

BOSS Update

The longest distance a participant traveled to get to Beaver Dam was over 9,000 miles!

Participants ranged in age from 21 to 84 years old.

The average age of study participants was 49 years.

580 study participants live out of state or overseas!

BOSS HEALTH

- 54% never smoked
- 26% eat 2+veggies/day
- 26% eat 2+fruits/day
- The average number of city blocks a participant walks per day is 9.

Thank you!

We would like to thank the 3,285 people who participated in the BOSS between June 2005 and August 2008. Your involvement has been so important! We had many individuals from out of town and state make a special effort to come in for an exam while they were visiting family and friends in Beaver Dam.

Results from Beaver Dam Offspring Study and Epidemiology of Hearing Loss Study presented at National Meetings

With the Beaver Dam Offspring Study (BOSS) data collection phase completed, the exciting work of making sense of all the data begins. Study investigators and staff have been presenting preliminary results of the study, as well as data from the Epidemiology of Hearing Loss Study (EHLS), at scientific meetings throughout the United States.

The Society for Epidemiologic Research annual meeting, held in Chicago this past June, allowed an opportunity to present some of the first data from the BOSS. Early findings presented included the prevalence of hypertension. BOSS investigators reported that 36.5% of the BOSS population had hypertension. Men and older participants were more likely to have hypertension. Of study participants identified as having hypertension, 30% were not aware that they had hypertension prior to their exam. The data were shared with other researchers

interested in how this may correlate to the health of the general population of the United States.

The BOSS and EHLS were featured at the 15th International Symposium on Olfaction and Taste held in San Francisco, CA, July 21-26 2008. Dr. Karen Cruickshanks, the Principal Investigator of the studies, and Carla Schubert, a researcher with the Beaver Dam studies, were invited speakers at a special symposium on Epidemiological Studies of Taste and Smell sponsored by the National Institute on Deafness and Other Communication Disorders. (See page 2 for preliminary findings.)

Study researchers will be busy during the next year analyzing the information collected from BOSS participants and comparing it to what we know about their parents.

Plans for a 5-year follow-up examination that would begin in 2010 were recently submitted to the NIH and are pending review.

The Beaver Dam Offspring Study staff are currently contacting study participants to update address and phone information. If you are in the process of moving or if you know of future moving plans please contact us with current information by calling the scheduling office at 608-890-0332 or 800-253-0986 or email us at BOSS@episense.wisc.edu It is important we have current information so we are able to reach you concerning progress and study findings.



Left to right: Rebecca Glewen, Kathy Campbell, Tom Dugolenski, Shirley Vant Hoff, Jo Welsch, Erica Schroeter

“Thank you to all Beaver Dam Study participants! We really enjoyed meeting you and working with you. Thanks for making a special effort to spend your valuable time with us!”

Tell Me More

These are just a few of the research topics we are attempting to address. The broad spectrum of data we have gives us a varied and unique look at the senses and how they are intertwined in our lives. If you are interested in a more in-depth look at our study results please check out our website for published papers and scientific articles at:

www.pophealth.wisc.edu/boss



For more information:

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Future information regarding the study will be sent to you in upcoming mailings. If you prefer to receive newsletters electronically please let us know.



Can you hear the crickets?

As we age, people who experience hearing loss tend to lose their high frequency hearing first, effectively blocking out the sound of crickets and chirping birds. Overall, 14.3% of BOSS participants had a hearing loss at their examination. Similar to what we learned in the EHLS, older BOSS participants were more likely to have a hearing loss compared to the younger participants and men were more likely than women to have a hearing loss. However, when comparing the prevalence of hearing loss at a specific age for participants born in different time periods, we found that participants born before 1935 had more hearing loss than those born in later years at the same age. Why do BOSS participants have a lower rate of hearing loss than their parents? Are there environmental/lifestyle changes or genetic factors that have contributed to this decrease? Our study researchers will be busy analyzing generational differences in environment and lifestyle that may help explain differences in degree of hearing loss.



“I don’t smell good”

No, this is not someone’s statement about their personal body odor. We often hear this response when we ask the question, “Do you have a normal sense of smell?” Many people complain they do not have a normal sense of smell. We found 3.8% of the BOSS participants and 24.5% of parents in EHLS had a deficiency in their sense of smell at their examination. What drives this loss? Does it really matter? We all know it can be an annoying deficit...just try this simple test. The next time you sit down to your meal plug your nose while you eat. The ability to smell plays a big role in our ability to taste certain foods. What role would a decreased sense of smell have in our diet choices? Would we add extra salt, eat fattier, greasier foods in order to compensate? Would we cut back on the amount of food we eat? How does this correlate to cardiovascular disease? The broad spectrum of testing in our research may help us learn more about the interdependence among sensory functions.



Oh say, can you see?

Visual impairment, as measured by the visual acuity chart was very rare in the BOSS. Overall, only 0.4% of participants were not able to read the 20/40 line with their better eye. Perhaps a better indicator of visual function is the contrast sensitivity chart. With this chart, instead of the letters becoming increasingly smaller as one reads down the chart, the letters become gradually fainter. Nearly 8% of BOSS participants were classified as having impaired contrast sensitivity. 5.3% of BOSS participants reported having had refractive surgery, a procedure to correct refractive error and reduce the need for glasses. This is a relatively new procedure and the long term effects of refractive surgery are not well known. Future examination phases will give us a unique opportunity to evaluate the long term effects of having this procedure.



It’s really not rude to stick out your tongue

More than 70% of participants were chosen to go through a taste examination including having their tongue dyed blue with food coloring before having a photograph of the tongue taken. The tongue photos documented the density of taste buds on the tongue and may help us determine if there is a correlation between taste sensitivity and tongue anatomy. Sense of taste may have importance in food preferences which in turn may affect our dietary choices and overall cardiovascular health. Earlier this summer, Juan Bo Liang, project manager of the Handan Aging Study in Handan Province, China, visited the BOSS site in Beaver Dam. The Handan Aging Project (like many other worldwide studies) looks to the Beaver Dam Studies as a model for design of research in their native countries. Mr. Liang was particularly interested in the BOSS taste testing and tongue photography, in that the Chinese holistic view of medicine believes the tongue is an indicator of overall health. Mr. Liang took back our protocols to the Handan Aging Study in China and may be applying them to the Handan Chinese population in years to come.