



HBA PARTICIPANT NEWS

The Journal for Participants in the Home-Based Assessment Trial

Can Diet & Exercise Prevent Alzheimer's Disease?

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Fall 2008



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Greeting from the HBA Principal Investigator

Dear HBA Participants,

I am pleased to report that the number of participants, families and friends committed to the Home-Based Assessment research study is growing at a steady pace. So far, we have enrolled nearly 60 percent of the qualified participants needed for this study. From the researchers and the study coordinators, to the nurses and the data managers, we can't thank you enough for contributing your time and support to help in the fight against Alzheimer's disease.

We are now at a significant crossroads for completing our enrollment, and our goal is in sight. We are reaching out to the community to find people who are interested in enrolling. And we are counting on you, our partners, to help us pursue better ways to identify, treat, and ultimately prevent AD. Please speak with your friends, neighbors and others in your community about AD research. Like you, they may want to know more about the ways they can contribute to the research to fight AD. Please encourage them to consider taking part in this important study by calling the Alzheimer's Disease Education and Referral Center (ADEAR) at 1-800-438-4380.

As a researcher, I appreciate the contribution that you and your families are making for the study. Together, we can make a difference!

Mary Sano, Ph.D

HBA Principal Investigator

Director, Mount Sinai Alzheimer's Disease Research Center



ADCS STUDY UPDATE

An exciting new study is under way at 40 sites across the U.S. which will enroll a total of 399 participants. Substantial data suggest that AD is caused by amyloid



REDUCING AMYLOID
in ALZHEIMER'S DISEASE

plaque deposits and tangles in the brain. These plaques and tangles lead to cognitive decline, memory loss and behavioral changes. Many proteins surround the amyloid plaques in AD patients. One of the proteins, Receptor for

Advanced Glycation Endproducts, called RAGE for short, binds to amyloid and may induce inflammation and lead to nerve cell damage. Researchers found that by inhibiting the interactions between RAGE protein amyloid, plaque formation could be reduced in animal models. The experimental drug was developed as a RAGE inhibitor (RI). This is a novel pathway for trying to treat AD.

The Alzheimer's Disease Neuroimaging Initiative (ADNI) is a groundbreaking study that is in its second full year with 822 participants. This study is creating the first ever standards to measure new treatments for Alzheimer's disease (AD). Standard



ADNI DEFINING ALZHEIMER'S DISEASE

protocols for brain imaging and other laboratory tests will provide a better basis for diagnosing AD, tracking the course of the disease, and monitoring how well people respond to new drugs. ADNI creates a yardstick to measure effectiveness of many new drug treatments aimed at slowing the progression or even preventing this devastating, costly and tragic disease. Without ADNI we have only limited ways to evaluate experimental treatments. The amount of new exciting information has been huge. For example, almost 100 scientific papers concerning ADNI data were presented at the International Conference on Alzheimer's Disease. Standardized brain imaging and other laboratory tests are now being used by pharmaceutical companies in their clinical trials of new drugs. Academic labs and industry are also using the results to design future treatment trials. In other words, ADNI is accomplishing its goal to provide new methods and data which facilitate the testing of new treatments for Alzheimer's disease (AD).

You may have heard about "Omega-3 fatty acids" in the news or at your grocery

store—these nutrients have shown some promising scientific results for heart and brain health. DHA (docosahexaenoic acid) is the main omega-3 fatty acid in our brain and eyes. It is a nutrient found in algae, fish and human breast milk. A study is currently in progress to learn if one omega-3, called DHA, can slow the progression of AD. 51 sites have enrolled a total of 400 participants.

CAN AN
Omega-3 Fatty Acid
SLOW Alzheimer's
Disease?





Can Diet and Exercise Prevent Alzheimer's Disease?

An Interview with Dr. Marwan Sabbagh

Director, Sun Health Research Institute



How early should a person start lifestyle changes to prevent AD?

Today. Ultimately we know that changes in the clinical manifestation of Alzheimer's disease start 20-30 yrs before the onset of symptoms. Start your prevention as early as possible. It's very important to embrace the concept of prevention early on.

Can reducing calorie intake reduce AD risk?

There is growing evidence in the lab that calorie restriction is the most basic anti-aging approach available. Calorie restriction lowers insulin levels in the body, the core body temperature and changes some of the metabolic factors related to longevity and aging. Data from the CALERIE project (Comprehensive Assessment of Long-term Effects of Reducing Intake of Energy) suggests that calorie restriction might prevent cognitive decline. Data from animal research also suggests that calorie restriction extends life but studies haven't yet been done on people that examine calorie restriction and cognitive health. However we have proven that obesity is bad and can influence cognitive decline.

