

Health Analysis Report: Dad (Il-Keun Lee)

EXECUTIVE SUMMARY

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Name: Dad (Il-Keun Lee)
Age: 62 years (60-69 bracket)
Gender: Male
Analysis Period: 2023-01-21 to 2025-11-27 (1030 days)
Generated: 2025-11-30 22:01

HEALTH SCORES

Overall Score: 69/100 (Moderate)

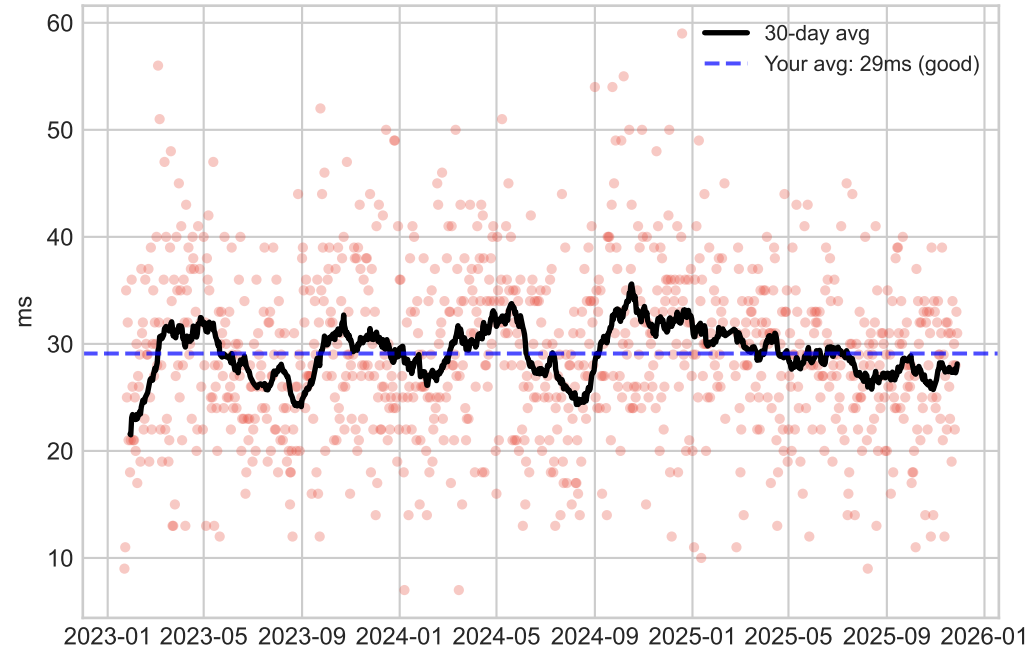
Cardiovascular: 80/100
Respiratory: 40/100
Sleep: 77/100
Recovery: 51/100
Activity: 97/100

TOP RECOMMENDATIONS

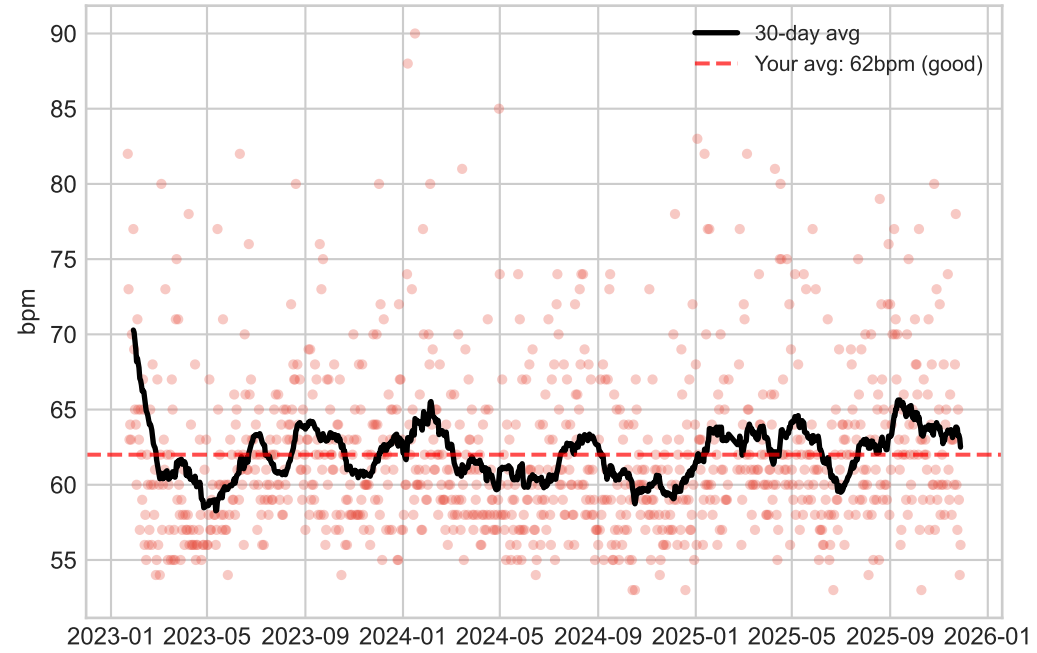
- 1. [HIGH] Respiratory: Screen for sleep apnea. Consider sleep study (polysomnograph...
- 2. [HIGH] Sleep: Aim for 7-9 hours. Establish consistent sleep/wake times. Cr...
- 3. [HIGH] Sleep Debt: Prioritize sleep extension. Consider 20-min naps if needed. ...

