

Hormones tables

Hormonal tables

[https://en.wikipedia.org/wiki/List\\_of\\_human\\_hormones](https://en.wikipedia.org/wiki/List_of_human_hormones)

Name	Abbreviation	Tissue	Cells/Amino acid	Receptor	Target Tissue	Effect
Adrenaline, also known as epinephrine	EPI	adrenal gland	Adrenal medulla / Tyrosine	adrenergic receptor	nearly all tissues	blood pressure, glycogenolysis, lipolysis, etc.
Melatonin	MT	pineal gland	Pinealocyte / Tryptophan	melatonin receptor	CNS and peripheral tissue	circadian rhythm
Noradrenaline, also known as norepinephrine	NE	adrenal gland	Adrenal medulla / Tyrosine	noradrenergic receptor	nearly all tissues	blood pressure, glycogenolysis, lipolysis, etc.
Triiodothyronine	T <sub>3</sub>	peripheral tissue of thyroid gland	Thyroid follicular cell / Tyrosine	thyroid hormone receptor	nearly every cell in the body	increased metabolism
Thyroxine	T <sub>4</sub>	thyroid gland	Thyroid follicular cell / Tyrosine	thyroid hormone receptor	same as above	similar effect as T <sub>3</sub> but much weaker; converted to T <sub>3</sub> in target cells
Dopamine	DA	substantia nigra (mainly)	Phenylalanine / Tyrosine	D1 and D2	system-wide	regulation of cellular cAMP levels, prolactin antagonist

Eicosanoid for more information about this class of paracrine signalling chemicals and hormones.

Name	Abbreviation	Tissue	Cells	Receptor	Target Tissue	Effect
Prostaglandins	PG	seminal vesicle		prostaglandin receptor		vasodilation
Leukotrienes	LT	Blood	white blood cells	G protein-coupled receptors		increase vascular permeability
Prostacyclin	PGI <sub>2</sub>	endothelium		prostacyclin receptor		vasodilation, platelet activation inhibitor
Thromboxane	TXA <sub>2</sub>	Blood	platelets	thromboxane receptor		vasoconstriction, Platelet Aggregation

