
4. My Objective Mito-Audit: Lab Ranges and Clues

No single routine lab test directly measures overall mitochondrial health. But the tests listed below can give us clues. Use this worksheet to look at the conventional lab ranges (CR) for each test and functional optimal lab ranges, when available. **Conventional ranges vary somewhat among laboratories. Always compare your results with the reference range reported by the laboratory that performed your test.** Functional optimal ranges (FOR) are ranges drawn from varying levels of evidence and used by some healthy longevity medicine practitioners. They are not universally standardized and may evolve as research advances. When no functional optimal ranges are available, use the conventional ranges and other biomarker clues described below to discuss test results with your healthcare provider.

Date of My Laboratory Tests: _____

Safekeepers (Protection)

- hs-CRP - How much chronic inflammation is present?

My Result: _____

Conventional Range (CR): 0.0 – 3.0 mg/L

Functional Optimal Range (FOR): Under 1.0 mg/L. Lower cardiovascular risk.

- Fasting Insulin - How well is my body managing insulin?

My Result: _____

Conventional Range (CR): 2.6 – 24.9 uIU/mL

Functional Optimal Range (FOR): 2.0 – 6.0 uIU/mL. Proposed range. Sources and assays vary.

Optimizers (Fine-Tuning)

- Fasting glucose - What is my blood sugar after an overnight fast?

My Result: _____

Conventional Range (CR): 70-99 mg/dL

Functional Optimal Ranges (FORs): Vary. Compare with fasting insulin, HbA1c, and trends.

- HbA1c - How well has my blood sugar been controlled over the past three months?

My Result: _____

Conventional Range (CR): 4.0% – 5.6%

Functional Optimal Range: Under 5.4%. Proposed range. Diabetes risk rises continuously.

- TSH (w/Free T4 if indicated) - Could thyroid function affect my energy?

My Result: _____

Conventional Range (CR): Use the TSH range on my lab report.

Functional Optimal Ranges (FORs): Vary. Consider Free T4, symptoms, and trends.

Builders (Expanding Capacity)

- Hemoglobin (Men) - Am I delivering enough oxygen to my cells?

My Result: _____

Conventional Range (CR): 13.2 – 17.1 g/dL

No Functional Optimal Range: Track against CR and over time.

- Hemoglobin (Women) - Am I delivering enough oxygen to my cells?

My Result: _____

Conventional Range (CR): 11.6–15.4 g/dL

No Functional Optimal Range: Track against CR and over time.

NOTE: Consider asking whether vitamin D or ApoB testing is appropriate for you. Neither directly measures mitochondrial health. Vitamin D testing assesses vitamin D status, while ApoB can provide additional information about cardiovascular risk.

From: ***The Power to Age Well: An Action Guide to Mitochondria & Healthy Longevity***

A full-sized, printable copy of this resource is available at:

IntelligentLivingForever.com/Worksheets. Look for the title of this worksheet.
