

ALPSTEINACADEMY

WELCOME!

**Greetings from the former
Whey Cure Village Gais - Switzerland**

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Supported by **SEVERT PHARMACEUTICALS**

The Topic

**Power Station
Adrenal Glands**

Holistic Anatomy, Physiology,
main Diagnostic Methods,
Diseases and Biological Ways to
influence.

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Seminar Content

- 1** • **Anatomy, Physiology, Endocrinology, Pathology**
- 2** • **Diagnosis of adrenal diseases in the holistic context**
- 3** • **Approved holistic-biological therapies in adrenal gland diseases**

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Topic

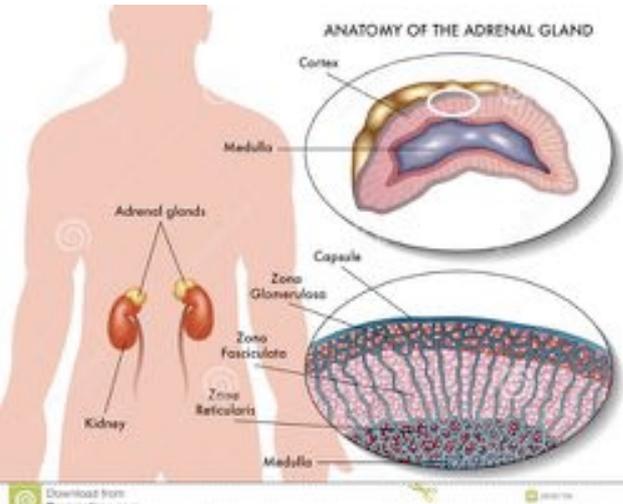
- 1** • **Anatomy, Physiology, Endocrinology, Pathology**
(Construction and function of the adrenal gland, coupling to vessels and lymph, classification into endocrine system, the most important diseases)

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Adrenal gland: Anatomy



- Adrenal gland (NN) (Latin *Glandula suprarenalis*) is a paired hormone gland
- Located at the upper pole of the kidney
- Weights 5-15 g, 4 cm long, 4 cm thick and about 2 cm wide
- Right NN is triangular, the left crescent-shaped
- Are embedded in fat capsule together with kidney and surrounded by kidney fascia
- topographically right NN stands with right Liver lobe, diaphragm and inferior vena cava in relationship,
- left NN is adjacent to stomach and omental bursa

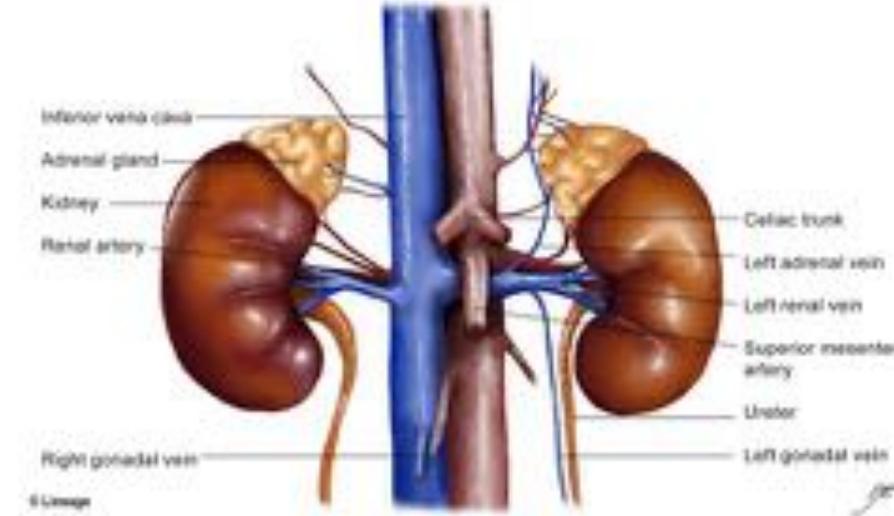
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Adrenal gland: vascular supply



- three arterial inflows (from the inferior phrenic artery, the abdominal aorta and the renal artery)
- Venous outflow exits via Hilum of the NN and via V. renalis to the inferior vena cava
- Lymphatic drainage via trunci lymphatici on both sides

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Adrenal gland: Histology

Region of adrenal gland

- Adrenal medulla
- Zona reticularis
- Zona fasciculata
- Zona glomerulosa
- Capsule