Cardiovascular Health

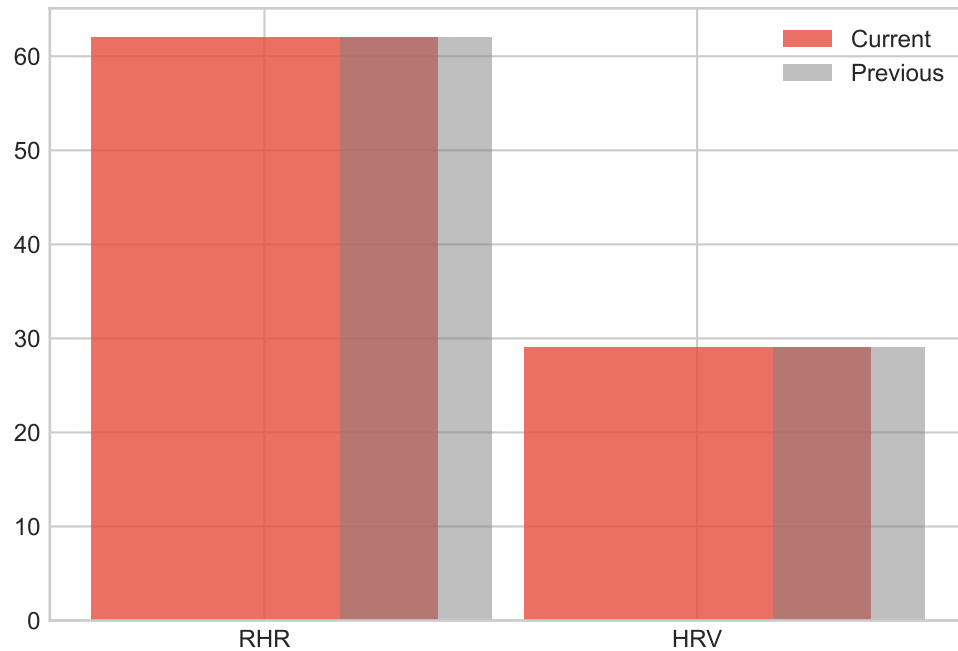
HRV - -1 ms vs age median



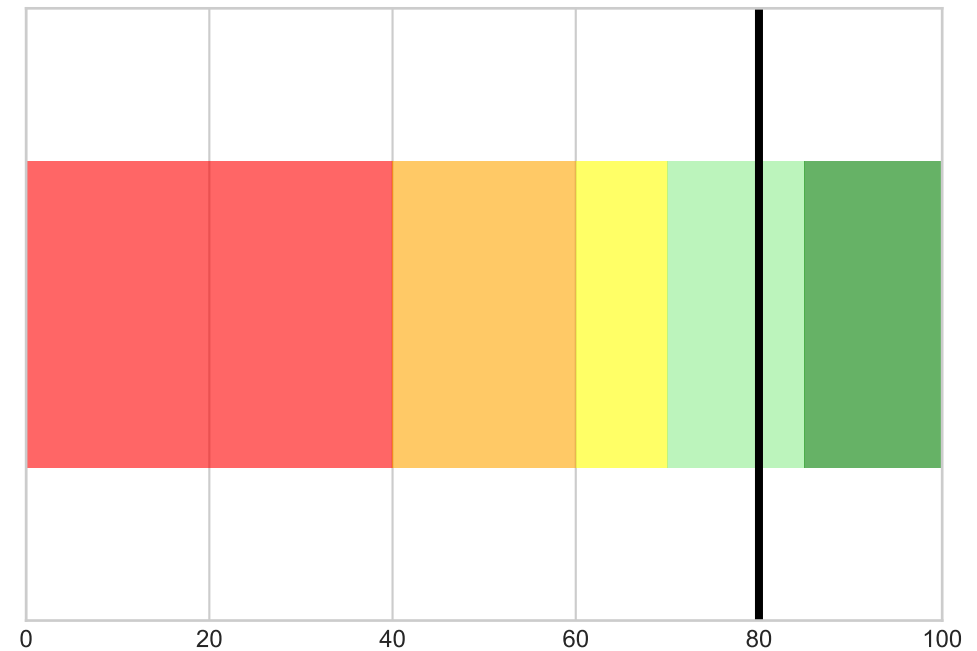
Resting Heart Rate - -6 bpm vs median



Current vs Previous Analysis

