What are Adrenal Glands?

The adrenal glands are two small, triangular-shaped endocrine glands located on top of the kidneys. They are orange in color and covered in a connective tissue capsule that is hidden in a layer of fat. These glands are made up of two parts – the adrenal cortex (outside) and the adrenal medulla (inside).

The adrenal glands work together with the pituitary gland and hypothalamus in the brain to produce a number of different hormones. These hormones are key components for your health and vitality.

They are responsible for the functioning of every tissue, organ and gland in the body, as well as affecting the way we think. Adrenal glands maintain metabolic processes by managing blood sugar levels and regulating inflammation as well as the balance of salt and water.

The primary function of the adrenals is to assist your body in dealing with all forms of stress including physical, emotional and psychological stress. Many circumstances cause an individual to feel stressed - ranging from illness, injury, feeling overworked, under pressure, having too little sleep (insomnia), a family quarrel or financial problems. When one has a low adrenal function, the body struggles to adapt to these stresses.

Causes of Adrenal Gland Disorders

Adrenal gland disorders occur when the body produces either too much or too little of the adrenal hormones. There are various types of adrenal gland disorders, some with different effects and symptoms.

Types of Adrenal Gland Disorders

- **Cushing’s Syndrome** - Cushing’s syndrome is caused when the body produces more cortisol than it needs. The high level of hydrocortisone may be due to an adrenal gland tumor, enlargement of both adrenal glands due to a pituitary tumor secreting excessive stimulatory hormones or it can be secondary to taking corticosteroid drugs for a long period of time.

- **Addison’s Disease** - Addison’s disease is a rare disorder caused by a deficiency of hydrocortisone and aldosterone. This disease is usually caused by an autoimmune disorder as a result of the immune system attacking the adrenal gland. It progresses slowly, and acute episodes called Addisonian crises are brought about by injury, infection or other stresses.
- **Congenital Adrenal Hyperplasia** - Congenital adrenal hyperplasia is a genetic disorder. There are six major variants but each involves a missing enzyme in the pathway of cortisol production. The body produces increasingly more stimulatory hormones to try to increase the production of cortisol but, because this pathway cannot be completed, the stimulus is mistakenly directed into over-producing the androgenic hormones.

- **Adrenal Virilism** - Adrenal virilism is usually genetic, but in rare cases adrenal virilism is caused by an adrenal gland tumor. It is the development or premature development of male secondary sexual characteristics as a result of the male sex hormones (androgens) being excessively produced by the adrenal gland. This disorder can occur before birth and can lead to sexual abnormalities in newborns. It may also occur in girls and women later in life.

- **Pituitary Tumors** - The pituitary gland is located in the brain and assists with regulating the activity of the adrenal glands as well as most of the other glands in the body. Benign (non-cancerous) tumors may grow on the pituitary gland restricting the release of the stimulatory hormones or occasionally the tumor may secrete excessive amounts of stimulatory hormones.

- **Adrenal Gland Cancer** - Adrenal gland cancer is rare and occurs in the endocrine tissue of the adrenals. It can affect any group, but mostly affects young adults. A cancer that occurs in the adrenal cortex is called an adrenocortical carcinoma and brings about symptoms that include high blood pressure, diabetes, weight gain, weakening of the bones and excess body hair. A cancer in the adrenal medulla is called a pheochromocytoma and may cause high blood pressure, palpitations, headaches, and excessive perspiration.

- **Adrenoleukodystrophy (ALD)** - Adrenoleukodystrophy (ALD) is rare genetic disorder characterized by symptoms that include progressive adrenal gland dysfunction and a loss of myelin – the fatty substance that insulates and surrounds the nerve cells in the brain. This is generally a severe childhood disease affecting only boys as a result of the genetic defect being sex linked recessive (carried on the X chromosome). It is a progressive disorder that leads to complete disability or death.

### Help for Adrenal Gland Disorders

Adrenal gland disorders can be life threatening conditions and treatment is aimed at restoring the adrenal glands health so they are producing normal levels of corticosteroid hormones. Treatment usually depends on the specific disorder or the specific cause of the disorder.

Using a combination of treatment options such as conventional medicine, complementary therapy and natural remedies can also be effective in treating an adrenal gland health disorder.

### Treatment Options for Adrenal Gland Disorder

Michele Carelse, Clinical Psychologist

All of our natural remedies are formulated by our expert team of herbalists, naturopaths and homeopaths, and headed by Michele Carelse.

Michele has had years of experience in the manufacturing and use of natural remedies. In addition, she is a trained Clinical Psychologist and has been incorporating natural remedies into her treatment of patients with depression, anxiety, ADD, ADHD and stress for many years with spectacular results.
Conventional Medicine

Depending on the cause, medication may need to be taken for the rest of the patient’s life and in certain circumstances surgery may be required.