# Peptide

<a href="#">Vasoactive intestinal peptide</a>	VIP	<a href="#">gut, pancreas</a> , and <a href="#">suprachiasmatic nuclei</a> of the <a href="#">hypothalamus</a>			stimulates <a href="#">contractility</a> in the heart, causes <a href="#">vasodilation</a> , increases <a href="#">glycogenolysis</a> , lowers arterial <a href="#">blood pressure</a> and relaxes the smooth muscle of <a href="#">trachea</a> , stomach and <a href="#">gall bladder</a>
<a href="#">Uroguanylin</a>	UGN	renal tissues			regulates <a href="#">electrolyte</a> and <a href="#">water</a> transport in <a href="#">renal epithelia</a> .
<a href="#">Thyrotropin-releasing hormone</a>	TRH	<a href="#">hypothalamus</a>	<a href="#">Parvocellular neurosecretory neurons</a>	<a href="#">anterior pituitary</a>	Release <a href="#">thyroid-stimulating hormone</a> (primarily) Stimulate <a href="#">prolactin</a> release
<a href="#">Thyroid-stimulating hormone</a> (or thyrotropin)	TSH	<a href="#">anterior pituitary</a>	<a href="#">thyrotropes</a>	<a href="#">thyroid gland</a>	secrete <a href="#">thyroxine</a> (T <sub>4</sub> ) and <a href="#">triiodothyronine</a> (T <sub>3</sub> )
<a href="#">Thrombopoietin</a>	TPO	<a href="#">liver, kidney, striated muscle</a>	<a href="#">Myocytes</a>	<a href="#">megakaryocytes</a>	produce <a href="#">platelets</a> <sup>[6]</sup>
<a href="#">Somatostatin (or growth hormone–inhibiting hormone or growth hormone release–inhibiting hormone or somatotropin release–inhibiting factor or somatotropin release–inhibiting hormone)</a>	GHIH or GHRH or SRIF or SRIH	<a href="#">hypothalamus, islets of Langerhans, gastrointestinal system</a>	<a href="#">delta cells</a> in islets Neuroendocrine cells of the <a href="#">Periventricular nucleus</a> in hypothalamus		Inhibit release of <a href="#">GH</a> and <a href="#">TRH</a> from <a href="#">anterior pituitary</a> Suppress release of <a href="#">gastrin</a> , <a href="#">cholecystokinin</a> (CCK), <a href="#">secretin</a> , <a href="#">motilin</a> , <a href="#">vasoactive intestinal peptide</a> (VIP), <a href="#">gastric inhibitory polypeptide</a> (GIP), <a href="#">enteroglucagon</a> in <a href="#">gastrointestinal system</a> Lowers rate of gastric emptying Reduces <a href="#">smooth muscle</a> contractions and blood flow within the intestine <sup>[4]</sup> Inhibit release of <a href="#">insulin</a> from <a href="#">beta cells</a> <sup>[5]</sup> Inhibit release of <a href="#">glucagon</a> from <a href="#">alpha cells</a> <sup>[5]</sup> Suppress the exocrine secretory action of <a href="#">pancreas</a> .
<a href="#">Secretin</a>	SCT	<a href="#">duodenum</a>	<a href="#">S cell</a>		Secretion of <a href="#">bicarbonate</a> from <a href="#">liver, pancreas</a> and duodenal <a href="#">Brunner's glands</a> Enhances effects of <a href="#">cholecystokinin</a> Stops production of gastric juice
<a href="#">Renin</a>		<a href="#">Kidney</a>	<a href="#">Juxtaglomerular cells</a>		Activates the <a href="#">renin–angiotensin system</a> by producing <a href="#">angiotensin I</a> of <a href="#">angiotensinogen</a>
<a href="#">Relaxin</a>	RLN	<a href="#">Corpus luteum, Uterus, placenta, and Mammary gland</a>	<a href="#">Decidual cells</a>		Unclear in humans
<a href="#">Prolactin-releasing hormone</a>	PRLH	<a href="#">hypothalamus</a>			Release <a href="#">prolactin</a> from <a href="#">anterior pituitary</a>

<a href="#">Prolactin</a>	PRL	<a href="#">anterior pituitary, uterus</a>	<a href="#">lactotrophs</a> of anterior pituitary <a href="#">Decidual cells</a> of uterus	milk production in <a href="#">mammary glands</a> <a href="#">sexual gratification</a> after <a href="#">sexual acts</a>
<a href="#">Pituitary adenylate cyclase-activating peptide</a>	PACAP	multiple		Stimulates <a href="#">enterochromaffin-like cells</a>
<a href="#">Parathyroid hormone</a>	PTH	<a href="#">parathyroid gland</a>	<a href="#">parathyroid chief cell</a>	<ul style="list-style-type: none"> <li>•increase blood <math>Ca^{2+}</math>:indirectly stimulate <a href="#">osteoclasts</a></li> <li>•<math>Ca^{2+}</math> reabsorption in <a href="#">kidney</a></li> <li>•activate <a href="#">vitamin D</a></li> </ul> (Slightly) decrease blood <a href="#">phosphate</a> : <ul style="list-style-type: none"> <li>•(decreased reuptake in <a href="#">kidney</a> but increased uptake from bones</li> <li>•activate <a href="#">vitamin D</a>)</li> </ul>
<a href="#">Pancreatic polypeptide</a>		<a href="#">Pancreas</a>	<a href="#">PP cells</a>	Self-regulation of pancreatic secretions (endocrine and exocrine). It also affects hepatic glycogen levels and gastrointestinal secretions.
<a href="#">Oxytocin</a>	OXT	<a href="#">posterior pituitary</a>	<a href="#">Magnocellular neurosecretory cells</a>	release breast milkStimulates contraction of <a href="#">cervix</a> and <a href="#">vagina</a> . Involved in <a href="#">orgasm</a> , trust between people, <sup>[2]</sup> and <a href="#">circadian homeostasis</a> (body temperature, activity level, wakefulness). <sup>[3]</sup>
<a href="#">Osteocalcin</a>	OCN	<a href="#">Skeleton</a>	<a href="#">Osteoblasts</a>	Favors muscle function, memory formation, testosterone synthesis and energy expenditure <sup>[1]</sup>
<a href="#">Orexin</a>		<a href="#">hypothalamus</a>		wakefulness and increased energy expenditure, increased appetite
<a href="#">Motilin</a>	MLN	<a href="#">Small intestine</a>		stimulates gastric activity
<a href="#">Melanocyte stimulating hormone</a>	MSH or $\alpha$ -MSH	<a href="#">anterior pituitary/pars intermedia</a>	<a href="#">Melanotroph</a>	<a href="#">melanogenesis</a> by <a href="#">melanocytes</a> in <a href="#">skin</a> and <a href="#">hair</a>
<a href="#">Luteinizing hormone</a>	LH	<a href="#">anterior pituitary</a>	<a href="#">gonadotropes</a>	In female: <a href="#">ovulation</a> In male: stimulates <a href="#">Leydig cell</a> production of <a href="#">testosterone</a>
<a href="#">Lipotropin</a>	LPH	<a href="#">anterior pituitary</a>	<a href="#">Corticotropes</a>	<a href="#">lipolysis</a> and <a href="#">steroidogenesis</a> , stimulates <a href="#">melanocytes</a> to produce <a href="#">melanin</a>
<a href="#">Leptin</a>	LEP	<a href="#">adipose tissue</a>		decrease of <a href="#">appetite</a> and increase of <a href="#">metabolism</a> .
<a href="#">Insulin-like growth factor</a> (or somatomedin)	IGF	<a href="#">liver</a>	<a href="#">Hepatocytes</a>	insulin-like effectsregulate <a href="#">cell growth</a> and development