Secretes

- Catecholamines
- Sex hormones
- Glucocorticoids
- Aldosterone

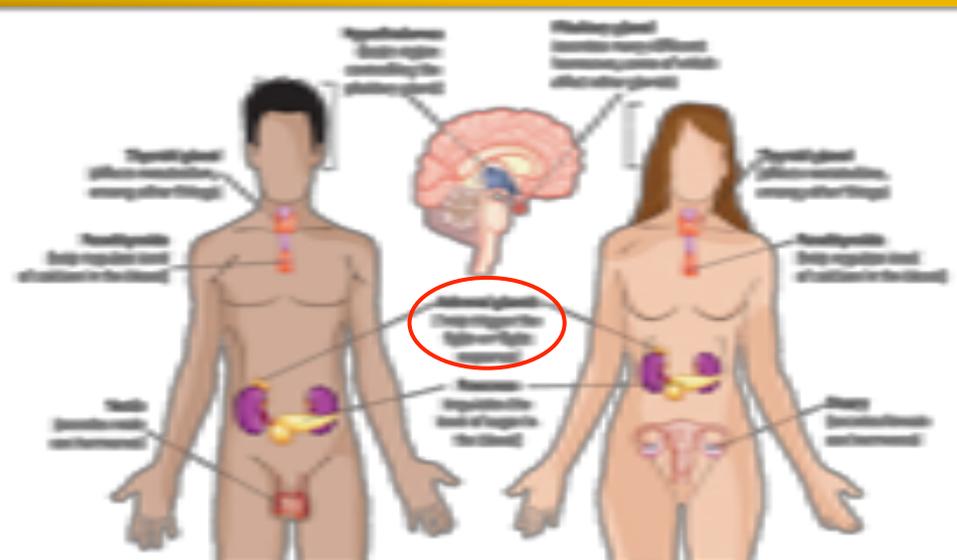
- Fiber-rich connective tissue capsule
- Zona reticularis is the layer of the cortex, is of mesodermal origin
In between lies the zone of the NN Mark,
- Arises from the Nevens system and is ectodermal

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Our endocrine System

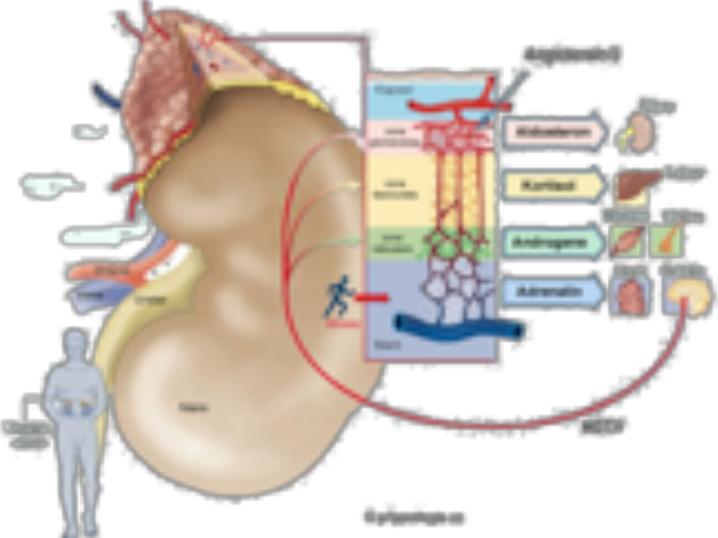


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Adrenal gland: Physiology



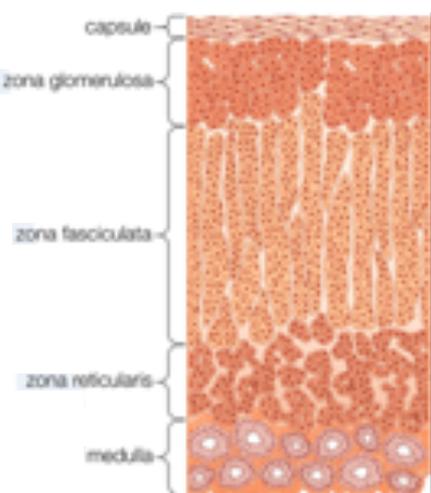
Overview of physiological relationships in the adrenal gland

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Adrenal gland: Physiology



Adrenal cortex

- 75 percent substance content of the adrenal glands
- is divided into three layers:
 - The outer layer is the *zona glomerulosa*, where the mineralocorticoids are produced (specially aldosterone).
 - The middle *zona fasciculata* is responsible for the formation of glucocorticoids, f.e. cortisol and cortisone.
 - The sex hormones are formed in the inner *zona reticularis*. These are predominantly male sex hormones (androgens).

