

SUMMARY AND FINDINGS FROM THE BEAVER DAM OFFSPRING STUDY

In the 20th century, it was often considered normal for hearing, vision, the sense of smell, and memory to get worse with age. However, it may be possible to slow or prevent these disorders. In this study, the adult children of people in Beaver Dam, WI who had participated in an earlier study had the same hearing, smell, vision, and cognitive tests as their parents had. We re-tested them after 5 and 10 years to measure changes. We wanted to know how often changes occurred and why some people developed problems and others did not. We also wanted to find out if they were healthier than their parents at a similar age. People in this study were born during the Baby Boom (1946-1953) and Generation X (1965-1984) years while their parents were in the Greatest (1901-1924) and Silent (1925-1945) Generations. About 3300 people participated. The average age was 49 years.

These were some of our main findings:

- Baby Boomers and Generation Xers were less likely to develop hearing, vision, and cognitive problems than their parents.
- People who were heavier, smoked, had diabetes, had higher levels of inflammation markers in their blood, and worse vascular disease were more likely to develop sensory or cognitive problems. People who had more education, exercised, and were light consumers of alcohol were less likely to develop them.
- Changes in hearing, vision and sense of smell often happened before cognitive problems. Sounds, sights, and smells are interpreted in the brain, so changes in these senses may be early warning signs of changes in the brain.
- We found that a scan of the back of the eye may be a good measure of age-related changes in the brain.

These results suggest that declines in hearing, vision, the sense of smell, and memory are not normal parts of aging. Healthier lifestyles, better diabetes control, lowering cholesterol and controlling inflammation in middle age may help maintain health in aging.