<a href="#">Insulin</a>	INS	<a href="#">pancreas</a>	<a href="#">beta cells</a>	Intake of <a href="#">glucose</a> , <a href="#">glycogenesis</a> and <a href="#">glycolysis</a> in <a href="#">liver</a> and <a href="#">muscle</a> from blood intake of <a href="#">lipids</a> and synthesis of <a href="#">triglycerides</a> in <a href="#">adipocytes</a> Other <a href="#">anabolic</a> effects
<a href="#">Inhibin</a>		<a href="#">testes</a> , <a href="#">ovary</a> , <a href="#">fetus</a>	<a href="#">Sertoli cells</a> of testes <a href="#">granulosa cells</a> of ovary <a href="#">trophoblasts</a> in fetus	Inhibit production of <a href="#">FSH</a>
<a href="#">Human placental lactogen</a>	HPL	<a href="#">placenta</a>		increase production of <a href="#">insulin</a> and <a href="#">IGF-1</a> increase <a href="#">insulin resistance</a> and <a href="#">carbohydrate</a> intolerance

<a href="#">Human chorionic gonadotropin</a>	hCG	<a href="#">placenta</a>	<a href="#">syncytiotrophoblast</a> cells	promote maintenance of <a href="#">corpus luteum</a> during beginning of <a href="#">pregnancy</a> Inhibit <a href="#">immune</a> response, towards the <a href="#">human embryo</a> .
<a href="#">Hepcidin</a>	HAMP	<a href="#">liver</a>		inhibits iron export from cells
<a href="#">Guanylin</a>	GN	<a href="#">gut</a>		regulates <a href="#">electrolyte</a> and <a href="#">water</a> transport in <a href="#">intestinal epithelia</a> .
<a href="#">Growth hormone-releasing hormone</a>	GHRH	<a href="#">hypothalamus</a>		Release <a href="#">GH</a> from <a href="#">anterior pituitary</a>
<a href="#">Growth hormone</a>	GH or hGH	<a href="#">anterior pituitary</a>	<a href="#">somatotropes</a>	stimulates <a href="#">growth</a> and <a href="#">cell</a> reproduction Release <a href="#">Insulin-like growth factor 1</a> from <a href="#">liver</a>
<a href="#">Gonadotropin-releasing hormone</a>	GnRH	<a href="#">hypothalamus</a>		Release of <a href="#">FSH</a> and <a href="#">LH</a> from <a href="#">anterior pituitary</a> .
<a href="#">Glucagon-like peptide-1</a>	GLP1	<a href="#">ileum</a>	<a href="#">L cells</a>	Stimulates the <a href="#">adenylyl cyclase</a> pathway, resulting in increased synthesis and release of <a href="#">insulin</a>
<a href="#">Glucagon</a>	GCG	<a href="#">pancreas</a>	<a href="#">alpha cells</a>	<a href="#">glycogenolysis</a> and <a href="#">gluconeogenesis</a> in <a href="#">liver</a> increases blood glucose level
<a href="#">Ghrelin</a>		<a href="#">stomach</a>	<a href="#">P/D1 cell</a>	Stimulate <a href="#">appetite</a> , secretion of <a href="#">growth hormone</a> from <a href="#">anterior pituitary gland</a>
<a href="#">Gastrin</a>	GAS	<a href="#">stomach</a> , <a href="#">duodenum</a>	<a href="#">G cell</a>	Secretion of <a href="#">gastric acid</a> by <a href="#">parietal cells</a>
<a href="#">Gastric inhibitory polypeptide</a>	GIP	mucosa of the <a href="#">duodenum</a> and the <a href="#">jejunum</a>	<a href="#">K cell</a>	Induces <a href="#">insulin</a> secretion