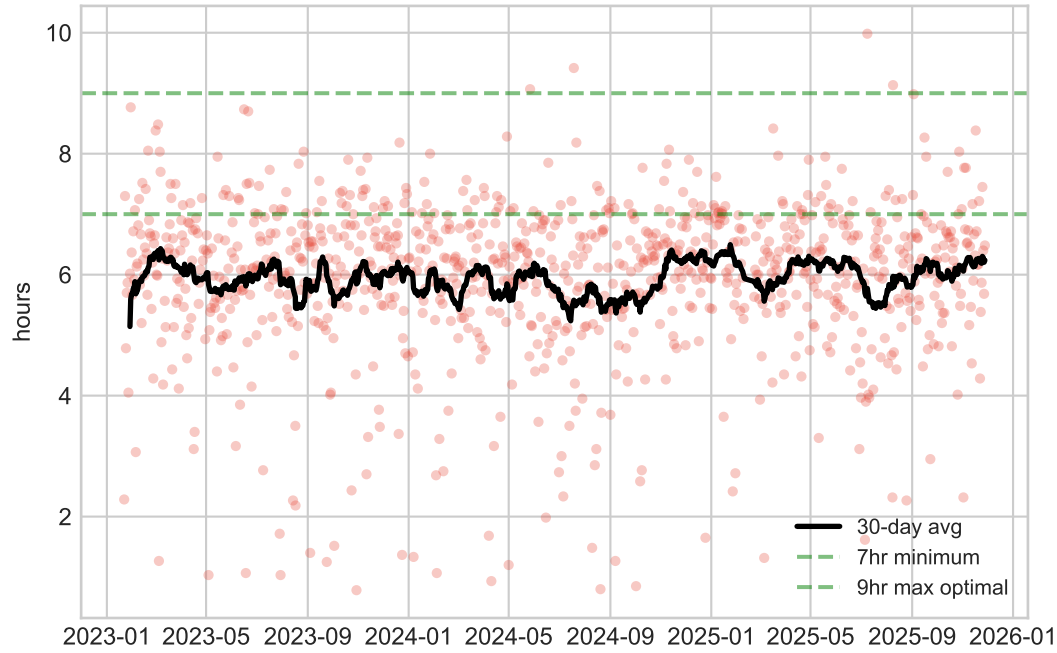


Cardiovascular Score: 80/100

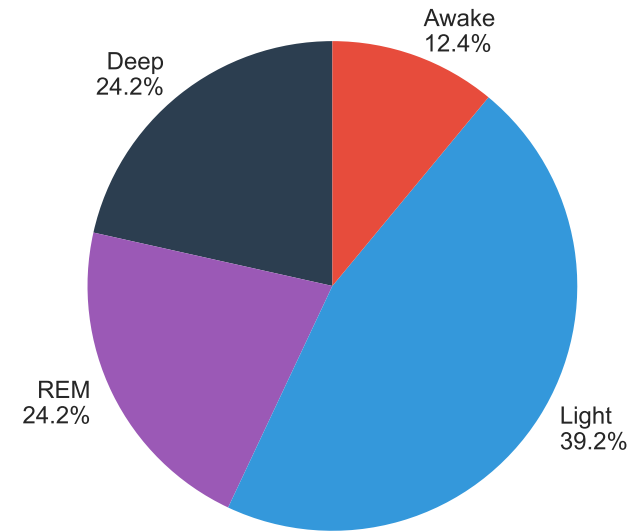


Sleep Health

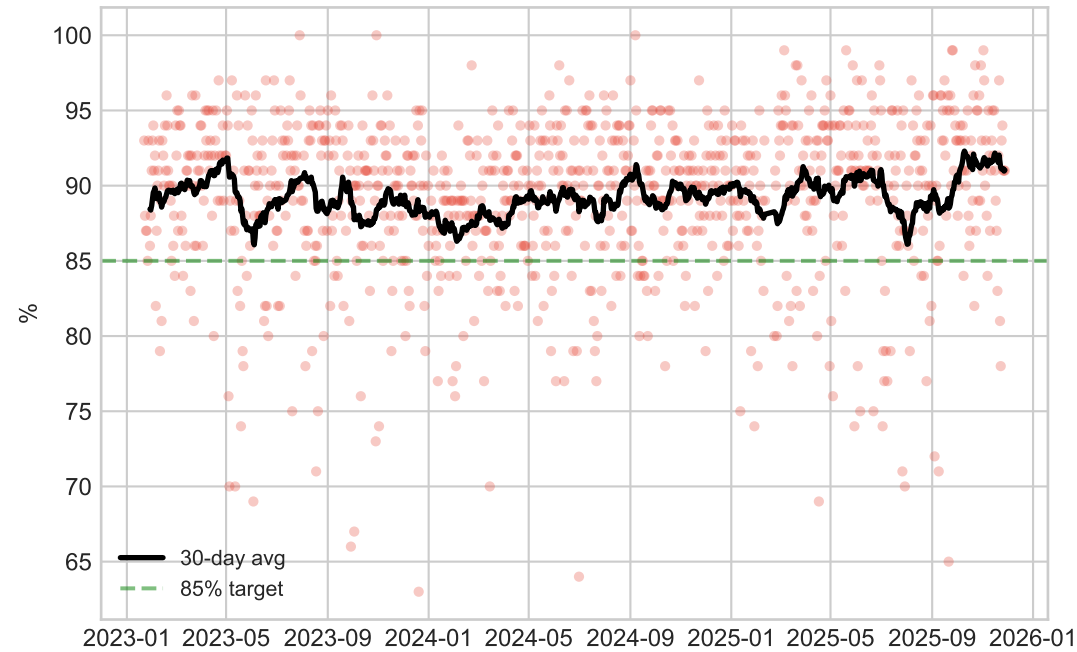
Sleep Duration - Short



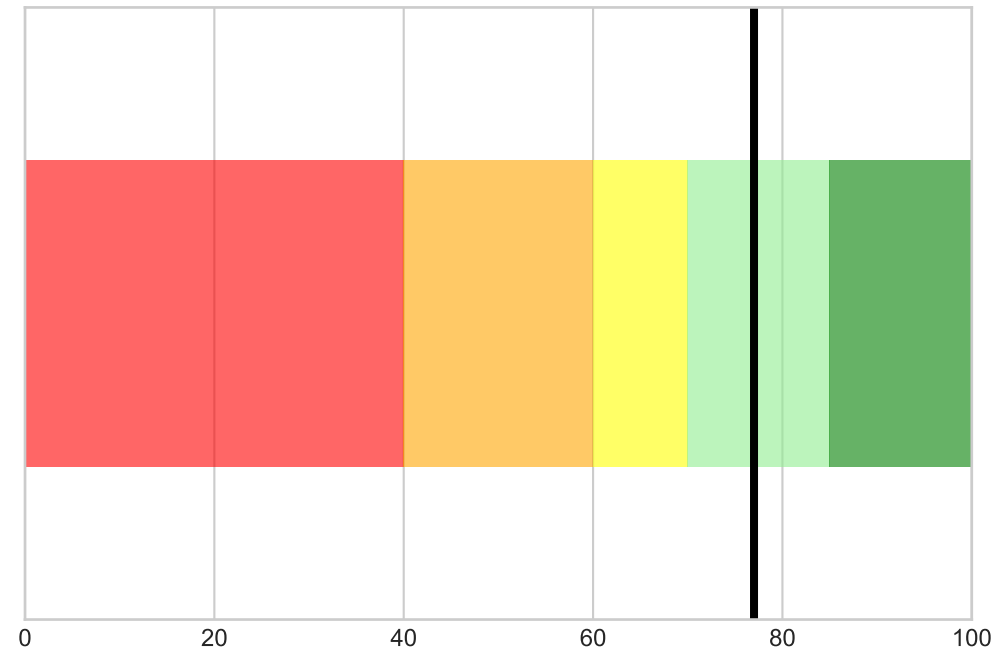