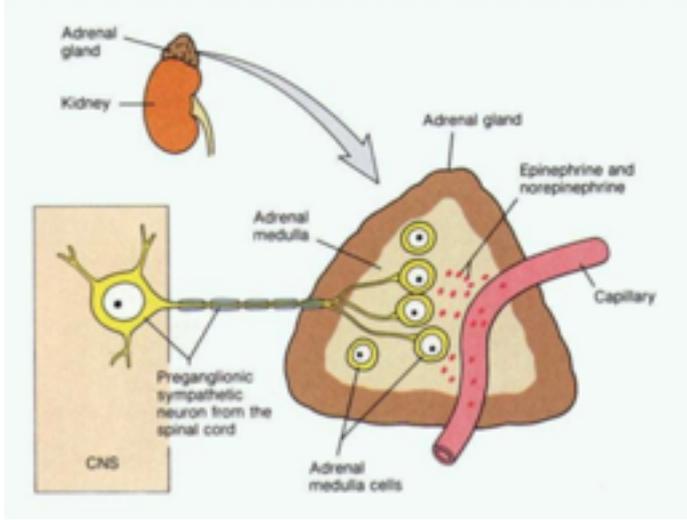
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Adrenal gland: Physiology



Adrenal medulla

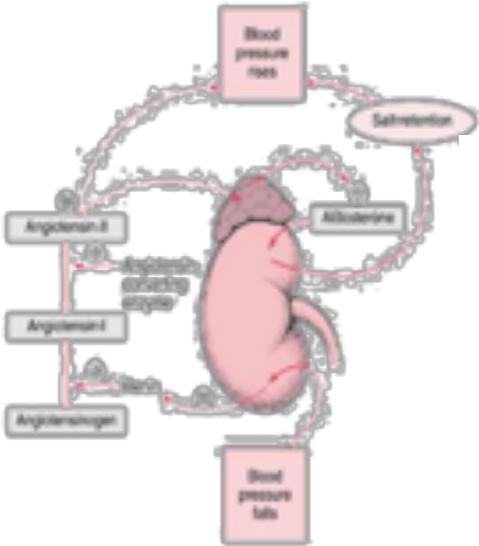
- Part of the vegetative (involuntary) nervous system.
- There are nerve endings of the Sympathikus nervs cube-shaped cells that are tightly filled with small vesicles.
- Vesicles have the ability to bind chromium-containing dyes -> chromaffin cells form adrenaline and norepinephrine, which is stored in chromaffin vesicles

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Adrenal cortex: Mineralocorticoids



Loop of mineralocorticoids

- Aldosterone activates the kidney mineralocorticoid receptor and increases reabsorption of sodium as well as the excretion of potassium in the distal renal tubule
- Is a derivative of progesterone
- Aldosterone is broken down in the liver and excreted via the bile
- Control over ACTH of the pituitary and potassium and sodium levels in the blood

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Adrenal cortex: Mineralocorticoids

Schematic representation of the renin-angiotensin-aldosterone system

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Adrenal cortex: Glucocorticoids

- derivates of progesterone
- Naturally 95% cortisol and 5% cortisone are formed
- Promote the conversion of protein into glucose and glycogen
- Degradation in the liver and excretion via the bile

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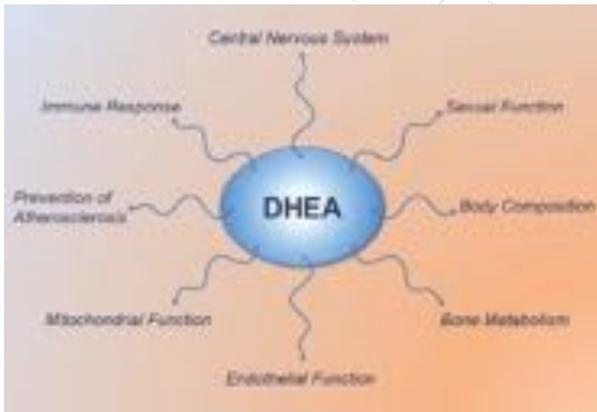
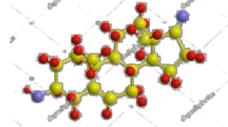
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Adrenal cortex: Steroidhormone

