

**National Institutes of Health
Longitudinal Studies Database**

New Mexico Aging Process Study

- 1. Short Summary:** The New Mexico Aging Process (NMAPS) is a long-term longitudinal study of ambulatory, community-dwelling elderly men and women. The study was initiated in 1978/1979 under NIH/NIA grants to Drs. James Goodwin and Philip Garry that were originally designed to study the association of nutrition with immune function in a cohort of 300 elders over the age of 65 y with no known serious medical illnesses. The study, entitled "A Prospective Study of Nutrition in the Elderly" (AG02049), continued under Dr. Garry's leadership with funding from NIH/NIA through 1998. Its scope was broadened to encompass the description of changes within individuals over time in nutritional status and the associations of these changes with physiological and cognitive function. Dr. Richard Baumgartner joined Dr. Garry in 1991, and in 1993 obtained additional funding from NIH/NIA to study changes with age in body composition in the NMAPS cohort. Dr. Baumgartner became PI of the NMAPS in 1998 with Dr. Garry's retirement, and his grant, "Body Composition Changes in the Elderly" (AG10149), extended the longitudinal study through 2003. The study subsequently shifted to emphasize the association of changes in body composition with physiological and cognitive function, and the etiology and consequences of "sarcopenia", or age-related muscle loss, became a major focus. A competing continuing renewal application for this grant received a 189 priority score but was not funded in February 2004, and a revised application is pending.

The NMAPS longitudinal design uses a "rolling recruitment" method in which new volunteers are added annually to replace those lost to follow-up by death or dropout and maintain the active cohort size at ~ 400. Enrollment criteria exclude those with serious clinical conditions, such as recent myocardial infarction, significant peripheral vascular disease, insulin-dependent diabetes, hepatic disease, history of internal cancer requiring surgery, x-ray or chemotherapy in the past 10 years, a positive test for hepatitis, untreated hypertension (systolic BP > 180 mm Hg; diastolic BP > 100 mm Hg), and those taking prescription medications, except for thyroid and estrogen replacement, or minor anti-hypertensives. These criteria were designed to exclude subjects with significant illness that would preclude their ability to participate in a long-term longitudinal study.

Longitudinal records, ranging from 2 to 23 years, are available for multiple serum nutrients and other analytes, anthropometric measures, dietary intake, physical activity, and various health indicators. Records of up to 10 years duration are available for body composition, grip strength, hormones, cytokines, cognitive and physical function, and self-reported falls. In recent years, the database was expanded to include genetic polymorphisms associated with specific study outcomes. The sample sizes available for analyses vary from ~200 to 780, depending on the variable and length of serial records required. The NMAPS maintains a repository of serum, plasma, RBC, buffy coat, and DNA samples.

- 2. Data collection:** Suspended pending award for competing continuing renewal. Data analyses open and on-going.

- 3. **Study website:** None
- 4. **Suggested keywords:** senescence, aging, nutritional status, body composition, sarcopenia, functional status
- 5. **Contact:**

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- 6. **Additional Details:** None at present

Chart

Country: USA – New Mexico

Sample Size: varies with length of longitudinal records from ~ 200 to 780

Age group: 65-98

Cohorts: one

Total Waves: not applicable (new participants recruited annually to replace those lost to follow-up – see above)

Measures:

Physiological	<u> X </u>	
Functional Health	<u> X </u>	
Lifestyle: physical activity	<u> X </u>	
Lifestyle: nutrition	<u> X </u>	
Lifestyle: other	<u> X </u>	
Minorities	<u> X </u>	(92% NHW, 8% Hispanic)
Psychological	<u> X </u>	
Cognitive	<u> X </u>	
Social/Demographic	<u> X </u>	
Health Services Utilization	<u> </u>	