

A P P E R F O R M A N C E

# Functional Age Report

12-WEEK LONGEVITY COACHING · BASELINE ASSESSMENT

CLIENT	James D.
SEX	Male
CHRONOLOGICAL AGE	52
ASSESSMENT DATE	April 22, 2026
COACH	Anthony Pietrobono · AP Performance

FUNCTIONAL AGE

44

— 8 years younger than chronological



# 01 Strength

20 / 25

DOMAIN SCORE

Strength is weighted at 25% of your composite — equal to cardiovascular capacity — because muscle mass and force production are two of the most evidence-backed predictors of all-cause mortality after age 50. Your strength profile is solid and trending toward Elite.

## TEST RESULTS

LIFT	RESULT	TIER	PTS
Back Squat (×BW)	1.65×	Advanced	4
Deadlift (×BW)	1.95×	Advanced	4
Strict Overhead Press (×BW)	0.78×	Advanced	4
Grip Strength (kg, dominant hand)	43 kg	Advanced	4
Strict Pull-Ups (reps)	9 reps	Advanced	4

### What This Means

Your strength profile is consistently Advanced across all five lifts — no glaring weaknesses. To break into the Elite tier (5/5 on any lift) you would need to push your back squat past 2.0×BW, deadlift past 2.25×BW, or pull-ups past 13 reps. All three are achievable in 12 weeks with progressive overload programming. Grip strength of 43 kg is particularly notable: research links grip strength under 26 kg in men aged 50-59 to early frailty risk, and you are well above that threshold.

## PROGRAMMING IMPLICATIONS FOR THE NEXT 12 WEEKS

Your strength foundation is strong enough to handle moderate-to-high-volume progressive overload. We will prioritize pulling strength (pull-up volume) and overhead pressing as your two biggest "promotion to Elite" opportunities. Squat and deadlift will be maintained at current loads with a deload-and-peak cycle in weeks 9-12, timed to your re-assessment.

# 02 Cardiovascular Capacity

20 / 25

DOMAIN SCORE

Cardiovascular capacity (VO<sub>2</sub> max) is among the strongest predictors of all-cause mortality in longitudinal research. Every 1-MET improvement in functional capacity is associated with roughly a 10-12% reduction in mortality risk in published cohorts. We assess cardio capacity using a standardized 2km row, which captures both upper- and lower-body conditioning while remaining low-impact for joints.

## TEST RESULTS

TEST	RESULT	TIER	PTS
2km Row · Damper 6 · 24-30 SPM	7:32	Advanced	20 / 25

Single-test domain — domain score reflected in Pts column.

### What This Means

Your 2km row time of 7:32 places you in the Advanced tier for men aged 50-59. The Elite threshold for your age group is sub-7:30 — you are within 2 seconds of breaking into the top 5%. That gap is closeable in 12 weeks with the right interval prescription. In practical terms, your VO<sub>2</sub> max estimate based on this row time is approximately 41-44 ml/kg/min, which is comparable to a healthy male in his mid-30s.

## PROGRAMMING IMPLICATIONS FOR THE NEXT 12 WEEKS

We will use a polarized cardio model: roughly 80% of your conditioning will be Zone 2 (conversational pace, 30-45 min, 2-3× per week) to expand mitochondrial density, and 20% will be high-intensity intervals (4×4 minutes at 92-95% HRmax, 1× per week) to push the top end of your VO<sub>2</sub> max. Target by week 12: sub-7:20 on the 2km row.

# 03 Mobility

15 / 18

DOMAIN SCORE

Mobility predicts injury resilience, fall risk, and long-term independence. The mobility battery uses fixed thresholds rather than age-adjusted norms — a healthy adult should be able to perform these patterns at any age. Your overall mobility is good, with two specific limitations that become priority work in your 12-week program.

## TEST RESULTS

TEST	RESULT	TIER	PTS
Overhead Squat Depth	Below parallel · 30 sec hold	Mid	3 / 5
Hip Flexion (Supine SLR)	92°	Pass	3 / 3
Ankle Dorsiflexion (Knee-to-Wall)	3.5 in. both sides	Pass	3 / 3
Thoracic Rotation	42° R · 38° L	Pass	3 / 3
Deep Squat Hold	2 min 15 sec	Pass	2 / 2
Shoulder Flexion	Full ROM with slight rib flare on reps 3-5	Mid	1 / 2 *

\* Shoulder flexion lost 1 point for slight rib flare on later reps. This is a coachable cue, not a structural restriction.

### What This Means

Two specific limitations are worth attention. First, your ankle dorsiflexion at 3.5 inches is at the low end of the passing range — well below the 4.5-inch standard that frees up clean squat depth. Limited ankle mobility cascades upward, contributing to the slight forward tip we observed in your overhead squat. Second, your thoracic rotation shows a 4° asymmetry (42° R vs 38° L), which is small but worth correcting before it manifests as low-back discomfort or rotational sports injury (golf, tennis, pickleball).