Start your prevention as early as possible.

The Mediterranean diet has been touted as a way to stave off AD. What is it about this diet that works better than others?

This is the work of Nicholas Scarmeas from Columbia. He showed that people who consume the Mediterranean diet on a regular basis have reduced risk. The top third of the group that followed the diet had a 40 percent reduced risk of developing AD over the lowest third. They found that even years later the top third of the group that continued to adhere to the diet had a 68 percent lower risk of developing Alzheimer's compared with the bottom third of the study's subjects. In short it wasn't one change that made the difference but rather the sum total of all the foods that provided the best chance for a protective benefit. The style of eating in the Mediterranean region consists of little red meat, few dairy products, limiting foods

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The true reduction of risk comes from adopting all strategies, not just one or two.

with saturated fat, eating fish high in Omega 3s, a bit of red wine, legumes, fresh fruits and vegetables, whole grains, nuts and olive oil. The Mediterranean diet isn't a diet, per se, but a way of eating. There is very little sugar in their diet. And no corn syrup, which is prevalent in the American diet. The difference is in the actual food.



How does exercise reduce AD risk?

It's a perennial problem. Physical exercise is essential to maintaining good blood flow, and it reduces the risk of some of the biggest killer diseases such as heart attack, stroke and diabetes. These health conditions also happen to be well-known contributors to cognitive decline. A number of recent epidemiological studies have shown that exercise and physical activities might protect against cognitive decline. The observation is apparent but now we have to figure out how that works. Is it improved circulation? Is it improved blood flow? Is it that exercise reduces weight and thus reduces co-morbidities? The mechanism isn't clear but there's a variety of possibilities. There are clinical trials now underway to test exercise as a possible intervention against cognitive decline. As a general health measure, everyone should strive to do some kind of aerobic exercise 30 minutes a day, five days a week.

Is there anything else people should do?

Everyone wants the five second sound bite, the quick fix. But the true reduction of risk comes from adopting all strategies, not just one or two. These ideas come from the best minds in Alzheimer's research. We all agree that it makes sense to reduce modifiable potential risks such as high blood pressure, extra weight, saturated fat in the diet, heart disease, vitamin deficiency, diabetes, and high cholesterol. If you control these factors, it is possible that you can modify your risk of Alzheimer's disease.



Quick and Easy Recipes that Are Healthy Too? You Bet!



When living with Alzheimer's disease or caring for a loved one with the disease it can be an ordeal to prepare a good meal that is both quick and nutritionally sound. There are ways to prepare such meals without resorting to ordering in pizza or stopping by a fast food restaurant.

* Here are a few tips that will help *

Keep your pantry, fridge and freezer well stocked so you don't have to waste time at the market more often than necessary. Keep the following on hand at all times: canned tomatoes, canned beans, canned chicken broth, canned or frozen corn, potatoes and other vegetables, frozen poultry and meats, rice, pasta, olives and salad dressings.

- * Stock your kitchen with healthy snacks such as mini carrots, fresh fruit, low sugar/low salt snack bars, nuts, peanut butter, crackers, a variety of cheeses and low-salt lunch meats, dried fruit and popcorn.
- * To stimulate appetite serve your loved one's favorite foods as much as possible.
- * Serve fun and easy-to-eat foods, such as finger foods, smoothies, milk shakes, and frozen treats such as ice cream sandwiches and popsicles.

Easy meals can be made in minutes. Consider these simple dishes:

Tuscan Pasta



Pour a large jar of marinara sauce into a saucepan. Add your favorite canned beans (drained), and a sliced zucchini. Cook the sauce over med-high heat for 5-7 minutes. Meanwhile cook the pasta according to package directions. Drain pasta and stir into saucepan. Divide pasta into serving bowls and top with grated Parmesan cheese.

Asian Soup



Simmer Japanese Udon noodles (available at most large grocery stores) in canned chicken stock. Stir in a can of drained Asian mushrooms, a can of drained bamboo shoots, cooked and diced chicken or turkey, one teaspoon of minced gingerroot, one teaspoon of minced garlic and a dash of low-sodium soy sauce. Most produce departments carry bottled ginger and garlic already minced. The Asian products are available at most major grocery stores.

