



# Adrenal Hormone Report



## Order: SAMPLE REPORT



Client #: 12345

Doctor: Sample Doctor

Doctor's Data, Inc.

3755 Illinois Ave.

St. Charles, IL 60174

Patient: Sample Patient

Age: 10

Sex: Male

## Sample Collection Date/Time

Date Collected 03/24/2022

AM30 03/24/2022 08:00

Noon 03/24/2022 12:00

Evening 03/24/2022 17:30

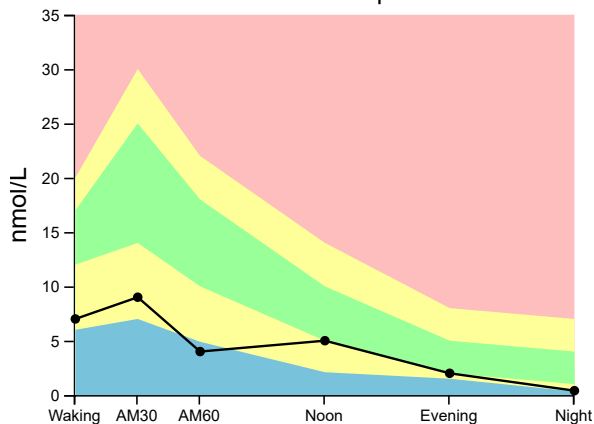
Night 03/24/2022 21:10

Date Received 03/25/2022

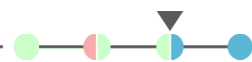
Date Reported 03/26/2022

| Analyte                  | Result | Unit   | L | WRI | H | Optimal Range | Reference Interval |
|--------------------------|--------|--------|---|-----|---|---------------|--------------------|
| Cortisol Waking          | 7.0    | nmol/L |   |     |   | 12 – 17       | 6.0 – 20           |
| Cortisol AM30            | 9.0    | nmol/L |   |     |   | 14.0 – 25.0   | 7.0 – 30.0         |
| Cortisol AM60            | 4.0    | nmol/L |   |     |   | 10.0 – 18.0   | 4.9 – 22.0         |
| CAR Rise (Calculated)    | 28.57  | %      |   |     |   |               | 35 – 60            |
| CAR Decline (Calculated) | -42.86 | %      |   |     |   |               | -33 – 0            |
| Cortisol Noon            | 5.0    | nmol/L |   |     |   | 5.0 – 10.0    | 2.1 – 14.0         |
| Cortisol Evening         | 2.0    | nmol/L |   |     |   | 2.0 – 5.0     | 1.5 – 8.0          |
| Cortisol Night           | 0.40   | nmol/L |   |     |   | 1.0 – 4.0     | 0.33 – 7.0         |

Cortisol Graph



Adrenal Phase: 2



## Hormone Comments

- The suboptimal diurnal cortisol pattern is consistent with evolving (Phase 2) HPA axis (adrenal gland) dysfunction.
- Cortisol Awakening Response (CAR) is the expected maximum rise in cortisol levels observed at 30 minutes (AM30) post awakening (approximately 35-60% above the waking value). This is followed by an expected decline sixty minutes after waking. The behavior of cortisol is a critical marker to understand the HPA axis' physiologic responsiveness and is a key indicator of HPA axis adaptability and reactivity.
- This patient's *CAR Rise* (the percent change from waking to AM30) does not demonstrate the expected degree of increase
- This patient's *CAR Decline* (the percent change from waking to AM60) dropped lower than expected.

## Notes:

The current samples are routinely held three weeks from receipt for additional testing.

RI= Reference Interval, L (blue)= Low (below RI), WRI (green)= Within RI (optimal), WRI (yellow)= Within RI (not optimal), H (red)= High (above RI)

Methodology: Enzyme Immunoassay