Calf circumference: The person was seated, with the right leg exposed.

Arm circumference: With the person seated or standing, the circumference was measured in the half point between the acromion (or posterior bone of the shoulder) and the olecranon or protruding bone of the elbow.

Tricipital and sub-scapular skin folds: The interviewer carried out the measurements using his or her thumbs and index fingers in order to make sure to take only the fatty tissue and not muscles or nerves. For this, a Lange Skinfold caliper, from Beta Technology Incorporated, was used.

Hand strength
Two measurements of hand strength were taken (the highest value is used in the analysis) with the interviewee standing with the dominant arm extended beside their body. A Creative Health Products Inc. dynamometer of was used, model T-18.

Flexibility and mobility
The flexibility and mobility tests were carried out with the purpose of measuring (1) equilibrium and balance, (2) agility and (3) walking speed. The exercises that were carried out were the following:

Equilibrium and balance: To measure equilibrium and balance two tests conducted, (1) to remain standing with feet together for 10 seconds and (2) to stand up five times from a sitting position, with arms crossed on the chest.

Agility: The agility was measured beginning with the senior’s ability to bend over, to pick up a pencil and to straighten out. If the interviewee could not do it in less than 30 seconds the test was not continued. The test was also not conducted if the senior had a cataract operation or another retinal procedure in the six weeks previous to the test.

Walking speed: To measure the senior's ability to rise off of a chair and walk, the interviewee was asked to rise from a chair and walk a distance of 3 meters in the manner that he normally does it; neither slower nor faster. The test was registered with a chronometer, noting the time in seconds that it took to carry out the test.

Laboratory procedures
The blood sample was obtained by venipuncture, mostly shortly after the interview was conducted. Two tubes of blood samples were collected: One with anticoagulant (VACUTAINER / EDTA) of 3-4 ml that was centrifuged later to separate the plasma of the cells and another tube without anticoagulant with coagulum activator (VACUTAINER SST, 5 ml) for obtaining serum. In the laboratory a fraction of serum was separated in a conical tube type Eppendorf for tests of total cholesterol, HDL (High Density Lipoprotein) and CRP (C-reactive protein), and 1 ml of complete blood in the tube EDTA for the analysis of HbA1c (glycated hemoglobin).
The biomarkers measured from blood samples of the CRELES-RC project were analyzed at the clinical laboratory of the Office of Health and Student Well-being of the University of Costa Rica (UCR). The tubes for the specimen collection were sent at the end of the day to the laboratory for analysis. Samples were kept at the appropriate temperature using a cooler box with ice. The remaining fractions of serum and plasma were aliquoted in red-top cryovials and they were stored in ultra-refrigeration (-140°C). When the fieldwork team was interviewing in regions outside the capital, San Jose, the blood samples were stored in refrigerators at public clinics and hospitals that are part of the Caja Costarricense del Seguro Social (the main public health care provider in the country).

The following are the assay methods used to analyze biomarkers:

<table>
<thead>
<tr>
<th>Biomarker</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cholesterol</td>
<td>Enzymatic colorimetric test, wavelength: 505 nm; temperature: 37°C; Reagents Roche, Equipment: Cobas c501 Analyzer</td>
</tr>
<tr>
<td>HDL</td>
<td>Enzymatic colorimetric test, wavelength: 600 nm; temperature: 37°C; Reagents Roche, Equipment: Cobas c501 Analyzer</td>
</tr>
<tr>
<td>CRP</td>
<td>Particle-enhanced immunoturbidimetric assay, using anti-CRP monoclonal antibodies, Equipment: Cobas c501 Analyzer</td>
</tr>
<tr>
<td>HbA1c</td>
<td>Turbidimetric Inhibition Immunoassay (TINIA) for total hemolyzed blood; Reagents Roche, Equipment: Cobas c501 Analyzer</td>
</tr>
</tbody>
</table>

**Research Ethics**

The study was approved in April 2009 by the Committee for Protection of Human Subjects (CPHS II) at the University of California at Berkeley. The study and procedures for fieldwork and informed consent were also approved by the Ethical Science Committee of the University of Costa Rica in the sessions held in April 24, 2009, August 10, 2009, and February 23, 2011 (references: VI-2878-2009, VI-5308-2009, and VI-1313-2012), as part of the research project number 828-A2-825. All the databases of the study have been made anonymous (the name and other identifiers were removed) to avoid risks to the privacy of the participants. Written informed consent was signed during the first wave of interviews, in which it was explained the occurrence of follow up visits after two years. Some of the subjects in the supplementary sample (the “short interviews”) were interviewed by phone; these participants’ consent to be interviewed is registered in a special “Informed Consent Form for Phone Interviews” approved by the Ethical Science Committee of the University of Costa Rica in the April 18, 2012 session (reference: VI-2403-2012).