Sleep Architecture



Sleep Efficiency - Avg: 89.2%

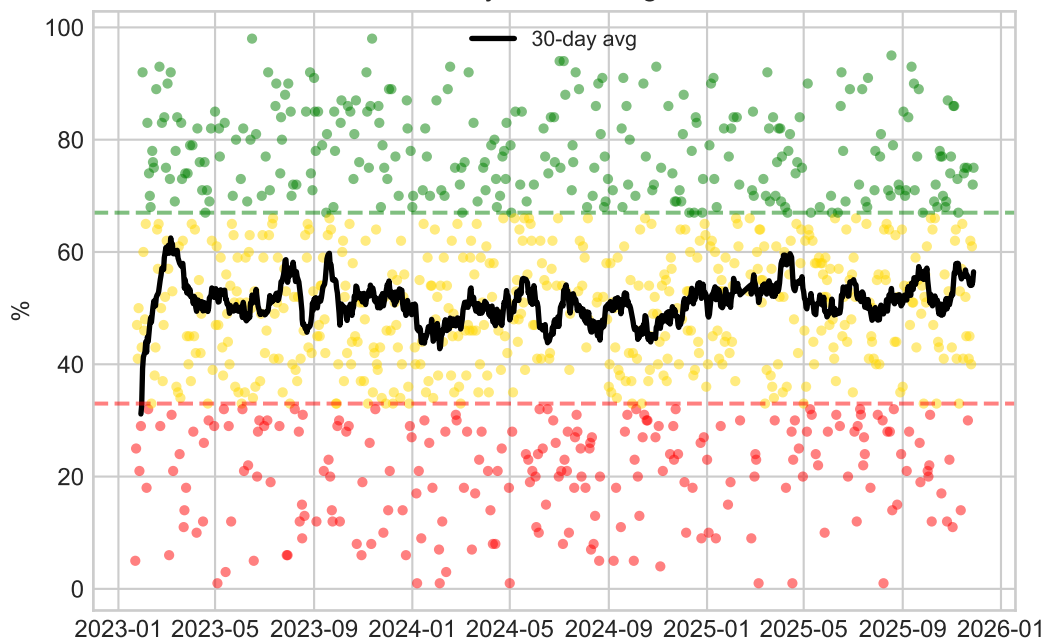


Sleep Score: 77/100

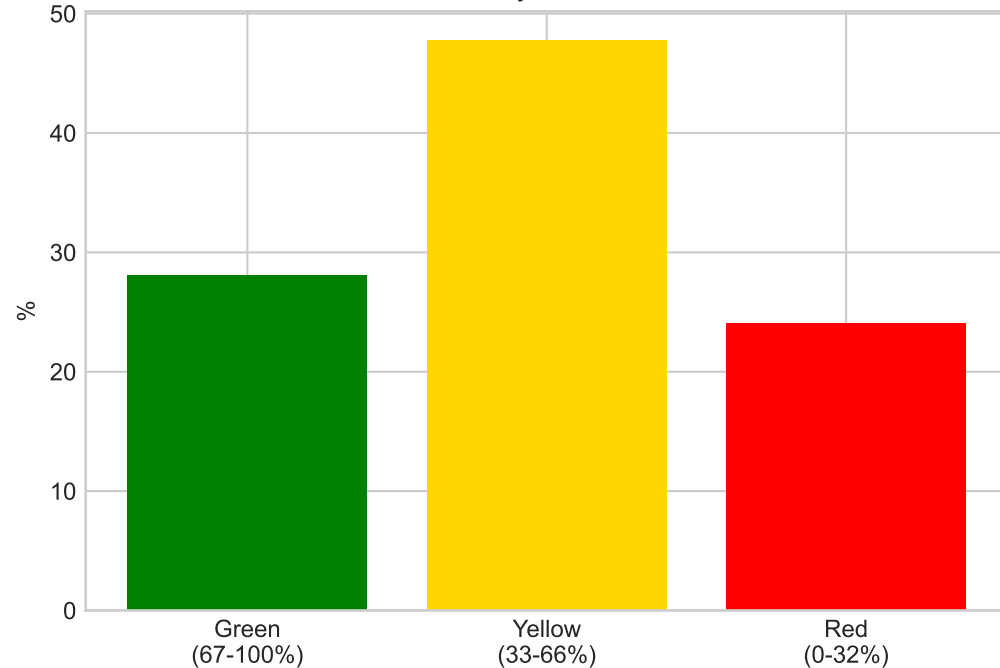


Recovery & Activity

