

California Aging Issues



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This issue of California Aging Issues highlights the upcoming Aging Workgroup Conference, "Resources for Optimal Aging" to be held November 10th, 2004, at the UC Davis Alumni Center. Our first article, "Optimal Aging," is by Carolyn Aldwin, and the second, "Memory and Aging," by Beth Obe, both of whom will be speakers at our conference.

At the end of her article, Carolyn announces leaving UC Davis to become the Chair of the Department of Human Development and Family Sciences at Oregon State University. We let her go with heavy hearts, but wish her well in the future.

*I am also leaving the University, retiring, fully aware of what wonderful people work in cooperative extension. Linda Kelly is the person to contact, lkelly@ucdavis.edu
Thanks, Diane F. Gilmer*

Register for the Aging Workgroup Conference:

"Resources for Optimal Aging"

**Guest Speaker: Sharon Johnson,
Oregon State University Cooperative Extension**

***Health promotion, legal check-up and retirement,
working with volunteers and memory loss.***

**November 10th, 2004, 8:30am to 5:00pm
Buehler Alumni Center, University of California, Davis**

For information, contact Linda Kelly at

lkelly@ucdavis.edu or register on our WEB site:

<http://groups.ucanr.org/elderly/> - go to the right side of the page, under Mission, and highlight "Resources for Optimal Aging Registration." To send the completed form, hit the button at the very bottom of the page.




OPTIMAL AGING, by Carolyn Aldwin

Tom Brokaw wrote a book in which he called the current cohort of elders the "Greatest Generation." While this may be a bit of hyperbole, it is true that this generation has been pioneers in aging. This is the first

generation in which significant numbers of people have lived until the biblical four score and ten – and beyond. And we have learned a tremendous amount about aging from their suffering and successes. For example, in 1970, the aging entry in the *Encyclopedia of Psychology* asserted that older adults were depressed, lonely, and suicidal – which is certainly not true for the vast majority of seniors! In the past 30 years, we’ve learned that dementia, osteoporosis, cardiovascular disease, and the like, are not inevitable, and that the aging process is *plastic*, or capable of being modified. Diane Gilmer and I just published a book which detailed much of this, called “*Health, illness, and optimal aging: Biological and psychosocial perspectives*” (Sage). The purpose of this book was to make the biology of aging comprehensible to behavioral and social scientists, as well as any reasonably well-educated lay person, and to show how psychosocial factors can affect the aging process.

Diane and I learned a tremendous amount writing this book. While some people talk about “successful aging,” we preferred the term “optimal aging”, because the term “success” implies that there is only one way to age well. Optimal aging recognizes that there are many different pathways to aging gracefully. Further, how we age not due primarily to genetics – Rowe and Kahn (2000) estimate that only about 30% of the variance in aging and mortality is due to genetics – the rest is due to choices that we make, at both an individual and a collective level. These choices can either accelerate the aging process or decelerate it. We were surprised at how well just a few key factors affected aging in many different organ systems.

- **Avoiding toxins.** Perhaps the biggest lifestyle choice that we can make is to avoid smoking tobacco. While the role of smoking as a risk factor for heart disease and lung cancer is well known, far fewer know that it also increases the rates of a number of other cancers, such as breast cancer, as well as a host of other diseases, such as osteoporosis and dementia. This is partially because it damages collagen, a glycoprotein which is the scaffolding of the body and thus affects many organ systems, including arteries (causing hypertension and other cardiovascular diseases), bone (causing osteoporosis), lung tissue (causing emphysema) and skin, causing wrinkles. Other substances such as methamphetamine and too much alcohol (although having 1-2 drinks a day may be protective), and exposure to environmental toxins, such as smog or harmful chemicals, can accelerate aging. 
- **Good nutrition.** There has been a lot of publicity lately about the worldwide epidemic of obesity. Interestingly, people who are overweight are also often malnourished, in the sense that they do not eat high quality foods which have essential nutrients in them. Being overweight can lead to glucose intolerance, which means that glucose is not processed well and remains circulating in the blood system. Too much glucose circulating in the blood system (in the form of glycoproteins) can damage the small capillaries which deliver blood (and therefore nutrients) to the cells. Thus, diabetes (an advanced form of glucose intolerance) can lead to hypertension, heart disease, strokes, blindness, peripheral neuropathy (damage to nerves), and peripheral vascular disease (damage to arteries, which may lead to problems with infections). In contrast, diets with lots of whole grains, fruits,

and vegetables provide not only many nutrients that our bodies need for optimal functioning, but are also good sources of antioxidants, which protect against aging at the cell level.

