

How to Test and Access Your Biological Age

Knowledge is power. When working toward increasing your healthspan and optimizing your longevity, it helps to have information to ensure you're on track. At your next annual physical, ask your practitioner for the below tests to offer valuable insight into how well you are aging. Whether you are in your 20's or 70's, these simple tools can be powerful indicators of biological age. (1)



BLOOD PANELS

Fasting Blood Glucose & Hemoglobin A1c

Fasting blood glucose (FBG) measures the concentration of glucose in your blood after at least 8 hours of fasting. Hemoglobin A1c is an indicator of your average blood glucose level over the preceding three months.

Elevation of these two markers indicates that your cells are not taking up circulating glucose efficiently; high levels of circulating glucose hasten biological aging by disrupting the body's inflammatory balance, brain function, and cardiovascular health.

Optimal Ranges:

- Fasting glucose: 75-90 mg/dL
- Hemoglobin A1c: 4.6-5.3%

High-Sensitivity C-Reactive Protein

High-sensitivity C-reactive protein (hsCRP) is a protein that increases in the blood when the body is experiencing inflammation. Higher hsCRP is associated with reduced strength and mobility, declines in cognitive acuity, and a faster pace of aging, making it a critical biomarker of biological aging. (2,3) Like glucose and hemoglobin A1c, hsCRP is a marker that can easily be added to a routine blood panel by your practitioner.

Optimal Range for hsCRP: < 1 mg/L

BODY FAT: WAIST-HIP RATIO

An elevated waist-hip ratio (WHR), defined as a ratio greater than 0.9 in men and 0.85 in women, indicates underlying metabolic dysfunction, a factor in accelerated biological aging. Your practitioner can help you or you can easily measure your WHR at home:

1. Take a soft fabric or plastic tape measure and circle it around your waist.
2. Make sure the tape measure is horizontal around your waist, just above your belly button. Stand up straight and breathe out. Check the tape measure; this reading is your waist circumference.
3. Next, measure the widest part of your body around your hips. Again, make sure the tape measure is horizontal. Check the tape measure; this reading is your hip circumference.
4. Finally, calculate your WHR by dividing your waist circumference by your hip circumference.

Optimal WHR Measurements	
Women	< 0.85
Men	< 0.9

Elevated WHR is a sign that you are storing excess body fat, particularly visceral body fat. Elevated levels of visceral fat, in the midsection nestled around your liver, kidneys, and other abdominal organs, are associated with accelerated biological aging. (4)

Body fat mass is also associated with toxic exposures, as many environmental toxins have hormone-disrupting effects that accumulate in fat tissue and cause fat cell proliferation. (5) Detoxifying your body can assist fat loss by removing these hormone-disrupting compounds.

BLOOD PRESSURE

Your blood pressure influences how hard your heart must work to pump blood throughout your body. A high blood pressure places significant demand on the cardiovascular system and is associated with accelerated biological aging.

Optimal Blood Pressure Measurement
< 120/80 mmHg