<a href="#">Galanin</a>	GAL	central nervous system and gastrointestinal tract			modulation and inhibition of <a href="#">action potentials</a> in <a href="#">neurons</a>
<a href="#">Gastric inhibitory polypeptide</a>	GIP	mucosa of the <a href="#">duodenum</a> and the <a href="#">jejunum</a>	<a href="#">K cell</a>		Induces <a href="#">insulin</a> secretion
<a href="#">Gastrin</a>	GAS	<a href="#">stomach</a> , <a href="#">duodenum</a>	<a href="#">G cell</a>		Secretion of <a href="#">gastric acid</a> by <a href="#">parietal cells</a>
<a href="#">Ghrelin</a>		<a href="#">stomach</a>	<a href="#">P/D1 cell</a>		Stimulate <a href="#">appetite</a> , secretion of <a href="#">growth hormone</a> from <a href="#">anterior pituitary gland</a>
<a href="#">Glucagon</a>	GCG	<a href="#">pancreas</a>	<a href="#">alpha cells</a>		<a href="#">glycogenolysis</a> and <a href="#">gluconeogenesis</a> in <a href="#">liver</a> increases blood glucose level
<a href="#">Glucagon-like peptide-1</a>	GLP1	<a href="#">ileum</a>	<a href="#">L cells</a>	<a href="#">pancreatic beta cells</a>	Stimulates the <a href="#">adenyl cyclase</a> pathway, resulting in increased synthesis and release of <a href="#">insulin</a>
<a href="#">Gonadotropin-releasing hormone</a>	GnRH	<a href="#">hypothalamus</a>			Release of <a href="#">FSH</a> and <a href="#">LH</a> from <a href="#">anterior pituitary</a> .
<a href="#">Growth hormone-releasing hormone</a>	GHRH	<a href="#">hypothalamus</a>			Release <a href="#">GH</a> from <a href="#">anterior pituitary</a>
<a href="#">Hepcidin</a>	HAMP	<a href="#">liver</a>			inhibits iron export from cells
<a href="#">Human chorionic gonadotropin</a>	hCG	<a href="#">placenta</a>	<a href="#">syncytiotrophoblast cells</a>		promote maintenance of <a href="#">corpus luteum</a> during beginning of <a href="#">pregnancy</a> Inhibit <a href="#">immune</a> response, towards the <a href="#">human embryo</a> .
<a href="#">Human placental lactogen</a>	HPL	<a href="#">placenta</a>			increase production of <a href="#">insulin</a> and <a href="#">IGF-1</a> increase <a href="#">insulin resistance</a> and <a href="#">carbohydrate</a> intolerance
<a href="#">Growth hormone</a>	GH or hGH	<a href="#">anterior pituitary</a>	<a href="#">somatotropes</a>		stimulates <a href="#">growth</a> and <a href="#">cell</a> reproduction Release <a href="#">Insulin-like growth factor 1</a> from <a href="#">liver</a>
<a href="#">Inhibin</a>		<a href="#">testes</a> , <a href="#">ovary</a> , <a href="#">fetus</a>	<a href="#">Sertoli cells</a> of testes <a href="#">granulosa cells</a> of ovary <a href="#">trophoblasts</a> in fetus		Inhibit production of <a href="#">FSH</a>
<a href="#">Insulin</a>	INS	<a href="#">pancreas</a>	<a href="#">beta cells</a>		Intake of <a href="#">glucose</a> , <a href="#">glycogenesis</a> and <a href="#">glycolysis</a> in <a href="#">liver</a> and <a href="#">muscle</a> from blood intake of <a href="#">lipids</a> and synthesis of <a href="#">triglycerides</a> in <a href="#">adipocytes</a> Other <a href="#">anabolic</a> effects
<a href="#">Insulin-like growth factor</a> (or somatomedin)	IGF	<a href="#">liver</a>	<a href="#">Hepatocytes</a>		insulin-like effects regulate <a href="#">cell growth</a> and development



