

Increasing and Decreasing your Risk of Alzheimer's Disease

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There are several risk factors for Alzheimer's that are replicated in numerous studies. The greatest risk factor is age: 10% risk over age 65, increasing to 50% over age 85. Another risk factor is genetics, with some genes leading to the disease if the person lives long enough and other genes increasing the risk but not inevitably leading to the disease. There are known cases where both biological parents made it to age 90 but one of their children was diagnosed with Alzheimer's at age 65. Studies of identical twins--who share the same genes--find that if one twin gets the disease at age 65, the other twin's

risk is only 50% by age 80. Another risk factor is gender, with the ratio of those having Alzheimer's being about 2:1 women to men. Most of that difference is due to differences in life expectancy, i.e. women tend to live longer than men (at age 85 there are 4 or 5 women alive for every man alive) so they are more likely to live long enough to get the disease.



Yet another risk factor is diabetes. Having Type II diabetes comes close to doubling the risk. Obesity also shows up as a risk factor in some studies, and since obesity is a risk factor for Type II diabetes, it might be part of the diabetes-Alzheimer's link. Obesity is also a risk factor for stroke, and stroke is a risk factor for Alzheimer's. Head injury--a severe blow to the head leading to loss of consciousness--does increase the risk of Alzheimer's. Boxers, for example, are prone to getting dementia pugilistica because of repeated blows to the head. The implication is that things that break the brain's blood vessels--blows to the head or stroke--increase the risk of the Alzheimer's pathology forming. High blood pressure also increases the risk, probably because it increases stroke risk.

Another interesting risk factor is low education. Learning, education, and variety of life experiences seem to increase synapses--the connections between neurons. Studies show that people with more education are less likely to be diagnosed with Alzheimer's.

There is no causal scientific evidence (e.g., a randomized controlled trial) that any lifestyle or dietary action will reduce the risk of Alzheimer's, but there is correlational evidence (i.e., those without the disease have a history of doing something different than those with the disease).

Implications include:

- Avoid head injury (wear a helmet when bicycling and a seatbelt when driving and stay out of the boxing ring)
- Avoid stroke
- Keep blood pressure under control
- Don't smoke tobacco
- Keep learning new things and keep the mind stimulated (e.g., learn a new musical instrument or a new foreign language, play bridge or work crossword puzzles or play Sudoku)
- Avoid obesity and Type II diabetes
- Eat a low-fat diet high in fruits and vegetables
- Take anti-oxidant vitamins and/or eat fruits and vegetables high in them
- Walk or engage in other physical exercise regularly
- Worry less and be happy more
- Maintain a good social support network.

Useful phone numbers and other information:

24/7 Helpline: 1-800-272-3900

Alzheimer's Assoc. Colorado Chapter: 1-303-813-1669

Fort Collins Office: 970-472-9798

All types of dementias:

http://www.nia.nih.gov/sites/default/files/the_dementias_no_drop_shadow_13dec18.pdf

Living Fully in Retirement

**A. Ray Chamberlain,
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RETIREMENT--FREEDOM OF CHOICE TIME



Retirement is like graduation--the commencement of the next stage of your life. But, for likely the first time in one's life, you have the freedom to set the work agenda and timelines for achievement. Yet, one is still constrained by economics and the rules of government.

For me, moving to full retirement had been underway since 1998 when Melanie and I left Washington, DC to return to Colorado. Full retirement in the sense of no longer working for money was achieved in 2012, when my last part-time consulting assignment ended. Given my having had several public and private sector jobs over a long working career, I can assert my good fortune as to always having interesting work, and having the benefit of excellent health.

What am I doing with all the time in full retirement, some 16 hours a day, of being awake, aside from my wife's "honey-do" list? The days are too short to achieve all that would be fun. But still the freedom of choice is a most valued concept.

A key item of time commitment and resources is spending from 25 to 40 days a year with the staff of Lindblad Expeditions, which is done in cooperation with the National Geographic Society. We live on ship, frequently the National Geographic Explorer, an ice-breaker ship that can handle up to 148 people. Usually when and where we go, there are about 100 to 110 people. We always have 2 or 3 National Geographic photographers and 3 to 5 naturalists with us, as resources for us to call on.

Each day is usually a different landing or zodiac cruising experience, to experience the environment and the wildlife, day or night. Landing on beaches, ice, or rocks is what the zodiacs

are used to accomplish. Wind, waves, rain, and snow are part of the game. About 95% of us on the ship use digital DSLR cameras--and come home with thousands of images. And print about one in fifty! Also, usually every year, we do a two week cruise ship trip with some five couples, most of whom worked for me in transportation. The group uses 800-1000 person ships and goes to typical destinations in Europe or Asia or the Caribbean.

As a member of the National Academies, I serve as a pro bono project team member and report draft reviewer on several projects each year. And, I just completed six years of service on membership selection committees. Most of these activities come under the National Research Council, on which I once served when chairing the Transportation Research Board's Executive Committee.

Currently, I am a trustee for a college scholarship organization, granting about 75 scholarships a year. Further, I am linked to The Nature Conservancy--Colorado. And, as a sideline, I serve on the board of a group that is trying to help Northeastern Colorado plan for a sustainable life style, even with a growing population. As a sideline, I manage our family investments, so as to hopefully continue to finance the above lifestyle, which includes sustaining two homes in Colorado and one on the Gulf of Mexico.

The bottom line is simple: Do all of your personal "bucket list" of things you want to do at the earliest possible time. The miracle of good health can fail quickly or an accident could do you in at any time. It is no fun to have to say: "I wish I had done that when I was healthy."

Upcoming Speaker Events

The speaker series this spring is being offered jointly with the Osher Lifelong Learning Institute. Note that we now meet from 3:00 - 4:30 pm at Pathways Hospice, 305 Carpenter Road.

