



ESTROGEN

GENETIC DATA

GENE	GENO TYPE
ESR1(1)	AA
ESR1(2)	TT
CYP1A1	CA
CYP1B1	CC
CYP3A4	TT
COMT	GA
GSTP1	AG

DECREASED

RECEPTOR
RESPONSE

AVERAGE

METABOLISM

Estrogen is a beneficial hormone in both males and females. It has many benefits beyond involvement in reproduction.

In males and females, estrogen is essential to bone health. Some studies have suggested that it is as important as Vitamin D in maintaining or stimulating bone growth. Decreased estrogen levels have been correlated with decreased memory and cognitive function.

In females, it is important for maintaining the health of the sex organs, sex drive, and sexual function. In males, lack of estrogen, even with normal testosterone, there can be issues with sex drive and erectile dysfunction so balance is essential. In genetic predispositions, we can assess receptor response to estrogen and look at the breakdown of healthy versus unhealthy detoxification. By identifying the genetic variants involved in the breakdown of estrogens, supplementation interventions that modify, or shift, the metabolism to more optimal and healthy outcomes.

INTERPRETATION

RECOMMENDATIONS



TESTOSTERONE

GENETIC DATA

GENE	GENO TYPE
JMJD1C	CC
FAM9B	TC
SHBG(1)	CT
SHBG(4)	TT
SHBG(3)	GG
PLCH2	CC
REEP3	CC
LHCGR	TC
APOe(1)	TT
APOe(2)	CC
CYP19A1(1)	CC
CYP19A1(2)	GA
CYP17A1	AA
SRD5A1	GA
SRD5A2	GC
HDAC4	CA
HDAC9	TG
TARDBP	AA
FOXA2	TC
MAOA	TT
MAOB	CC

LOWER
SHBG LEVELS

DECREASED
LH LEVELS

Testosterone is traditionally classified as the primary sex hormone; the reality is that it is the primary sex hormone in both males and females. It is a hormone of vitality and maintaining healthy balanced levels is essential to optimized wellbeing.

Potential benefits:

- Improved wellbeing
- Improved confidence and drive
- Improved sex drive
- Improved bone density
- Improved strength & muscle
- Decreased cognitive decline
- Decreased body fat
- Improved mood

To fully understand testosterone availability and benefits in the body, it is important to look at several factors that contribute to the outcome. These include; the amount of binding from SHBG (sex hormone binding globulin), response to LH (luteinizing hormone), and conversion to DHT (dihydrotestosterone), and conversion to estrogen to name a few.

AVERAGE **INCREASED**
DHT LEVELS ESTROGEN CONVERSION

INTERPRETATION

RECOMMENDATIONS



THYROID

GENETIC DATA

GENE	GENO TYPE
PDE8B(1)	GG
PDE8B(2)	TT
PDE8B(3)	TT
PDE8B(4)	AA
THRA	CC
DIO1(1)	CT
DIO1(2)	CA
DIO2(1)	CC
DIO2(2)	.
SLC01B1	TT
SLC16A2	CC

LOW

TSH PROPENSITY

AVERAGE

D1 ACTIVITY

LOW

D2 ACTIVITY

The thyroid gland is one of the most important endocrine organs in the body. It is responsible for production of hormones that control metabolism. The glands involvement in metabolism affects a range of body functions;

- Body weight
- Cognitive function
- Body temperature
- Menstrual cycles
- Muscle performance
- Cholesterol

The production and utilization if thyroid hormone is highly complex and optimizing outcomes requires a deep knowledge of the interactions of lifestyle, environment, genetics, and epigenetics. Understanding the genetic polymorphisms involved can lead to much more precise interventions that can lead to optimizing the function to achieve greater potential. Genetic propensities can be used to better understand proper function of the gland, ranging from receptor sensitivity, conversions to active forms, brain responses, and supplements to improve function.

INTERPRETATION



RECOMMENDATIONS

