

BALTIMORE LONGITUDINAL STUDY ON AGING (BLSA)

The BLSA, America's longest-running scientific study of human aging, began in 1958. BLSA scientists are learning what happens as people age and how to sort out changes due to aging from those due to disease or other causes. More than 1,200 men and women are study volunteers: they participate in more than 100 physiological assessments intended to yield a scientific understanding of the processes of human aging.

Listing of study variables & measurement of variables

Sociodemographic:

- sex
- ethnicity
- income/job status

Functional health:

- Self-reported health
- Hearing loss was measured by pure tone thresholds, speech recognition, tympanogram, acoustic reflex and disease history.
- taste sensations: oral physiology and taste test
- vision testing for acuity, depth perception, contrast sensitivity
- muscle strength
- timed gait

Bio-clinical:

- for heart, arteries, brain,, prostate, metabolism
- blood pressure
- medical history and physical examination
- laboratory variables, immunological assays
- ability to perform aerobic exercises: resting and treadmill ECG
- ambulatory electro-cardio
- arterial stiffness
- exercise Thallium scan
- echocardiography
- cardiac MRI
- vascular medications
- blood cholesterol levels
- Prostate Specific Antigens (PSA) measures
- percentage of free PSA to predict treatable cancer
- alcohol metabolism in men
- glucose tolerance, plasma lipids, lipoproteins
- body fat distribution in both sexes with concentration on waist
- diabetes predictors
- renal function
- pulmonary function
- estrogen levels vis-a-vis memory

- neurological exam
- bone and joint- osteoporosis, osteoarthritis
- brain imaging
- prostate imaging.

Psychological:

- stability of personality: Guilford Zimmerman
- Temperament Survey, California Q-Set, Computer-Assisted Test
- Revised NEO Personality Inventory
- coping mechanisms
- personality tests to predict psychological well-being

Cognitive abilities:

- visual recall: Benton Visual Retention Test
- vocabulary test: WAIS Vocabulary
- CERAD Neuropsychological SS. Battery
- memory/reaction time
- sustained vigilance task

Lifestyle:

- nutrition
- diet trends
- physical activity and other
- physical activity questionnaire

The Baltimore Longitudinal Study of Aging (BLSA) was founded in 1958 and has continued to the present. The study is an open panel which has continually recruited new subjects over the entire time course of the study. The initial recruitment consisted of men who spanned the entire adult life span. Starting in 1978, recruitment of women began, and in the 1990s an emphasis was placed on recruitment of African American subjects. The initial purpose of the study was to characterize individual aging, and the normal aging process. Over the years, an effort developed to study the time course of disease development, including diabetes mellitus, cardiac disease, prostate disease, Alzheimer's disease, and others.

Currently the study is actively following approximately 1200-1300 adult individuals, aging from approximately 20 – 100 years of age. Over the course of the study, approximately 3000 individuals have been evaluated at least once, with some men having been followed for more than 40 years. At each evaluation, subjects undergo a medical evaluation, psychological, blood, cardiovascular and other studies. The battery of tests has changed over time. Blood samples have been stored on subjects since the 1960s. Measurements that have been collected in the study are presented on the studies website: blswww.grc.nia.nih.gov. The contact person for the BLSA is the study director: Dr. Luigi Ferrucci, 410-350-3936, email: ferruccilu@mail.nih.gov

Country:	US	x	Physiological Measures	x	Psychological Measures
Sample Size:	~3000	x	Functional Health	x	Cognitive Abilities
Age Group:	20-100	x	Lifestyle: Physical Activity	x	Social and Demographic Measures
Gender:	Both	x	Lifestyle: Nutrition		Health Services Utilization
# Cohorts:			Lifestyle: Other		
Total		x	Minorities		
Waves:					