- Depending on the patient’s condition, corticosteroids such as prednisone may be taken orally or intravenously
- Fludrocortisone may also be administered to restore the body’s level of sodium and potassium
- Surgery
- Radiation therapy
- Microsurgery

Natural Approach

Holistic and natural remedies can be highly effective when used in combination with other treatments. These remedies manage to address the symptoms of the adrenal gland health disorder as well as the individual’s overall health and wellbeing.

Herbal and homeopathic remedies are gentle, yet effective without the harmful side effects of conventional medicine. A combination of herbs such as Borago officinalis (Borage), Eleutherococcus senticosis (Siberian Ginseng) and Astragalus membranaceous (Huang Qi) can be used to support the functioning of the adrenal glands and help to assist the body to fight the stress of modern day living.

Consult a homeopath or naturopath for a remedy specific to your needs.

Roles of the Adrenal Medulla and Adrenal Cortex

Adrenal medulla

The adrenal medulla is the inner region of the gland which is responsible for producing hormones called epinephrine and norepinephrine (adrenaline and noradrenaline). These hormones play an important role in the way we respond to stress and regulate a number of different body functions.

Epinephrine (also called adrenaline)

- Facilitates the flow of blood to the brain and muscles
- Increases the heart rate and encourages heart contractions
- Helps muscles to relax
- Helps to convert glycogen to glucose in the liver

Norepinephrine (also called noradrenaline)

- Has strong vasoconstrictive effects thereby increasing blood pressure.

Adrenal cortex

The adrenal cortex is the outer region of the gland and produces corticosteroid hormones, androgens and aldosterone
Corticosteroid hormones

- Consists of hydrocortisone and corticosterone hormones.
- The hydrocortisone hormone controls how the body uses fats, proteins and carbohydrates, while the corticosterone hormone represses inflammatory responses in the body and affects the immune system.

Aldosterone hormone

By controlling the amount of sodium excreted into the urine, Aldosterone is the main hormone responsible for fluid and electrolyte balance, which in turn is an integral part of maintaining blood pressure and blood volume.

The Natural Approach

While Western medicine has become the norm in many cultures, it is not the only treatment option. Conventional Western medicine, often called allopathic medicine, is the system of medicine taught at most medical schools and most pharmaceutical and synthetic medicines are manufactured and marketed according to the principles of allopathic medicine. Allopathic medicine is also sometimes called orthodox medicine.

Because most of us in the Western world have grown up in a society in which allopathic medicine is the prevailing norm, we forget that, only a few decades ago, homeopathic, herbal and other natural medicines were commonly available – and freely used even by conventional doctors. While there are often heated debates about which system of medicine is ‘better’ than the other, many responsible doctors (whether they are allopathic or not) recognize that both have a role to play in the treatment program.

Natural medicine has often been frowned on by conventional doctors, especially by those who did not have sufficient knowledge of these medicines. However, it is encouraging to note that some medical schools are now beginning to re-introduce it into their course work, thereby providing doctors with a wider range of treatment options from which to choose. In many countries, especially in Europe, India and China, natural and homeopathic medicines are commonly prescribed by conventional doctors and represent a significant part of the total annual drug sales.

Naturopathy is a branch of medicine (just as allopathy is a branch of medicine) which operates according to the underlying philosophy that the body has an innate capacity to heal itself. While natural medicines are often called ‘alternative’ or ‘complimentary’ medicines, they are, in fact, a unique and independent form of medicine in their own right, well able to treat a variety of conditions. Perhaps the term ‘holistic’ medicine is more apt, given the broad range of treatment options and approaches which are to be found within the practice of natural medicine, which encompasses many different disciplines, including herbalism, homeopathy, iridology, osteopathy, chiropractic, therapeutic massage techniques, aromatherapy, acupuncture and many, many more.

Most naturopaths will use a variety of treatment modalities in order to treat their patients in a holistic way to support health, relieve symptoms and prevent future disease. In fact, even the World Health Organization defines health as being "... more than simply the absence of illness. It is the active state of physical, emotional, mental and social well-being." This is a wonderfully clear description of holistic or
natural medicine, which strives to support health (thereby relieving or preventing symptoms), rather than simply eliminating disease.

Although allopathic medicine certainly has a role to play and has made a tremendous contribution to medical science during the past century, there is a growing perception that it is not the only answer and that, in many cases, holistic medicine can accomplish just as much, if not more – without the risk of side effects, addiction and sacrifice to health so commonly associated with pharmaceutical drugs. Contrary to common perception, and provided that they are manufactured in the correct way, natural medicines can work quickly and safely to promote healing.