March 17, 2014

"Have Wolves Saved the Willows in Yellowstone?"
Tom Hobbs, Natural Resource Ecology Laboratory

April 21, 2014

"A Mallet Player's Guide to the History, Music, and Great Performance of the Xylophone"
Eric Hollenbeck, Music, Theatre, and Dance

Editor's Contribution

"Old Age Ain't No Place for Sissies" -- "Bette" Davis (1908-1989)

There is good reason to believe that today people between the age of 40 and 60 are in the young part of middle age and those between 60 and 80 are in the old part of middle age. Why? Because there is significant evidence that the "natural" life-time of mankind is close to 120 years or 1 million hours! Thus, barring auto accidents, war, other stupidities and reasonable health care an 80 year old has 40 more years of life!

What is the evidence for such optimism? Well, there is observational data (today in the USA there are more than 54,000 centenarians, whereas 60 years ago there were only 2,300), bio-statistical data (if even one of our



major biological killers is eliminated, say arteriosclerosis, the California State Health Department has projected an expected average female will live to 100); longevity studies (George Buffon almost 200 years ago examined the different life spans of a variety of animal species [e.g. mice, elephants, whales, etc.], and he found that animals

normally live six (6) times the time required to reach skeletal maturation; thus, a mature human at 20 can expect to live $6 \times 20 = 120$ years); rate of vital cell aging (gerontologist Nathan Shock determined that vital organ cells lose function at about 1% per year after year 30, so assuming full capacity at age 30, one should still have 30% vitality at age 100, and it is known that individuals operate quite well at 30% of maximum); and finally, the total longevity of individual cells (Leonard Hayflick found that cells can replace themselves a finite number of times [the Hayflick limit], and the number is species specific, but for humans it is about 50 resulting in a MLP (maximum lifetime potential) between 115 to 120 years).

Much of this and other theories of aging can be found online with Wikipedia under Senescence, but a very readable summary can be found in the recently republished (2007) and revised book by Walter Bortz II, M.D. titled "*We Live Too Short, and Die Too Long*". Locally, we are also fortunate at Colorado State to have our own Professor Manfred Diehl, Human Development and Family Studies, and Director of the CSU Center on Aging. During the fall semester he shared with the SSS family and OSHER members his talk on "*Optimizing Successful Aging: An Integrative Approach*." You can find a .pdf copy of his talk to download and review at <https://webcom.colostate.edu/seniorscholars/files/2013/05/SeniorScholars-ManfredDiehl-Presentation.pdf>

As George Burns observed: "*Retirement at sixty-five is ridiculous. When I was sixty-five I still had pimples,*" and "*If you live to the age of a hundred, you have it made because very few people die past the age of a hundred*".

Robert N Meroney, SSS Newsletter Editor and VP

Upcoming Ram Trax and Senior Scholar Tours

These tours have been organized with the assistance of the Office of External Relations Ram Trax program. To participate, RSVP to jennifer.lobermeier@colostate.edu. Some tours are size limited so reserve early.

Monday, March 10, 3:00 - 4:00 p.m.

CSU Equine Reproduction Laboratory

Thursday, April 24, 1:00 - 3:00 p.m.

Earth, Sun, and Fire Tour (Foothills Campus) Tour an 8,000 Trina solar panel field, biomass boiler, and composter.

Monday, May 19, time tbd

ARDEC--animal side

Monday, June 9, time tbd

Global Energy Solutions, visit to CSU Engines and Energy Conversion Laboratory at the old Fort Collins Powerhouse.

OSHER LIFELONG LEARNING INSTITUTE AT COLORADO STATE UNIVERSITY: FOR THOSE AGES 50 AND BETTER

Osher at Colorado State University is a member-based, member-driven program that provides educational and engagement opportunities for those aged 50 and better (though curious minds of all ages are welcome). In January 2014, Osher transitioned its membership model to better serve its members, build “value-added” opportunities into membership and ensure program growth and sustainability. Two membership levels are now available to meet the needs of Osher members:

- “Gold-level” membership (\$95/session) for those members that actively participate in multi-session Osher courses. Membership and tuition for a single course offering have been rolled into one convenient fee. Membership includes access to Perk Series lectures, tours, and special events. “Gold-level” membership also entitles members to enter into a Value-Added Draw for additional free-of-charge Osher courses, based on space availability.
- “Green-level” membership (\$35/year) for those members who only participate in Perk Series lectures, tours, and special events and wish to support lifelong learning in our community.

Learn more about Osher by visiting our website at: osher@colostate.edu or calling (970) 491-7753. Osher invites all Senior Scholars to challenge yourself and learn something new by joining Osher today. Below is a listing of upcoming classes:

Starting March					
Course Title	Course #	Day/s	Dates	Time	Cost
Basic Spanish Language & Culture Awareness for Travel Part II	OSHR 1201 106	Thursdays	3/27-4/24	3 - 5 p.m.	\$95
Starting April					
What Makes the Economy Tick	OSHR 1397 100	Mondays	4/7-5/12	10 a.m. - noon	\$95
Common But Seldom Seen Wildlife	OSHR 1820 106	Mondays	4/7-5/12	1 - 3 p.m.	\$95
Vienna 1900: Art, Life and Culture	OSHR 1720 100	Mondays	4/7-5/5	6 - 8 p.m.	\$95
A Personal Search for Meaning--How Theology, Philosophy, and Psychology Intersect	OSHR 1375 100	Tuesdays	4/8 - 5/13	10 a.m. - noon	\$95
Understanding Alzheimer's	OSHR 1366 106	Tuesdays	4/8 - 4/29	10:30 a.m. - 12:30 p.m.	\$95

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