Pita Pockets



Grill a chicken breast. and slice. Slice the top 1/4 off of a pita bread. Stuff it with the sliced chicken, lettuce, diced tomato, cucumber, chopped bell pepper, cucumber slices and lettuce. Drizzle a vinaigrette salad dressing into the pocket. If your loved one likes spicy food, substitute a flavorful salsa for the vinaigrette. Serve immediately.

Anti-Oxidant Salad

Toss together a bag of fresh spinach, a half-pint of fresh blueberries, 1/4 cup of dried cranberries, a handful of chopped walnuts, croutons and your favorite salad dressing. Be careful not use too much salad dressing; you don't want to cover up the flavors of the fruit.

WHAT THE

ALZHEIMER'S DISEASE



COOPERATIVE STUDY

Is all about

Do you know how the Alzheimer's Disease Cooperative Study (ADCS) functions? The ADCS, formed in 1991 as a cooperative agreement between the National Institute on Aging (NIA) and the University of California San Diego, is a consortium of over 90 sites in the United States and Canada. The ADCS is a major initiative for Alzheimer's disease (AD) clinical studies to facilitate the discovery, development and testing of new treatments for AD.

Check out our website at <http://www.adcs.org> and learn what the ADCS is all about. You will also find general information on AD and other dementias, AD research studies in progress, research news, and helpful links.

An exciting component of our new website is the Alzheimer's Disease Information Network. The goal of the Information Network is to register a significant portion of the 5 million people affected by AD, as well as people who have undiagnosed memory disorders or those who are interested in learning more about AD and dementia. The purpose of the Information Network is to educate the public with updates on AD research and treatment and upcoming clinical research studies.

The link to register for the Information Network is at <http://www.adcs.org/Research/registry.aspx>. Or, you can link to it from the home page.

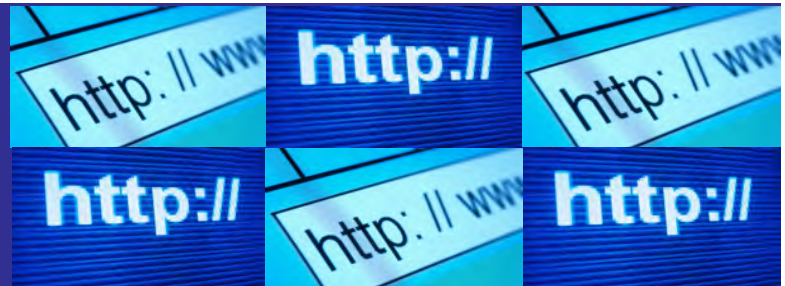
www.adcs.org



Join the **ALZHEIMER'S DISEASE INFORMATION NETWORK**

WEB WEB EVERYWHERE

Websites with comprehensive information on Alzheimer's disease and dementia



NATIONAL INSTITUTE ON AGING <http://www.nia.nih.gov>

One of the 27 Institutes and Centers of NIH, leads a broad scientific effort to understand the nature of aging and to extend the healthy, active years of life. NIA's mission is to improve the health and well-being of older Americans and to disseminate information and communicate with the public and interested groups on health and research advances and on new directions for research.

ALZHEIMER'S DISEASE EDUCATION AND REFERRAL (ADEAR) <http://www.nia.nih.gov/Alzheimers/default.htm>

This web site will help you find current, comprehensive Alzheimer's disease (AD) information and resources from the National Institute on Aging (NIA).

ALZHEIMER'S ASSOCIATION <http://www.alz.org>

The leading voluntary health organization in Alzheimer care, support and research whose mission is to eliminate Alzheimer's disease through the advancement of research; to provide and enhance care and support for all affected; and to reduce the risk of dementia through the promotion of brain health.

ALZHEIMER RESEARCH FORUM <http://www.alzforum.org/>,

Dedicated to understanding Alzheimer's disease and related disorders, this web site reports on the latest scientific findings, from basic research to clinical trials; creates and maintains public databases of essential research and produces discussion forums to promote debate, speed the dissemination of new ideas, and break down barriers across the numerous disciplines that can contribute to the global effort to cure Alzheimer's

BRAIN EXERCISE

Mind Games are a really fun way to exercise the mind. Check out the mind games on the AARP website — good for both caregivers who want to stay sharp and study participants with mild dementia.

http://www.aarpmagazine.org/games/printandplay_brain_teasers.html

BRAIN TEASERS

 Guess the meaning of...

1 LONG
DO

2 WEAR
LONG

3 MIND
MATTER

4 T
O
W
N

5 T
O
U
C
H

ANSWERS
1. Long Overdue 2. Long Underwear 3. Mind Over Matter 4. Downtown 5. Touchdown



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