<a href="#">Leptin</a>	LEP	<a href="#">adipose tissue</a>			decrease of <a href="#">appetite</a> and increase of <a href="#">metabolism</a> .
<a href="#">Lipotropin</a>	LPH	<a href="#">anterior pituitary</a>	<a href="#">Corticotropes</a>		<a href="#">lipolysis</a> and <a href="#">steroidogenesis</a> , stimulates <a href="#">melanocytes</a> to produce <a href="#">melanin</a>
<a href="#">Luteinizing hormone</a>	LH	<a href="#">anterior pituitary</a>	<a href="#">gonadotropes</a>		In female: <a href="#">ovulation</a> In male: stimulates <a href="#">Leydig cell</a> production of <a href="#">testosterone</a>
<a href="#">Melanocyte stimulating hormone</a>	MSH or $\alpha$ -MSH	<a href="#">anterior pituitary/pars intermedia</a>	<a href="#">Melanotroph</a>		<a href="#">melanogenesis</a> by <a href="#">melanocytes</a> in <a href="#">skin</a> and <a href="#">hair</a>
<a href="#">Motilin</a>	MLN	<a href="#">Small intestine</a>			stimulates gastric activity
<a href="#">Orexin</a>		<a href="#">hypothalamus</a>			wakefulness and increased energy expenditure, increased appetite
<a href="#">Osteocalcin</a>	OCN	<a href="#">Skeleton</a>	<a href="#">Osteoblasts</a>	<a href="#">Muscle Brain Pancreas Testes</a>	Favors muscle function, memory formation, testosterone synthesis and energy expenditure
<a href="#">Oxytocin</a>	OXT	<a href="#">posterior pituitary</a>	<a href="#">Magnocellular neurosecretory cells</a>		release breast milkStimulates contraction of <a href="#">cervix</a> and <a href="#">vagina</a> . Involved in <a href="#">orgasm</a> , trust between people, and <a href="#">circadian homeostasis</a> (body temperature, activity level, wakefulness).
<a href="#">Pancreatic polypeptide</a>		<a href="#">Pancreas</a>	<a href="#">PP cells</a>		Self-regulation of pancreatic secretions (endocrine and exocrine). It also affects hepatic glycogen levels and gastrointestinal secretions.
<a href="#">Parathyroid hormone</a>	PTH	<a href="#">parathyroid gland</a>	<a href="#">parathyroid chief cell</a>		<ul style="list-style-type: none"> <li>•increase blood <a href="#">Ca<sup>2+</sup></a>;indirectly stimulate <a href="#">osteoclasts</a></li> <li>•Ca<sup>2+</sup> reabsorption in <a href="#">kidney</a></li> <li>•activate <a href="#">vitamin D</a> (Slightly) decrease blood <a href="#">phosphate</a>:</li> <li>•(decreased reuptake in <a href="#">kidney</a> but increased uptake from bones</li> <li>•activate <a href="#">vitamin D</a>)</li> </ul>
<a href="#">Pituitary adenylate cyclase-activating peptide</a>	PACAP	multiple			Stimulates <a href="#">enterochromaffin-like cells</a>