- **Exercise.** Everyone knows that exercise promotes cardiovascular health, but did you know that it also increases pulmonary functioning, and may protect against some form of cancer? With age, we produce less growth hormone, which leads to loss of muscle, which in turn leads to balance problems and falls. However, exercise increases our production of growth hormone, and we can retain much of our muscle mass. Weight-bearing exercise (especially those that involve some impact) such as running, lifting weights, or even jumping, also stresses the bones, promoting growth – or at least retarding the rate at which we lose calcium from the bones with age. Exercise also regulates neuroendocrine and immune function, and seniors who exercise regularly are less likely to get colds.



Don't get me wrong – we are all subject to aging, the majority of us will develop some sort of chronic illness, and we will all die. The encouraging news, though, is that, with a little care and luck, we can delay the age at which this will occur, and decrease the time in which we are disabled. But we also need to think of the quality of our lives – which involves what we do for others and the society as a whole. Thus, Diane and I argued that the development of wisdom is also an essential component of optimal aging!

Note: In September I left to take the position as Chair of the Human Development & Family Sciences Department at Oregon State University. I miss working with everyone, but am very glad that the Aging Workgroup is continuing! I'm enjoying my new position, especially working with the fine folks in extension here who work on aging, but find myself (surprisingly) advocating for child programs! See you at the conference in November!



Memory and Aging, by Beth Ober

There are a number of popular myths about memory and aging. In this article, three of these myths will be stated, and following each myth, the actual facts will be provided. The facts are based on the scientific research findings; each factual statement is followed by elaborative information, including concrete examples.

Myth #1: All types of memory are adversely affected in normal aging.

Fact #1A: Only one type of long-term memory - episodic memory - shows significant decline with normal aging. There are three general types of long-term memory: episodic, semantic, and procedural. When cognitive psychologists and neuropsychologists talk about long-term memories, they are referring to memories that last anywhere from minutes to years beyond the time that the information was encoded into memory. If the information is encoded into long-term memory, then even if the individual has not thought

about it for awhile, the individual is still able to remember the information. This is in contrast to the case where you obtain a phone number or a name, but don't write it down, and then, after even a moment's distraction, you cannot recall it. In this case, the information was being held in short-term memory, and was not encoded into long-term memory.

Returning to the different types of long-term memory, the only one that is affected by normal aging - episodic memory - involves memory for personal events/episodes that are linked to a particular situation or context. For example,

remembering one's most recent drive through Concord, N.H., depends on episodic memory, and involves visual images, emotional content, etc.



Another example of episodic memory at work is when we are at the supermarket, trying to remember the items on a shopping list that was written at home and then inadvertently left there.

The second type of long-term memory is semantic memory, which consists of our knowledge about the world, including knowledge of objects, people, social customs, and language(s). This type of memory is very well preserved in normal aging; in fact, some aspects of semantic memory, such as vocabulary, have been shown to increase in later adulthood.

The third, and final, type of long-term memory is procedural memory; this consists of our knowledge of procedures and rules for performing many types of sensori-motor and perceptual tasks.

Procedural memory is involved in tasks such as swimming, piano-playing, and card games. Procedural memory, like semantic memory, is very well preserved in normal aging.



Fact #1B: Only one type of short-term memory - working memory - shows significant decline with normal aging. Working memory involves the simultaneous manipulation and rehearsal/coding of information in short-term memory. For example, if you are asked to repeat a series of numbers, in reverse order from the order in which they were given to you, you need to engage working memory.

Also, if you are asked to engage in more than one type of information evaluation or decision-making at the same time, this also requires working memory. Aspects of short-term memory that involve simply storage/maintenance of information, in the absence of any distraction, are well preserved in normal aging.

Myth #2: Memory deficits which are serious enough to impact activities of daily living are the norm in older adulthood; If one lives long enough, one will have serious memory problems.

Fact #2: The majority of older adults do not have serious memory problems. Rather, they have relatively minor memory problems which, although annoying, do not prevent them from continuing to live independently. For example, the episodic memory declines associated with normal aging result in older adults needing to spend more time and effort on incorporating

recent events into long-memory than do younger adults. Once the memories are encoded into long-term memory, however, older adults will remember these events over time, as well as younger adults.

Myth #3: The memory deficits associated with normal aging are simply milder forms of the same types of memory deficits associated with Alzheimer's disease.