In many cases, they can succeed where pharmaceutical drugs have failed. Despite frequent reports that they are ‘unproven’ and ‘untested’, the opposite is true. Natural medicines have a long history of usage and there is a wealth of empirical evidence to support their effectiveness and safety. In addition, active clinical research is carried out by many academic hospitals and universities to support the extensive traditional and empirical evidence behind natural medicines.

It is also important to know that, like any medicine, herbal and homeopathic medicines must be manufactured in the correct way, following acceptable procedures and manufacturing methods to ensure maximum effectiveness and safety. Due to the recent rise in popularity of natural remedies, many companies have sprung up to take advantage of the market. Unfortunately not all of them are equipped to manufacture to the correct standards, often resulting in a flood of inferior (and sometimes even unsafe) remedies onto the market – and giving natural remedies a bad name.

Even some pharmaceutical companies have rushed to claim their market share by producing so-called ‘standardized’ extracts of herbs and offering these as superior to the tried and tested methods of naturopathic manufacturing. Nothing could be further from the truth. While ‘standardized’ extracts may offer benefit of easy consistency of dosage (and cheaper more efficient production lines), they have grave disadvantages. These include an increase in side effects as the medicines produced in this manner lose the natural protective properties of the herbs. In some cases, these side effects have proved fatal – as was seen in the liver toxicity associated with standardized extracts of kava kava, a herb previously safely used for generations without any known side effects.

Most naturopaths recommend what is called the Full Spectrum Method of extraction – which retains the benefits of ALL the active ingredients within the herb as opposed to isolating only one – thereby providing a more complete treatment as well as superior protection against side effects.

Whatever your choice, always choose wisely. Research what is best for you. If you have a chronic or life threatening condition, don’t make changes without first discussing them with your doctor in order that your condition may be monitored. Well informed and supportive practitioners will support patients who want to take responsibility for their own health.

Related Natural Remedies:

**AdrenoBoost:** Protects adrenal glands from the damaging effects of stress to maintain healthy functioning.
AdrenoBoost is a 100% safe, non-addictive, natural herbal remedy. AdrenoBoost can be used consistently to safely support **health and systemic balance in the adrenal glands and endocrine system**.

AdrenoBoost contains a selection of herbs known for their supportive function in maintaining hormonal balance. AdrenoBoost supports the **healthy functioning of the adrenal glands**, thereby helping to maintain balanced metabolism, energy levels, sleep patterns, and routine, healthy performance of the immune system.

AdrenoBoost can make all the difference, without compromising health and **without the risk of serious side effects**.

The formula remains true to the **whole spectrum method** of herbal extraction, ensuring the bio-availability and balance of all the active ingredients contained in the remedy. This method of manufacture also significantly reduces the likelihood of side effects and maintains all active ingredients in perfect balance – exactly as nature intended!

**Learn more about AdrenoBoost**

**MindSoothe:** Promotes balanced mood and feelings, as well as healthy levels of serotonin and other neurotransmitters.

MindSoothe is a 100% safe, non-addictive, natural herbal remedy that has been especially formulated by a Clinical Psychologist for adults and teens, and comes in a compact capsule form, making it easy to take.

MindSoothe can be used to **safely maintain emotional health, balanced mood and systemic harmony** in the brain and nervous system, without harmful side effects.

This remedy contains a selection of herbs known for their calming and supportive function in maintaining brain and nervous system health, **emotional balance** and overall wellbeing.

The formula remains true to the **whole spectrum method** of herbal extraction, ensuring the bio-availability and balance of all the active ingredients contained in the remedy. This method of manufacture also significantly **reduces the likelihood of side effects** and maintains all active ingredients in perfect balance – exactly as nature intended!

In combination with a healthy lifestyle and diet, MindSoothe supports the healthy functioning of the brain and nervous system, thereby helping **emotional wellbeing and maintaining mood and routine equilibrium**.

MindSoothe can especially benefit those individuals needing to support routine mood and emotion and **promote naturally balanced sleep patterns.** MindSoothe can be used consistently, without compromising health.

**Learn more about MindSoothe**
Circu-Live: For circulatory and nervous system health, keeps healthy toes and fingers comfortably tingle free.

Circu-Live is a 100% safe, non-addictive, natural herbal remedy formulated by a team of experts in the field of natural medicine, Circu-Live has been used for many years to safely maintain health and systemic balance of the circulatory system.

Containing a selection of herbs known for their supportive function in maintaining circulatory health and well being, Circu-Live remains true to ensuring the bio-availability and balance of active ingredients contained in the remedy, while significantly reducing the likelihood of side effects.

Circu-Live supports functioning of the cardiovascular system, thereby helping to maintain healthy circulation of the blood through veins and arteries to all extremities, assist routine oxygenation of the blood to all body tissue and organs, and provide optimum temperature regulation.

Learn more about Circu-Live

Read the testimonials for these quality products here!