<a href="#">Prolactin</a>	PRL	<a href="#">anterior pituitary, uterus</a>	<a href="#">lactotrophs</a> of anterior pituitary <a href="#">Decidual cells</a> of uterus	milk production in <a href="#">mammary glands</a> <a href="#">sexual gratification</a> after <a href="#">sexual acts</a>
<a href="#">Prolactin-releasing hormone</a>	PRLH	<a href="#">hypothalamus</a>		Release <a href="#">prolactin</a> from <a href="#">anterior pituitary</a>
<a href="#">Relaxin</a>	RLN	<a href="#">Corpus luteum, Uterus, placenta, and Mammary gland</a>	<a href="#">Decidual cells</a>	Unclear in humans

<a href="#">Renin</a>		<a href="#">Kidney</a>	<a href="#">Juxtaglomerular cells</a>		Activates the <a href="#">renin-angiotensin system</a> by producing <a href="#">angiotensin I</a> of <a href="#">angiotensinogen</a>
<a href="#">Secretin</a>	SCT	<a href="#">duodenum</a>	<a href="#">S cell</a>		Secretion of <a href="#">bicarbonate</a> from <a href="#">liver</a> , <a href="#">pancreas</a> and duodenal <a href="#">Brunner's glands</a> Enhances effects of <a href="#">cholecystokinin</a> Stops production of gastric juice
<a href="#">Somatostatin (or growth hormone-inhibiting hormone or growth hormone release-inhibiting hormone or somatotropin release-inhibiting factor or somatotropin release-inhibiting hormone)</a>	GHIH or GHRIH or SRIF or SRIH	<a href="#">hypothalamus, islets of Langerhans, gastrointestinal system</a>	<a href="#">delta cells</a> in islets Neuroendocrine cells of the <a href="#">Periventricular nucleus</a> in hypothalamus		Inhibit release of <a href="#">GH</a> and <a href="#">TRH</a> from <a href="#">anterior pituitary</a> Suppress release of <a href="#">gastrin</a> , <a href="#">cholecystokinin</a> (CCK), <a href="#">secretin</a> , <a href="#">motilin</a> , <a href="#">vasoactive intestinal peptide</a> (VIP), <a href="#">gastric inhibitory polypeptide</a> (GIP), <a href="#">enteroglucagon</a> in <a href="#">gastrointestinal system</a> Lowers rate of gastric emptying Reduces <a href="#">smooth muscle</a> contractions and blood flow within the intestine <sup>[4]</sup> Inhibit release of <a href="#">insulin</a> from <a href="#">beta cells</a> Inhibit release of <a href="#">glucagon</a> from <a href="#">alpha cells</a> Suppress the exocrine secretory action of <a href="#">pancreas</a> .
<a href="#">Thrombopoietin</a>	TPO	<a href="#">liver, kidney, striated muscle</a>	<a href="#">Myocytes</a>	<a href="#">megakaryocytes</a>	produce <a href="#">platelets</a> <sup>[6]</sup>
<a href="#">Thyroid-stimulating hormone</a> (or thyrotropin)	TSH	<a href="#">anterior pituitary</a>	<a href="#">thyrotropes</a>	<a href="#">thyroid gland</a>	secrete <a href="#">thyroxine</a> (T <sub>4</sub> ) and <a href="#">triiodothyronine</a> (T <sub>3</sub> )
<a href="#">Thyrotropin-releasing hormone</a>	TRH	<a href="#">hypothalamus</a>	<a href="#">Parvocellular neurosecretory neurons</a>	<a href="#">anterior pituitary</a>	Release <a href="#">thyroid-stimulating hormone</a> (primarily) Stimulate <a href="#">prolactin</a> release
<a href="#">Vasoactive intestinal peptide</a>	VIP	<a href="#">gut, pancreas, and suprachiasmatic nuclei of the hypothalamus</a>			stimulates <a href="#">contractility</a> in the heart, causes <a href="#">vasodilation</a> , increases <a href="#">glycogenolysis</a> , lowers arterial <a href="#">blood pressure</a> and relaxes the smooth muscle of <a href="#">trachea</a> , stomach and <a href="#">gall bladder</a>
<a href="#">Guanylin</a>	GN	gut			regulates <a href="#">electrolyte</a> and <a href="#">water</a> transport in <a href="#">intestinal epithelia</a> .
<a href="#">Uroguanylin</a>	UGN	renal tissues			regulates <a href="#">electrolyte</a> and <a href="#">water</a> transport in <a href="#">renal epithelia</a> .

