



# IMAGE AWARENESS WELLNESS INSTITUTE

## *Adrenal Health (Part 2)*

1271 HIGH STREET, AUBURN, CA 95603 • PHONE (530) 823-7092 • ORDER LINE (800) 359-6091  
HOURS: TUES. – FRI. 10 A.M. – 4 P.M. • E-MAIL: MAIL@IMAGEAWARENESS.COM WEB: [WWW.IMAGEAWARENESS.COM](http://WWW.IMAGEAWARENESS.COM)

July 2010

Volume 6 : Issue 7

### HISTORY OF ADRENAL SUPPORT

The history of adrenal support follows two pathways. On the one side, one finds the use of adrenal hormones to give the adrenal a rest or boost the effects of these hormones. On the other side is the use of diet and nutritional supplements to boost the functioning of the adrenals.

### HORMONAL SUPPORT

Many physicians once understood that a healthy set of adrenal glands was imperative for long term health and for coping with allergies and asthma. This is illustrated by John Tintera who wrote, "I've yet to work with an allergic person whose troubles weren't basically due to his poorly functioning adrenals, or who wasn't relieved of all his allergic woes when his adrenals were put into proper working order."

The first use of an adrenal extract was in 1998 by Sir William Osler who administered a crude preparation of adrenal cells to a person with Addison's disease. Adrenal cell extracts became commercially available in 1918. Thousands of medical doctors subsequently used adrenal cell extracts for treating patients with low adrenal function.

Adrenal extracts first attracted considerable attention in 1918 during the Spanish flu epidemic which killed tens of millions of people. Researchers observed that respiratory infections are

particularly hard on the adrenal glands and exhaust them rapidly. Lucke and his associates found that 106 of 126 autopsied cases of deaths from the flu revealed adrenal exhaustion, hemorrhage or enlargement of the adrenals.

This observation led to the use of liquid adrenal cortical extracts combined with small amounts of thyroid and gonadal extracts. The formulation was found to be unusually effective in preventing many of the negative consequences of becoming infected with the flu and made a noticeable improvement in recuperation from the devastating disease. Recovery was uneventful and rapid in those using the formula rather than long and drawn out which was typical.



By the mid 1930's liquid and tablet forms of adrenal extracts were being manufactured and marketed to tens of thousands of physicians. These products were marketed by such pharmaceutical giants as Upjohn and Eli Lilly until 1968. In January, 1978 the FDA sent regulatory letters to 78 drug firms in which it said adrenal cortical extracts represented substantial risk of undertreatment because of the drug's low potency. This action in effect removed adrenal cortical extracts from the market.

In the early 1950's synthetic cortisol was developed. The profit margin for pharmaceutical firms on this product was huge in comparison to the profits obtained from the laborious process of developing adrenal cortical extracts from natural sources.

The adrenal extracts which had worked so well for patients for so many years were replaced with cortisone. The adrenal extracts were at first ignored and later a concerted effort began to discredit the adrenal cortical extracts and to remove them from the market.

Cortisone and other synthetically produced adrenal substances appeared to produce much more dramatic results than the adrenal extracts when they were first used. The mechanism of action was quite different. The adrenal extracts had very low quantities of the active hormones compared to the synthesized products. The extracts work to nourish

the adrenals and allow them to rest a little by lightening their burden.

The synthetic products were often used in excessive quantities and destroyed the normal feedback loops which balance the body's hormones. They tend to shut down adrenal function. Synthetic corticosteroids are up to 17 times more powerful than the natural form of cortisol and can shut down the adrenals for days, weeks or years. The side-effects can be dramatic.

William Jefferies aptly describes the consequences of the headlong rush into the use of synthetic adrenal hormones without consideration of the consequences of their greater potency and greater increased risk of side-effects than the natural hormones. He writes, "The potential of cortisone and hydrocortisone in clinical medicine has been confused by numerous factors. When agents that initially were thought to provide one of the greatest advances in therapy in the history of medicine were found to be capable of causing numerous serious and sometimes catastrophic side effects, both physicians and patients understandably reacted with alarm. Unfortunately, the reaction was so great that perspective has been lost. Furthermore, misunderstanding has resulted from failure to differentiate between physiologic and pharmacologic dosages and effects, from confusion of natural steroids with more potent derivatives, from lack of knowledge of the nature of beneficial effects, and from other, more subtle factors."