## PROGRAMMING IMPLICATIONS FOR THE NEXT 12 WEEKS

Daily ankle mobility work (2 minutes of banded distraction) plus thoracic rotation drills (90/90 breathing, segmental cat-cow) will be added to your warm-up protocol. Within 6 weeks we expect ankle dorsiflexion to push past 4.5 inches and thoracic rotation to equalize within 2°. These are small numbers with large downstream effects on every lift you do.

# 04 Balance & Coordination

13 / 17

DOMAIN SCORE

Balance is the most age-sensitive domain on this assessment. Single-leg stance with eyes closed has one of the strongest correlations to longevity of any field-based balance test in the literature — it integrates proprioception, vestibular input, and motor control simultaneously. This is your weakest domain on a percentage basis, and it represents your single biggest opportunity in the 12-week program.

## TEST RESULTS

TEST	RESULT	TIER	PTS
Single-Leg Stance · Eyes Open	52 sec	Excellent	5 / 5
Single-Leg Stance · Eyes Closed	14 sec	Mid	3 / 5
Y-Balance Composite (worst side)	89%	Good	5 / 7

### What This Means

Eyes open you are excellent. Eyes closed you drop dramatically — from 52 seconds to 14 seconds. This pattern is classic in adults who have been highly active in visually-guided modalities (cycling, golf, tennis) but have not specifically trained proprioception. The good news: this is one of the most rapidly trainable longevity markers. Most clients move from the 10-15 second range to 30+ seconds eyes-closed within 8-10 weeks of dedicated work.

## PROGRAMMING IMPLICATIONS FOR THE NEXT 12 WEEKS

A 5-minute proprioception block will be added at the start of every training session. We will rotate through eyes-closed single-leg holds, barefoot stability work, and reactive balance drills. By week 12, the target is 30+ seconds eyes-closed (Excellent tier) and a 95%+ Y-Balance composite. This single-domain improvement alone should add 3 points to your composite score.

# 05 Body Composition

15 / 15

DOMAIN SCORE

Body composition combines body fat percentage and skeletal muscle index (SMI). SMI is the stronger longevity marker of the two: sarcopenia — low muscle mass — is a more reliable predictor of all-cause mortality than overweight status alone. You are at the maximum score on this domain: a perfect 15/15.

## TEST RESULTS

METRIC	RESULT	TIER	PTS
Body Fat % (InBody)	17.2%	Lean	7 / 7
Skeletal Muscle Index (SMI)	10.4 kg/m <sup>2</sup>	Excellent	8 / 8

### What This Means

Your body composition is exceptional for a 52-year-old male. Body fat at 17.2% is in the Lean range (above-average for men 50-59), and an SMI of 10.4 kg/m<sup>2</sup> places you in the Excellent muscle mass category — well above the sarcopenia threshold of approximately 7.0 kg/m<sup>2</sup> and above the average-male reference of approximately 8.5 kg/m<sup>2</sup>. This is the foundation that protects everything else on this assessment. Your priority over the next 12 weeks is preservation, not transformation.

## PROGRAMMING IMPLICATIONS FOR THE NEXT 12 WEEKS

Maintenance protocol: protein target of 1.0-1.1 g per pound of bodyweight per day, resistance training 3× per week minimum, sleep target of 7+ hours nightly. We will re-test InBody at weeks 6 and 12 with the goal of **holding** current SMI while improving the strength, mobility, and balance domains. If body fat drops below 14% during the program, we add carbohydrates to protect lean mass.

# Your 12-Week Focus Areas

Your program is structured around **four priority levers**. Each focus area has a specific target, a measurable outcome, and a programming strategy. The week-12 re-assessment quantifies the change.

## 1. Single-Leg Eyes-Closed Balance **PRIORITY A**

**Target:** Move from 14 sec → 30+ sec by week 12.

**Why Priority A:** Largest single-domain improvement opportunity (+2-3 composite points). Strongest longevity correlation in the balance battery. Most rapidly trainable.

**Strategy:** 5-min proprioception block at session start. Daily 2-min eyes-closed practice. Reactive balance drills 2×/wk. Barefoot training on lower-body days.

## 2. Ankle DF & Overhead Squat **PRIORITY A**

**Target:** Ankle DF 3.5 in → 4.5+ in (both sides). OHS below parallel with 0.25× BW load, no forward tip.

**Why it matters:** Ankle mobility cascades upward. Fixing it cleans up squat mechanics and typically unlocks an additional 0.1-0.2× on the back squat without added strength work.

**Strategy:** Daily banded ankle distraction (2 min/side). Loaded heel-elevated split squats 2×/wk. Weekly knee-to-wall reassessment.

## 3. Pull-Ups + 2km Row **PRIORITY B**

**Target:** Strict pull-ups 9 → 14+ reps (Elite). 2km row 7:32 → sub-7:20.

**Why Priority B:** Both are already Advanced. The gain is incremental, not transformational — but promotion to Elite adds composite points and creates the visible "wins" that fuel week-12 momentum.

