Stress Hormones

Much of the response to stress comes from the brain. It is responsible for stimulating the production of *cortisol*, the “stress hormone”, which impacts numerous other systems in the body to help it manage stressful situations and get the body back in balance.

Your genetics can impact this hormone system, helping or hindering your body’s response to stress. Knowing your predispositions, along with diet, lifestyle, and environmental factors, can help you make better decisions about your health regimen.

TYPICAL LEVELS

Cortisol

Likely typical cortisol levels

Cortisol

Cortisol is a hormone produced by the adrenal glands — small glands on top of the kidneys. It is most widely known as a **"stress hormone"** that initiates the body's "fight-or-flight" response. This helps the body react to stress by shifting into an "emergency mode" where non-critical functions are put on hold [R, R].

Genetics influence cortisol levels. Up to 60% of people's differences in blood cortisol levels may be due to genetics. **Please note that this report is looking at your genetics of salivary cortisol**, which is closely related to blood cortisol [R, R].

Cortisol levels vary naturally throughout the day. They are generally highest in the morning after waking and gradually decrease throughout the day [R, R].

Cortisol levels also rise naturally:

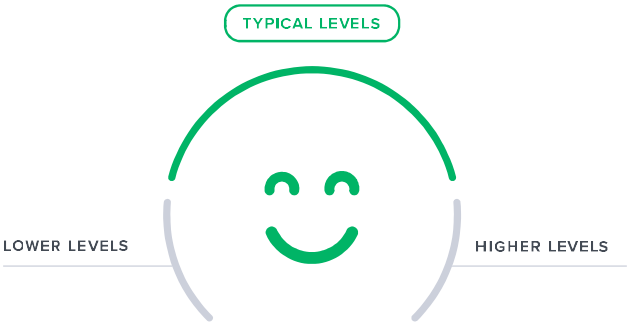
- After eating [R]
- After physical activity [R, R, R, R, R]
- In response to physical and psychological stress [R, R, R, R, R, R]

Very high or low cortisol levels may be indicative of chronic health conditions such as [R]:

- Hypercortisolism or high cortisol (e.g. Cushing syndrome)
- Hypocortisolism or low cortisol (e.g. Addison's disease)

Genetically higher cortisol may be causally associated with:

- Depression [R]
- Heart disease [R, R, R]
- Atrial fibrillation [R, R]
- Muscle mass (women) [R]
- Strength (women) [R]
- Cognitive decline [R]
- Alzheimer's (lower risk) [R]
- Parkinson's (lower risk) [R]
- Overweight [R]
- High blood pressure [R]



Likely typical cortisol levels based on 10 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
CNTNAP5	rs11899245	CT
DGKH	rs1170109	TG
SPC24	rs11557092	CT
/	rs6768297	AA
ZFP42	rs6849009	CC
PDE10A	rs2983496	GG
INHBA	rs10244501	CC
TFAP2C	rs6069930	GG
LDLR	rs5927	AA
TMPRSS9	rs7248779	TT

The number of "risk" variants in this table doesn't necessarily reflect your overall result.