Jefferies worked for many years with physiologic doses of cortisone without any complications, but had difficulty persuading other physicians to use physiological doses of adrenal hormones. He explains that pharmaceutical companies have not promoted physiologic doses because patents have expired and claims for a new use of the product, even a lower dose, would require expensive testing.

Secondly, he explains that there

has been little discrimination between the effects of physiologic and pharmacologic doses. Finally, there is a tendency to confuse cortisone and hydrocortisone with more potent derivatives. "A dosage of 5 mg four times daily of cortisone acetate or hydrocortisone is a safe, physiologic dosage, but 5 mg four times daily of prednisone or any of the other derivatives is at least four times as potent and, hence, subject to all of the hazards of pharmacologic dosages."

While William Jefferies preferred to use cortisone and hydrocortisone in very small quantities which he referred to as physiologic doses, Tintera preferred the natural adrenal cortical extracts. He wrote, "In view of ... the vast totally favorable clinical experience which exists, we are thoroughly confident that the whole natural adrenal cortical extract is uniquely valuable. Balanced in nature's own proportions, it provides a synergistic combination of 32 or more hormones which no man-made compound can duplicate. It is certainly not at all related therapeutically to cortisone or cortisol, or to any synthetic or extracted steroid-hormone fraction. Adrenal cortical extract provides the basis for a 'no risk' therapeutic regimen that is at once ataractic in its effect (does not disturb but calms) as well as therapeutic, being the only agent we know about which provides a 'rest and recovery' period for the adrenal-pituitary-thyroid axis system instead of the life long dependency inherent in cortisone and other 'replacement' therapy."

#### REFERENCES:

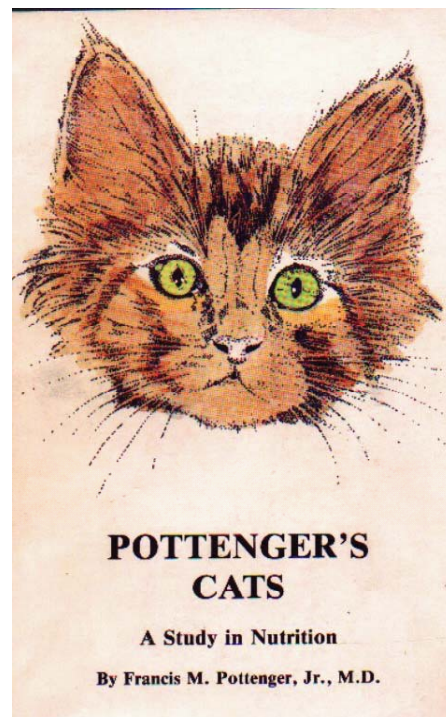
Tintera, John, What you should know about your glands and allergies, *Woman's Day*, February 1959.

Lucke, Baldwin, et al., Pathologic anatomy and bacteriology of influenza: Epidemic of autumn, 1918, *Archives of Internal Medicine*, August 1919, XXIII, 154.

<http://chronicfatiguesolution.com/AdrenalGlandExtracts.htm>

Jefferies, William, *Safe Uses of Cortisone*, Springfield, Illinois: Charles C. Thomas, 1981, v.

Tintera, John W., *Hypoadrenocorticism*, New York: Adrenal Metabolic Research Society of the



Hypoglycemia Foundation, Inc., 1980, 19-20, 132.

## NUTRITIONAL SUPPORT FOR ADRENAL FUNCTION

Francis M. Pottenger, Jr., a physician and prominent nutritional pioneer did a great deal of adrenal support in the form of supplementation with adrenal glandulars for his patients. Pottenger was actively involved in producing and marketing adrenal cortical extracts.

The adrenal glands Pottenger was using for his extracts varied greatly in their potency. Investigation revealed that the glands with the highest potency came from cattle killed in Denver and those with the lowest potency came from animals slaughtered in Los Angeles.

The animals from Denver were fed on "young, rapid growing range grasses," while the animals from Los Angeles were fed "mostly dry feed consisting of molasses, cotton seed meal, beet pulp, orange pulp, grape pulp and other industrial by-products, field dried alfalfa and grain."

Pottenger learned that the health of the animals fed the fresh green grass was superior with higher reproductive efficiency and a lower



mortality rate among these animals.

A diet high in fresh, raw foods is optimal for strengthening the adrenal glands. This is in stark contrast with the diet of the average American.