**Strategy:** Pull-up density blocks 2×/wk. Polarized cardio: 2× Zone 2 (30-45 min), 1× HIIT (4×4 min).

## 4. Body Composition **PRIORITY C**

**Target:** Hold SMI at 10.4 kg/m<sup>2</sup>. Hold body fat 15-18%. Do not lose muscle while training intensity rises.

**Why Priority C:** You are already at maximum domain score. The risk is regression, not deficiency.

**Strategy:** Protein 175-185 g/day (1.0-1.1 g/lb). Resistance training 3×/wk minimum. InBody re-test at week 6 and week 12.

## PROJECTED OUTCOME AT WEEK 12

### IF YOU HIT TARGETS

Strength: 20 → 22 (+2) · Cardio: 20 → 22 (+2) · Mobility: 15 → 17 (+2) · Balance: 13 → 16 (+3) · Body Comp: 15 → 15 (hold)

Projected Raw Score: 92 / 100 · Projected Functional Age: 52 - ((92 - 60) × 0.35) = 40.8 → 41

**Net Functional Age drop: 11 years from chronological**

# Coach's Notes

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James,

*The headline number — Functional Age 44, eight years younger than chronological — is impressive on paper. But the more interesting story is in the domain breakdown.*

*You have built an exceptional foundation in body composition and a strong base in strength. Most men your age would trade their decade for the skeletal muscle index you walked in with. That is not luck — that is compounding the right habits over years. We will protect that foundation aggressively in the next 12 weeks.*

*The opportunity is in balance. The 14-second eyes-closed single-leg result is the only marker on this report flagging early-stage decline. It is also the most fixable. By week 12 I expect you in the Excellent tier on this single test — and that movement alone will drop your Functional Age by another 1-2 years independent of anything else we do.*

*The mobility work will be the unsexy daily compound interest. Two minutes of ankle drills doesn't feel like training, but in 8 weeks it will quietly add half a body-weight multiple to your back squat without any extra effort. Do not skip it.*

*My ask of you: hit the protein target every day, hit the proprioception block every session, and message me directly if anything in the program is not landing. The Functional Age model is honest — it tells the truth about whether the work is working. Twelve weeks from now we re-test, and the number either moved or it didn't. I am planning on a Functional Age of 40-41 when we sit down again.*

*Let's get to work.*

## Anthony Pietrobono

AP PERFORMANCE · LONGEVITY PERFORMANCE COACH

# Methodology & Disclaimer

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## WHAT THIS REPORT IS

The Functional Age score is a wellness assessment tool built on five physical-performance and body-composition domains. Each domain is scored against age-and-sex-adjusted norms drawn from peer-reviewed research linking that individual domain to longevity and healthspan outcomes — for example, grip strength and all-cause mortality (Leong et al., 2015; *The Lancet*); VO<sub>2</sub> max and longevity (Mandsager et al., 2018; *JAMA Network Open*); single-leg balance and 10-year survival (Araujo et al., 2022; *British Journal of Sports Medicine*); and sarcopenia and mortality risk (Cruz-Jentoft et al., 2019; *Age & Ageing*). The composite weighting and age-sensitivity factors are calibrated to translate domain-level shifts into a directional Functional Age estimate.

## WHAT THIS REPORT IS NOT

The Functional Age score is not a medical diagnosis. It does not interpret bloodwork, prescribe medications, or replace clinical judgment. AP Performance does not provide medical advice, medical nutrition therapy, or treatment for any medical condition. Clients with chronic conditions or new symptoms are referred to their physician for clinical evaluation.

## HOW THE SCORE IS CALCULATED

Each domain is scored on a fixed scale (Strength: 25 · Cardio: 25 · Mobility: 18 · Balance: 17 · Body Composition: 15) summing to a 100-point composite raw score. Functional Age is derived using:

$$\text{Functional Age} = \text{Chronological Age} - ((\text{Raw Score} - 60) \times \text{Age Sensitivity Factor})$$

### AGE SENSITIVITY FACTOR

$$30s = 0.28 \quad \cdot \quad 40s = 0.32 \quad \cdot \quad 50s = 0.35 \quad \cdot \quad 60s = 0.38 \quad \cdot \quad 70s = 0.41$$

A raw score of 60 represents age-typical performance — the body performing exactly at chronological age. Scores above 60 indicate younger biological-age performance; scores below 60 indicate accelerated aging. The age-sensitivity factor reflects the increasing rate of biological change per decade, calibrated so that domain shifts translate into clinically meaningful Functional Age changes for the cohort.

## RE-ASSESSMENT

A graduation re-assessment is conducted at week 12. The same 5 domains are re-tested under the same protocols. The before-and-after report quantifies the change in your Functional Age and identifies which domains shifted most.