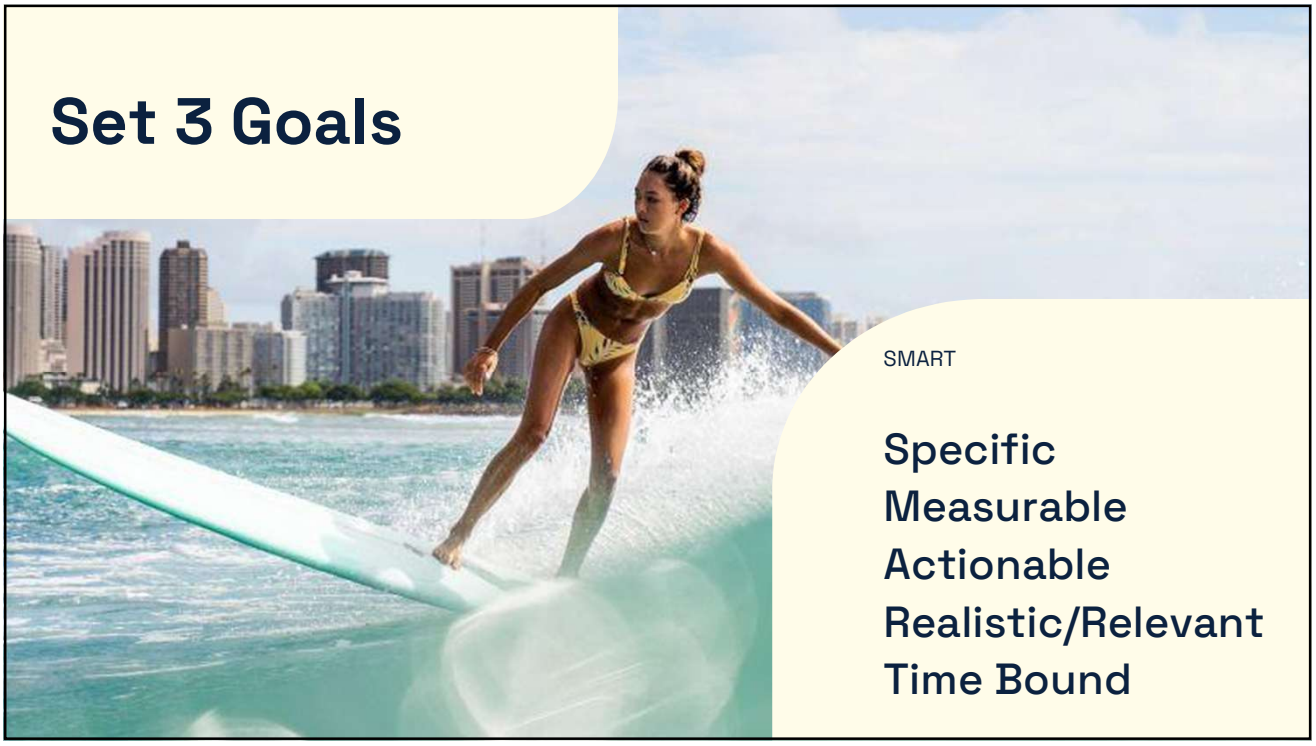
3 step process

1. Take Your Brain Care Score
2. Assess your current and ideal values
3. Set 3 goals for the next 30-90 days

The 12 Brain Care Score Areas
Blood pressure
Hemoglobin A1c
Cholesterol
Body mass index
Nutrition
Alcohol intake
Smoking
Aerobic activities
Sleep
Stress
Relationships
Purpose in life
Singh SD, et al. "A Brain Care Score for Risk of Late-Life Depression and A Composite Outcome of Dementia, Stroke and Late-Life Depression: data from the UK Biobank cohort" Frotiers in Psychology DOI: 10.3389/fpsyt.2024.1373797


Recreation
Hobbies, Fun, & Enjoyment
Restoration
Sleep & Daytime Energy
Finances
Spending & Saving
Growth
Novel Challenges
Connections
Social Interactions & Relationships
Spirituality
Meaning & Purpose
Body
Movement & Function
Nutrition
Food & Drink Intake
1 2 3 4 5 6 7 8 9 10

Set 3 Goals



SMART

Specific
Measurable
Actionable
Realistic/Relevant
Time Bound

Thank you
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cnunokawa@b-hari.org