Pottenger wrote, "In comparing the diets of farm and hatchery chickens and of range and dry feed cattle, we find that they all contain adequate amounts of fat, protein, carbohydrate and minerals. *The difference lies in the presence or absence of fresh factors.* It is the fresh, raw factors in feed that appear to hold the balance between a healthy animal capable of reproducing healthy offspring and one that is unhealthy and has poor reproductive efficiency. Logically, the nutritional value of animal products such as milk and eggs depends on the nutritional value of the producing animal's diet."

Pottenger also records an experiment with guinea pigs where fresh foods made a significant difference in the health of the animals. Guinea pigs fed rolled and cracked grain with supplements of cod liver oil and field-dried alfalfa showed loss of hair, paralysis and high litter mortality. Diarrhea and pneumonia began to appear. The addition of fresh cut green grass resulted in remarkable improvement.

The culmination of Pottenger's research was his famous cat studies. Pottenger tested the effectiveness of his adrenal extracts by surgically removing the adrenal glands from cats and then supporting them with the extracts. Not only did he learn that the adrenals of cattle eating fresh food had stronger adrenals, but he also learned that cats consuming raw food survived his surgery better than animals given cooked food.

Pottenger fed several generations of cats raw or cooked food for several generations. Cooked food animals developed not only weakened adrenals, but a wide variety of health problems which intensified from one generation to the next unless the cats were returned to a raw food diet. Only two thirds of the diet was cooked in these studies, but the nutrient destruction involved in this simple form of processing was sufficient to induce a wide range of degenerative changes in the animals.

REFERENCES:

Pottenger, Francis M., Jr., *Pottenger's Cats*, La Mesa, CA: Price-Pottenger Nutrition Foundation, 1983, 18-19.

GENERAL DIET

Tintera found that diet was important in rebuilding adrenal health al-



though he focused on avoiding sugars which stress the adrenals rather than on raw foods. His patients were put on a diet high in protein, moderate in fat, and low in carbohydrates. Refined carbohydrates, sugary or stimulating drinks, and alcohol were forbidden. He observed, "It is the kind of diet that puts the least stress on the adrenals by permitting them to function with top efficiency; the kind of diet that doesn't exhaust but builds adrenal reserves. Fortunately our adrenal glands have recuperative power, they will come back if given the chance."

REFERENCE:

Tintera, John, What you should know about your glands and allergies, *Woman's Day*, February 1959.

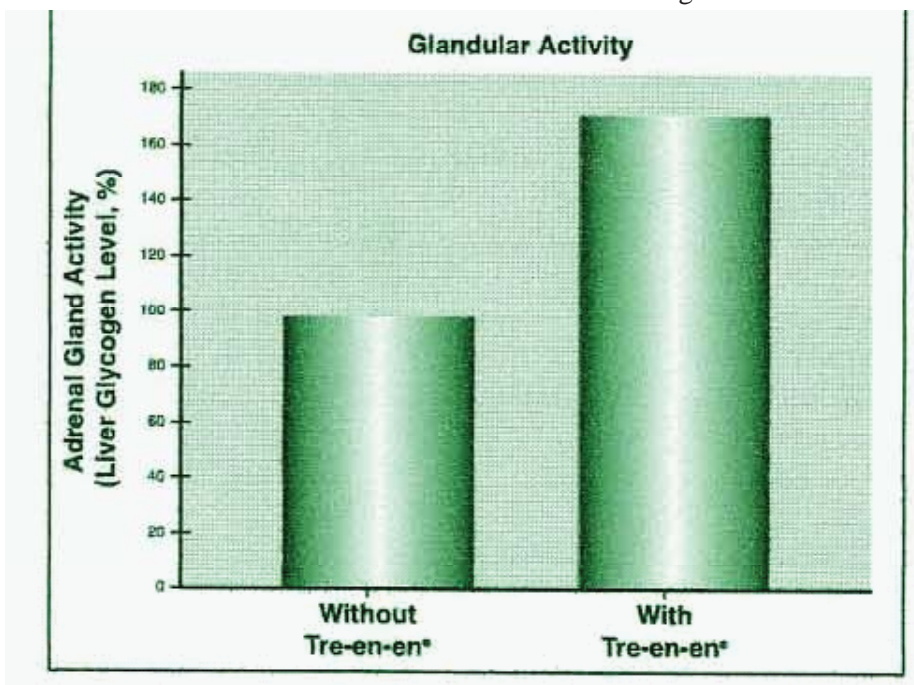
SUPPORTIVE NUTRIENTS

In the 1950's physicians learned that patients with allergy symptoms would often respond to supplementation with L-tyrosine (GNLD Enersine) and B Complex vitamins. The physicians focused on vitamins B3 and B6.