# Steroid

Chemical class	Name	Abbreviation	Tissue	Cells	Target Tissue	Effect
<a href="#">androgen</a>	<a href="#">Testosterone</a>		<a href="#">testes, ovary</a>	<a href="#">Leydig cells</a>		<a href="#">libido</a> , <a href="#">Anabolic</a> : growth of <a href="#">muscle mass</a> and strength, increased <a href="#">bone density</a> , growth and strength, <a href="#">Virilizing</a> : <a href="#">maturation</a> of <a href="#">sex organs</a> , formation of <a href="#">scrotum</a> , deepening of voice, growth of <a href="#">beard</a> and <a href="#">axillary hair</a> .
<a href="#">androgen</a>	<a href="#">Dehydroepiandrosterone</a>	DHEA	<a href="#">testes, ovary, kidney</a>	<a href="#">Zona fasciculata</a> and <a href="#">Zona reticularis</a> cells of kidney <a href="#">theca cells</a> of ovary <a href="#">Leydig cells</a> of testes		<a href="#">Virilization</a> , <a href="#">anabolic</a>
<a href="#">androgen</a>	<a href="#">Androstenedione</a>		<a href="#">adrenal glands, gonads</a>			Substrate for <a href="#">estrogen</a>
<a href="#">androgen</a>	<a href="#">Dihydrotestosterone</a>	DHT	multiple			5-DHT or DHT is a male reproductive hormone that targets the prostate gland, bulbourethral gland, seminal vesicles, penis and scrotum and promotes growth/mitosis/cell maturation and differentiation. Testosterone is converted to 5-DHT by 5alpha-reductase, usually with in the target tissues of 5-DHT because of the need for high concentrations of 5-dht to produce the physiological effects.
<a href="#">mineralocorticoid</a>	<a href="#">Aldosterone</a>		<a href="#">adrenal cortex (zona glomerulosa)</a>			Increase <a href="#">blood volume</a> by reabsorption of <a href="#">sodium</a> in <a href="#">kidneys</a> (primarily) <a href="#">Potassium</a> and $H^+$ secretion in kidney.