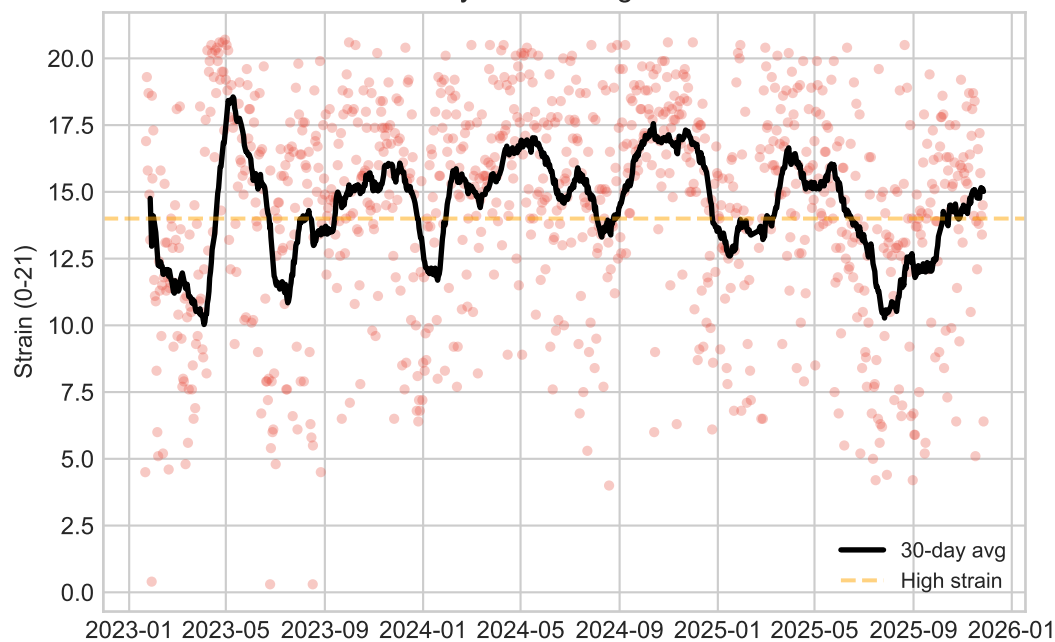
Recovery Score - Avg: 51%



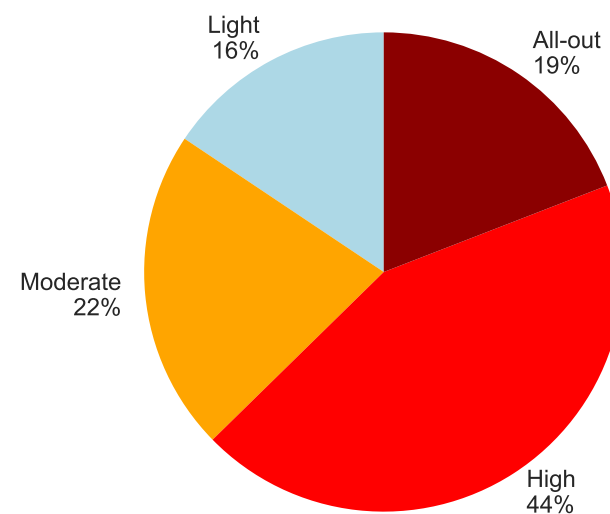
Recovery Distribution



Day Strain - Avg: 14.5

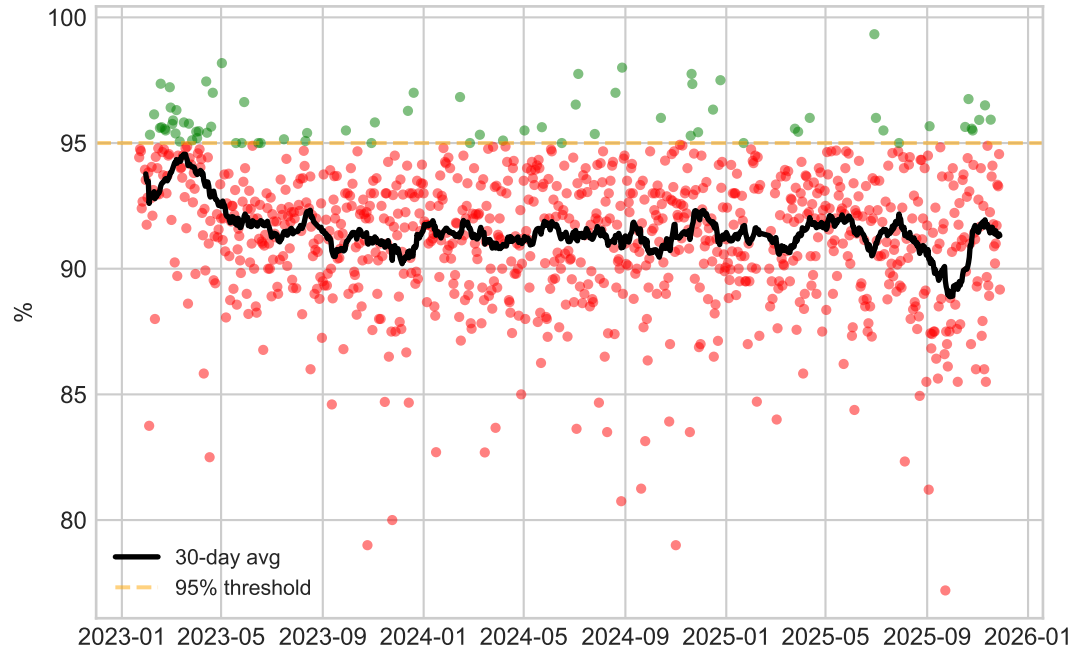


Activity Intensity Mix