Fact #3: The memory deficits of Alzheimer's disease differ in type as well as in severity, especially in the moderate-to-severe stages of the disease. Alzheimer's disease is by no means an "end point" for normal aging. In early Alzheimer's disease, only episodic memory and working memory are significantly impaired, and these impairments are of a much greater magnitude than those associated with normal aging. As Alzheimer's disease progresses into the moderate and then severe stages, all of the other types of memory become affected as well. It is interesting (and of great interest to those who care for Alzheimer patients) that many aspects of semantic (world knowledge) and procedural memory are relatively well preserved from the early to moderate stages of the disease. An Alzheimer patient in the mild-to-moderate stages of the disease, for example, can often do very well on tasks involving recognition of objects and their functions, basic language abilities, and playing an instrument (that they had, of course, learned how to play earlier in life). Incorporating the relatively preserved types of memory, and minimizing the most impaired type of memory (i.e., episodic/event memory) into the day-to-day activities of mild-to-

moderate Alzheimer's disease patients has been shown to be very helpful both to the patients and to their caregivers, in terms of stress reduction.



Announcements:

Gloria Barrett, UC Cooperative Extension of Sacramento County, announces the continuing caregiver training program for In-Home Supportive Services. The September 29th class targeted Hmong caregivers. For those interested, please contact Gloria at 916-875-6913



Mark your calendars:



“The 22nd Annual Alzheimer’s Caregiver Seminar”

Saturday, November 6th, 7am to 3pm
American River College Cafeteria
4700 College Oak Drive
Sacramento, CA

Information will cover research, grief and guilt, resources and placement, pharmacy, patient care, hospice and legal issues.

Cost: \$35. Continuing education credits are available for an additional cost.

To register call 916-448-7001, 209-333-2649, or 800-540-3340

Two UCDavis Events:



“Coming of Age Lecture Series, 2004”

Lectures will be from 6:30 to 8PM, at the Cancer Center Auditorium, UCDCM, 4501 X Street, Sacramento.

“Monday Noontime Lectures at Sierra Health Foundation”

Lectures will be from noon to 1:30 at the Sierra Health Foundation, 1321 Garden Highway, Sacramento.

For further information on the above two programs call 916-734-4768 or access: http://healthvaging.ucdavis.edu/community/lecture/on_aging/schedule/COASp2003.pdf



Resources on Aging

An excellent WEBSITE for ordering videos on aging issues is at www.terranova.org. One video I would recommend is “Complaints of a Dutiful Daughter.” I have used it in my class and know it is equally popular at our local senior center. It depicts the difficulties of caring for a parent with dementia. Although expensive, it is an excellent teaching tool.

WEB information on Aging

An interesting interactive WEB site for seniors can be found at www.nihseniorhealth.gov

- For ongoing State Legislation information, contact Sarah Sutro-Steenhausen, Consultant, Senate Subcommittee on Aging and Long Term Care: Sarah.Sutro@SEN.CA.GOV
 - A national all-around source of excellent information: <http://www.aoa.dhhs.gov/elderpage.html>
 - National Institute of Aging: <http://www.nia.nih.gov>
 - California Department of Aging: <http://www.aging.state.ca.us/>
 - DANR Aging Workgroup site: <http://groups.ucanr.org/elderly/>
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Workgroup members:

Janet Momsen, PhD, Chair
Professor, UC Davis
Mary Blackburn, MPH, PhD – Co-Chair
Nutrition, Family, & Consumer Science Advisor
Mariciel Klenk, CFCS
Nutrition, Family, & Consumer Science Advisor
Gloria Barrett, RN, BSN, MSN,
Cooperative Extension County Director
Patti Wooten-Swanson, PhD, CFCS
Estella West, MS, Home Economics
Margaret Johns
Nutrition, Family, & Consumer Science Advisor
Dorothy Smith
Nutrition, Family, & Consumer Science Advisor
Rose Hayden-Smith, 4-H Youth Development
Beth Ober, PhD, Professor, UCD
Karen Varcoe, PhD, Chair, DANR Human Resources
Linda Kelly, Post Graduate Researcher
UC Davis

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Memory Tips



- 1. Link new information that is important for you to remember to things you already know well.**
- 2. Use memory "tricks" such as bizarre images, rhymes, etc., when trying to link a name to a person you have recently met.**
- 3. Exercise your memory in your daily life with material that is interesting to you.**
- 4. Use "stickies/post-its" (paper or computer versions) to help you keep track of special appointments or obligations.**
- 5. Regular physical activity improves memory and other cognitive functions.**
- 6. Keeping stress under control will help your memory.**
- 7. Do not waste your money on over-the-counter "memory pills". Good nutritional practices, including a daily multivitamin supplement (with anti-oxidants), will be much more effective.**