<p><a href="#">estrogen</a></p>	<p><a href="#">Estradiol</a></p>	<p>E<sub>2</sub></p>	<p>females: <a href="#">ovary</a>, males <a href="#">testes</a></p>	<p>females: <a href="#">granulosa cells</a>, males: <a href="#">Sertoli cell</a></p>	<p><b>Females:</b>Structural:</p> <ul style="list-style-type: none"> <li>•promote formation of female <a href="#">secondary sex characteristics</a></li> <li>•stimulate <a href="#">endometrial</a> growth</li> <li>•increase <a href="#">uterine</a> growth</li> <li>•maintenance of <a href="#">blood vessels</a> and skin</li> <li>•reduce <a href="#">bone resorption</a></li> <li>•increase hepatic production of binding proteins</li> </ul> <p><b>Coagulation:</b></p> <ul style="list-style-type: none"> <li>•increase circulating level of <a href="#">factors 2, 7, 9, 10, antithrombin III, plasminogen</a></li> <li>•increase <a href="#">platelet</a> adhesiveness</li> </ul> <p>Fluid balance:</p> <ul style="list-style-type: none"> <li>•salt (<a href="#">sodium</a>) and water retention</li> <li>•increase <a href="#">growth hormone</a></li> <li>•increase <a href="#">cortisol, SHBG</a></li> </ul> <p>Gastrointestinal tract:</p> <ul style="list-style-type: none"> <li>•reduce bowel motility</li> <li>•increase cholesterol in <a href="#">bile</a></li> </ul> <p>Lung function:</p> <ul style="list-style-type: none"> <li>•promote lung function by supporting <a href="#">alveoli</a>.<sup>[7]</sup></li> </ul> <p><b>Males:</b> Prevent <a href="#">apoptosis</a> of germ cells<sup>[8]</sup></p>
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<a href="#">estrogen</a>	<a href="#">Estrone</a>		<a href="#">ovary</a>	<a href="#">granulosa cells</a> , <a href="#">Adipocytes</a>	
<a href="#">estrogen</a>	<a href="#">Estriol</a>	E <sub>3</sub>	<a href="#">placenta</a>	<a href="#">syncytiotrophoblast</a>	
<a href="#">glucocorticoid</a>	<a href="#">Cortisol</a>		<a href="#">adrenal cortex (zona fasciculata and zona reticularis cells)</a>		Stimulation of <a href="#">gluconeogenesis</a> Inhibition of glucose uptake in muscle and <a href="#">adipose</a> tissue Mobilization of <a href="#">amino acids</a> from <a href="#">extrahepatic</a> tissues Stimulation of <a href="#">fat breakdown</a> in adipose tissue <a href="#">anti-inflammatory</a> and <a href="#">immunosuppressive</a>
<a href="#">progesterone</a>	<a href="#">Progesterone</a>		<a href="#">ovary</a> , <a href="#">adrenal glands</a> , <a href="#">placenta</a> (when pregnant)	<a href="#">Granulosa cells</a> <a href="#">theca cells</a> of ovary	<ul style="list-style-type: none"> <li>•Support <a href="#">pregnancy</a>.<sup>[9]</sup>Convert <a href="#">endometrium</a> to secretory stage</li> <li>•Make <a href="#">cervical mucus</a> permeable to sperm</li> <li>•Inhibit <a href="#">immune</a> response, e.g. towards the <a href="#">human embryo</a>.</li> <li>•Decrease uterine <a href="#">smooth muscle</a> contractility<sup>[9]</sup></li> <li>•Inhibit <a href="#">lactation</a></li> <li>•Inhibit onset of <a href="#">labor</a></li> <li>•Support <a href="#">fetal</a> production of <a href="#">adrenal</a> mineralo- and glucosteroids</li> </ul> Other: <ul style="list-style-type: none"> <li>•Raise <a href="#">epidermal growth factor-1</a> levels</li> <li>•Increase core temperature during ovulation<sup>[10]</sup></li> <li>•Reduce <a href="#">spasm</a> and relax <a href="#">smooth muscle</a> (widen <a href="#">bronchi</a> and regulate <a href="#">mucus</a>)</li> <li>•<a href="#">Antiinflammatory</a>. Regulate <a href="#">immune response</a></li> <li>•Reduce <a href="#">gall-bladder</a> activity<sup>[11]</sup></li> <li>•Normalize <a href="#">blood</a> clotting and vascular tone, <a href="#">zinc</a> and <a href="#">copper</a> levels, <a href="#">cell oxygen</a> levels, and use of fat stores for energy</li> <li>•Assist in <a href="#">thyroid</a> function and <a href="#">bone</a> growth by <a href="#">osteoblasts</a></li> <li>•<a href="#">Resilience</a> in <a href="#">bone</a>, <a href="#">teeth</a>, <a href="#">gums</a>, <a href="#">joint</a>, <a href="#">tendon</a>, <a href="#">ligament</a> and <a href="#">skin</a> healing by regulating <a href="#">collagen</a></li> <li>•Nerve function and healing by regulating <a href="#">myelin</a></li> <li>•Prevent <a href="#">endometrial cancer</a> by regulating effects of estrogen</li> </ul>
<a href="#">secosteroid</a>	<a href="#">Calcitriol</a> (1,25-dihydroxyvitamin D <sub>3</sub> )		<a href="#">skin/proximal tubule</a> of <a href="#">kidneys</a>		Active form of <a href="#">vitamin D<sub>3</sub></a> Increase absorption of <a href="#">calcium</a> and <a href="#">phosphate</a> from <a href="#">gastrointestinal tract</a> and <a href="#">kidneys</a> inhibit release of <a href="#">PTH</a>
<a href="#">secosteroid</a>	<a href="#">Calcidiol</a> (25-hydroxyvitamin D <sub>3</sub> )		<a href="#">skin/proximal tubule</a> of <a href="#">kidneys</a>		Inactive form of <a href="#">vitamin D<sub>3</sub></a>