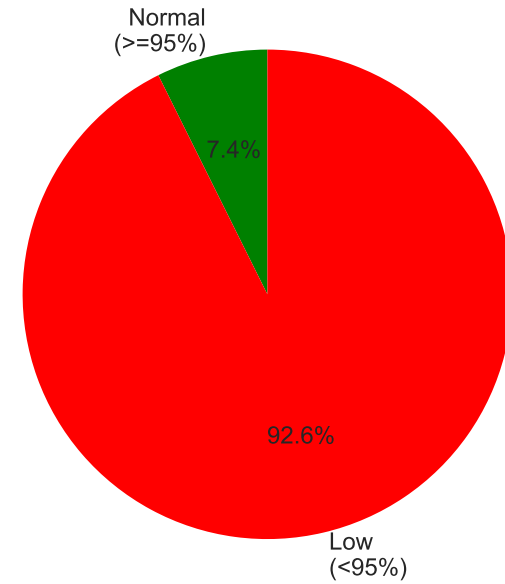


Respiratory Health

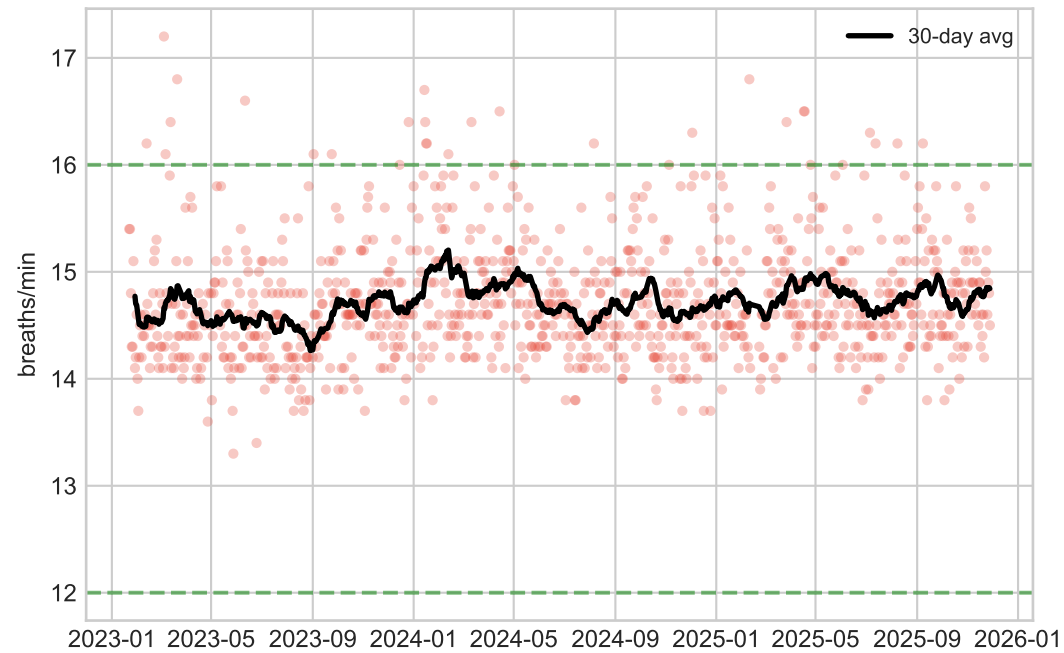
Blood Oxygen (SpO2) - Avg: 91.5%



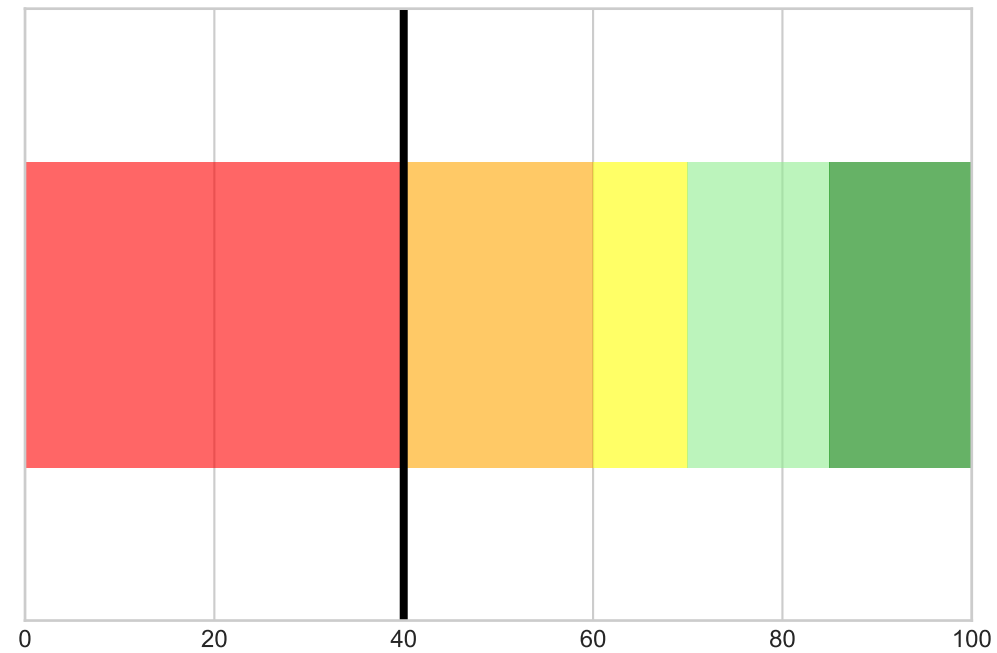
SpO2 Distribution (92.6% low)