L-Tyrosine is the precursor to adrenal hormones. The adrenal glands also require large quantities of B complex vitamins and vitamin C in order to function properly. Adrenal tissues have one of the highest concentrations of vitamin C in the human body. Vitamin C is doubly important for humans because man, unlike most other creatures on planet earth, can not synthesize vitamin C in the body.

REFERENCE:

Widmann RR, Keye JD, "Epinephrine precursors in control of allergy," *Northwest Med* 51:588-90, 1952.





## IMAGE AWARENESS WELLNESS INSTITUTE

1271 HIGH STREET, AUBURN, CA 95603  
PHONE (530) 823-7092 ORDER LINE (800) 359-6091  
E-MAIL: MAIL@IMAGEAWARENESS.COM  
VISIT OUR WEBSITE! [WWW.IMAGEAWARENESS.COM](http://WWW.IMAGEAWARENESS.COM)

### TRE-EN-EN EXTRACTS

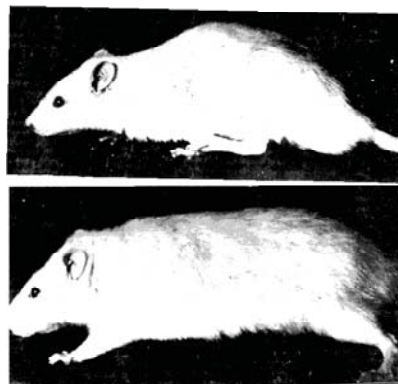
The rats pictured on this page provide a visual image of the difference in overall growth between animals fed a normal rat ration and those fed with Tre-en-en concentrates. Tre-en-en concentrates are a valuable nutritional support for the functioning of the adrenal glands. The following excerpt is from the GNLD manual on the Tre-en-en research:

“Scientists have known for years that lipids and sterols are required for normal cellular functioning, glandular activity, and overall growth and development. A series of studies conducted at Texas A&M University in 1987 confirmed the nutritional benefits of Tre-en-en Grain Concentrates (lipids and sterols from wheat, rice, and soybeans). The seven-week studies looked at growth, development, maturation, and glandular activity of young rats fed either a standard control diet (laboratory chow fortified with vitamins and minerals) or the standard diet with Tre-en-en Grain Concentrates substituted for the lipids used in the standard chow.”

It should be pointed out simply as a matter of interest that laboratory chow for rats is superior to the diet of

the average American. These diets are formulated in such a manner that failures in reproduction are rare, which this problem is common in the human population. This study clearly showed the superiority of Tre-en-en for not only adrenal support, but also the overall general health of the animals.

“When the amount of food consumed was correlated with the amount of weight the rats gained, the researchers found that the Tre-en-en fed animals displayed superior growth and development, indicating that their bodies made better use of the available nutrients. In all cases the Tre-en-en fed group grew faster, achieved maturity faster, and had better overall development than the group that was fed the control diet. In addition, the cardiovascular systems of the Tre-



en-en group was better developed, and *their adrenal activity--an indicator of their energy levels and ability to respond to stress--was greater.*”

#### REFERENCE:

GNLD Manual, Products, 6.09, P-3.

### WEB RESOURCES

[www.imageawareness.com](http://www.imageawareness.com)

[www.yourbodyssignlanguage.com](http://www.yourbodyssignlanguage.com)

[www.jimmcafee.com](http://www.jimmcafee.com)

### DISCLAIMER

This publication contains the opinions and ideas of its author. It is intended to provide helpful and informative material on the subjects addressed in the publication. It is provided with the understanding that the author and publisher are not engaged in rendering medical, health, or any other kind of personal professional services in this newsletter. The reader should consult his or her medical, health or other competent professional before adopting any of the suggestions in this newsletter or drawing inferences from it.

The author and publisher specifically disclaim all responsibility for any liability, loss, or risk, personal or otherwise, which is incurred as a consequence, directly or indirectly, of use and application of any of the contents of this newsletter.