Respiratory Rate - Avg: 14.7 rpm

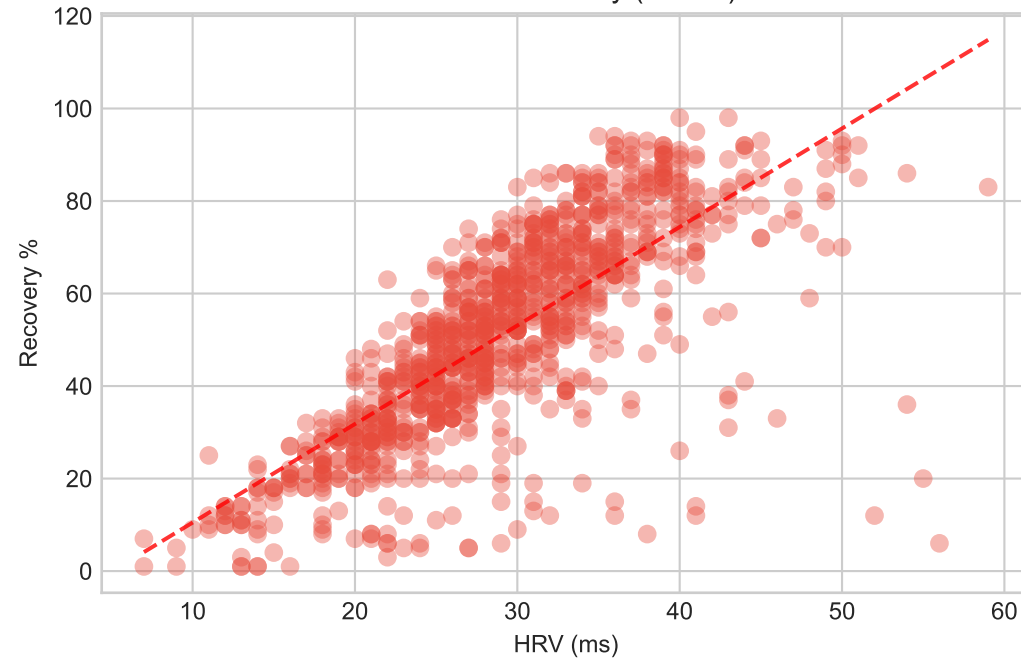


Respiratory Score: 40/100

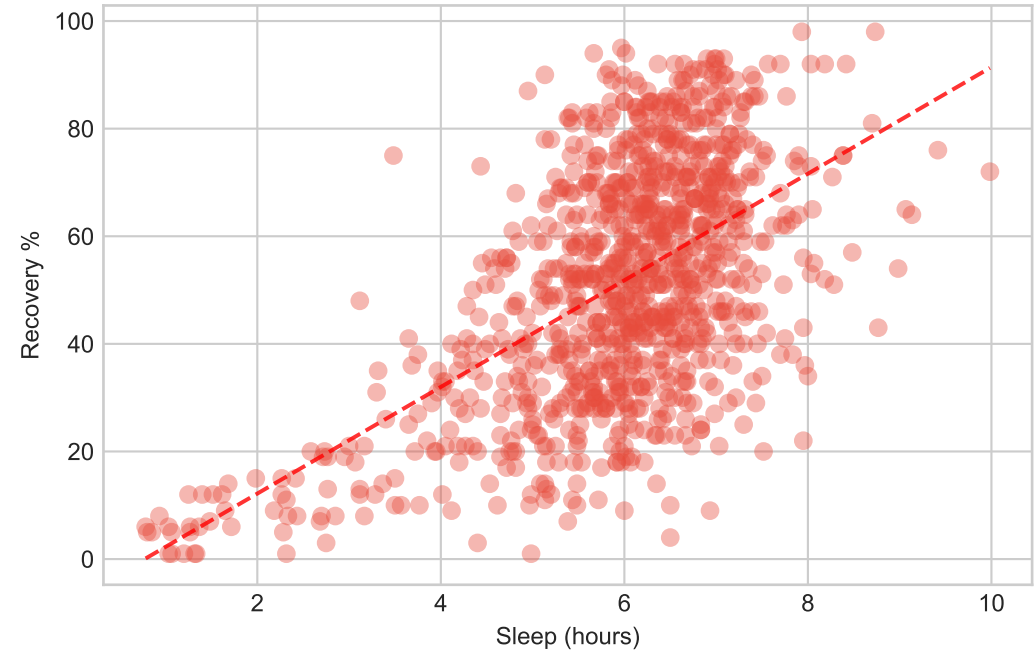


Correlation Analysis

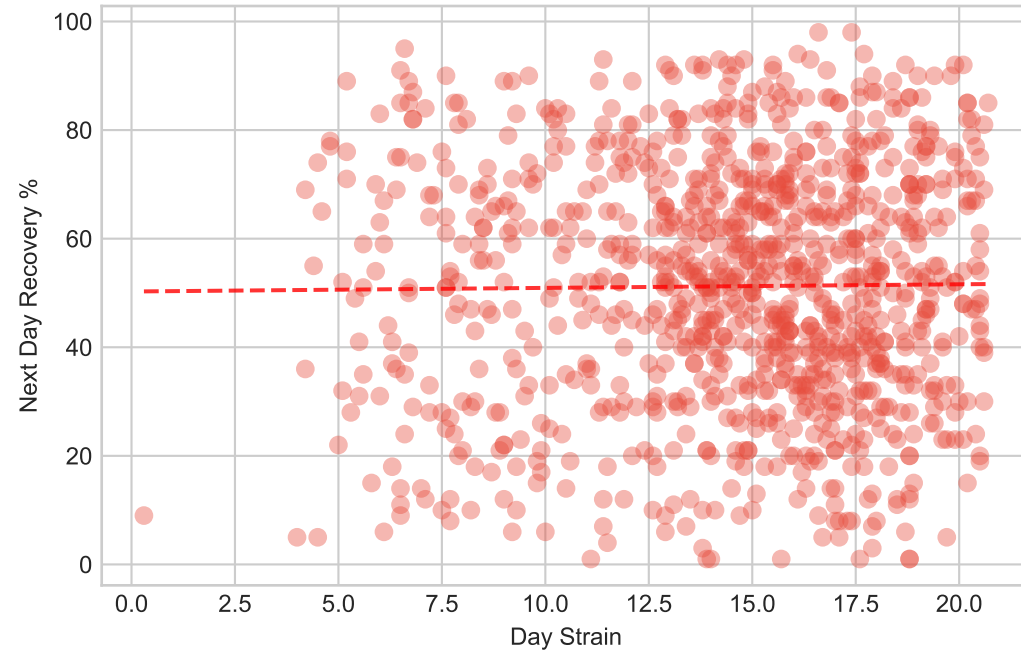
HRV vs Recovery ($r=0.76$)



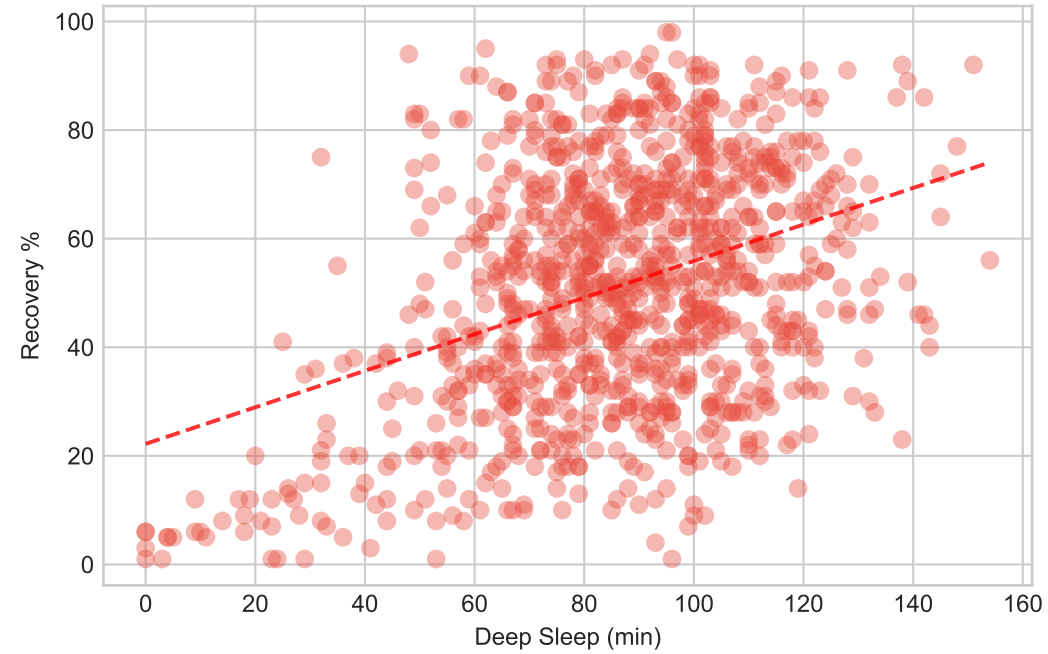
Sleep vs Recovery ($r=0.57$)



Strain vs Next Day Recovery ($r=0.01$)



Deep Sleep vs Recovery ($r=0.37$)



RECOMMENDATIONS & ALERTS

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ACTIVE ALERTS

[CRITICAL] Critical: 92.6% of nights with low SpO2
[WARNING] Severe sleep debt: 109.0 min average

RECOMMENDATIONS

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- [HIGH] Respiratory
Finding: 92.6% of nights with SpO2 < 95%
Action: Screen for sleep apnea. Consider sleep study (polysomnography). Review sleeping position and nasal breathing.
Note: Frequent desaturations during sleep warrant medical evaluation for OSA.
- [HIGH] Sleep
Finding: Insufficient sleep duration (5.9 hours avg)
Action: Aim for 7-9 hours. Establish consistent sleep/wake times. Create sleep-conducive environment (dark, cool, quiet).
Note: Chronic sleep deprivation increases risk of obesity, diabetes, and CVD.
- [HIGH] Sleep Debt
Finding: Chronic sleep debt (109.0 min average)
Action: Prioritize sleep extension. Consider 20-min naps if needed. Address root causes of sleep restriction.
Note: Sleep debt accumulates and cannot be fully repaid with catch-up nights.
- [HIGH] Recovery
Finding: High percentage of poor recovery days (24.1%)
Action: Review training load vs recovery balance. Consider deload weeks. Optimize nutrition, hydration, and stress management.
Note: Chronic under-recovery increases injury risk and may indicate overtraining.

METHODOLOGY & CITATIONS

- This analysis uses medical benchmarks from:
- American Heart Association (AHA) 2024: <https://www.heart.org/en/health-topics/high-blood-pressure/understanding-blood-pressure-readings>
 - Whoop & Clinical Studies Meta-Analysis 2024
 - WHO & CDC Pulse Oximetry Guidelines 2024
 - National Sleep Foundation 2024
 - Clinical Guidelines (Cleveland Clinic 2024)

For medical decisions, please consult with healthcare providers.