Molecular structure of **DHEA**
(Dihydroepiandrosteron)



- Predominant production of DHEA
- Is a precursor hormone, which is converted into male and female sex hormones
- Highest production between 25-30 living years
- In 80-year-old people only 20% compared to the young adult
- Is considered an "anti-aging" hormone

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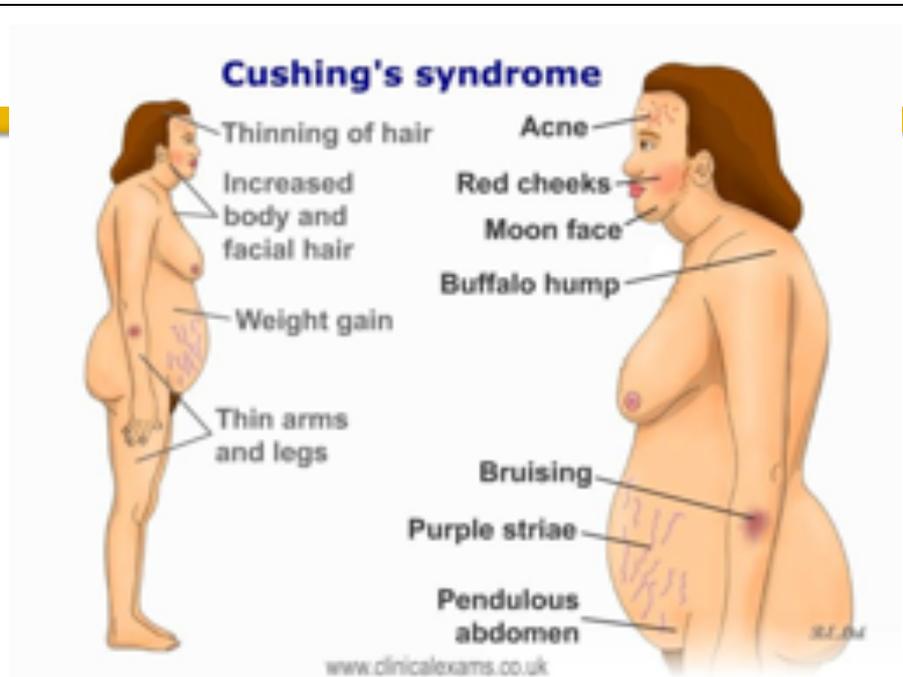
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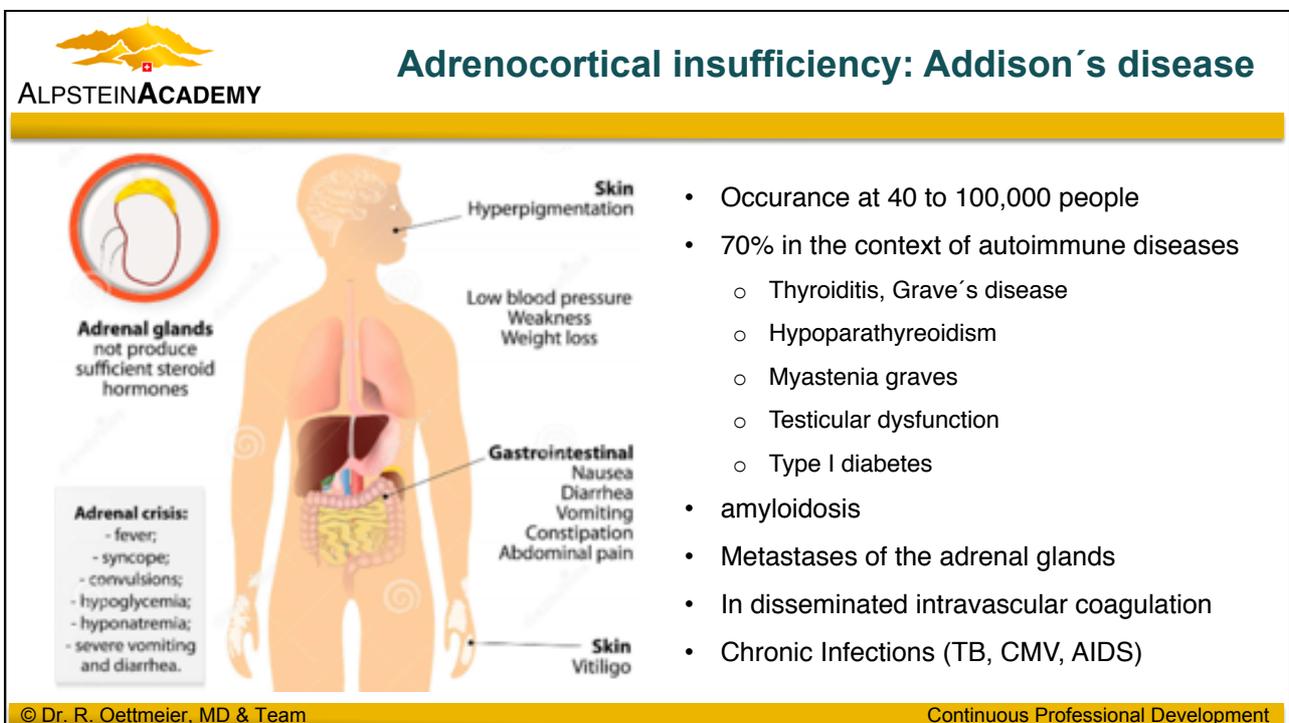
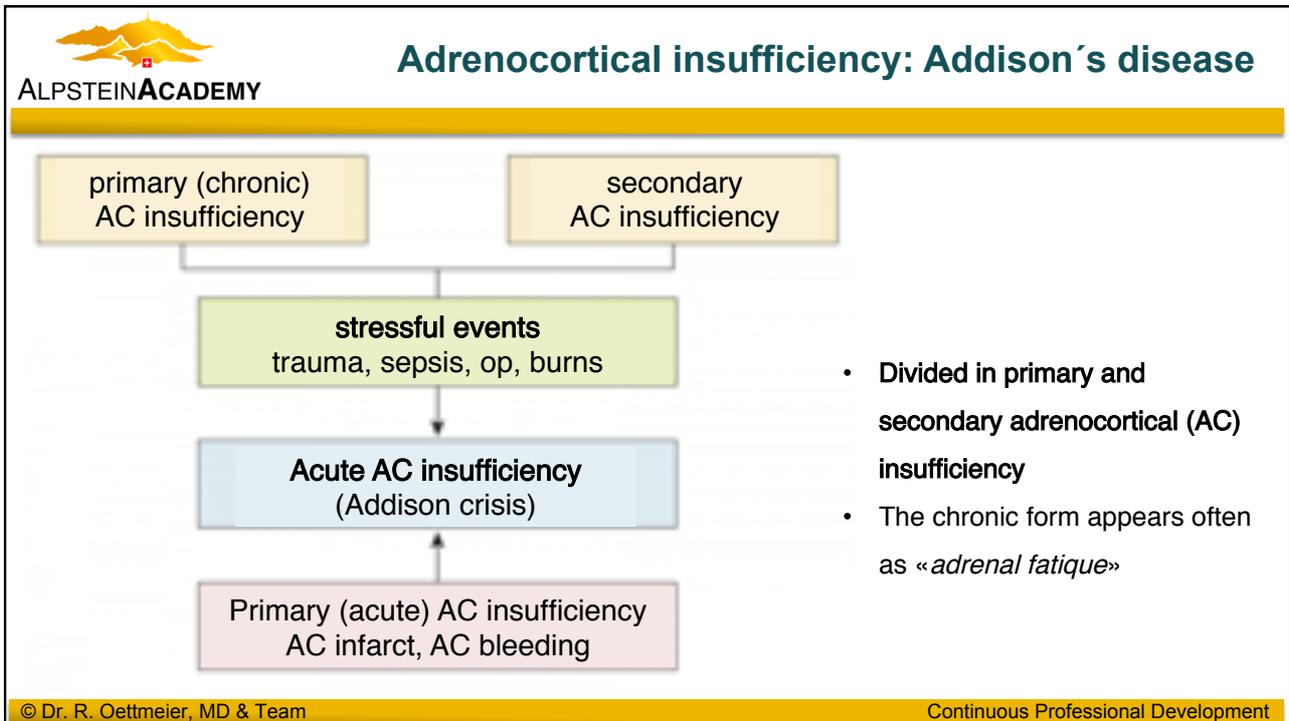
Too much Cortisol: Cushing's disease

Effects of long-term stress and excessive cortisol formation or external supply to the biosystem



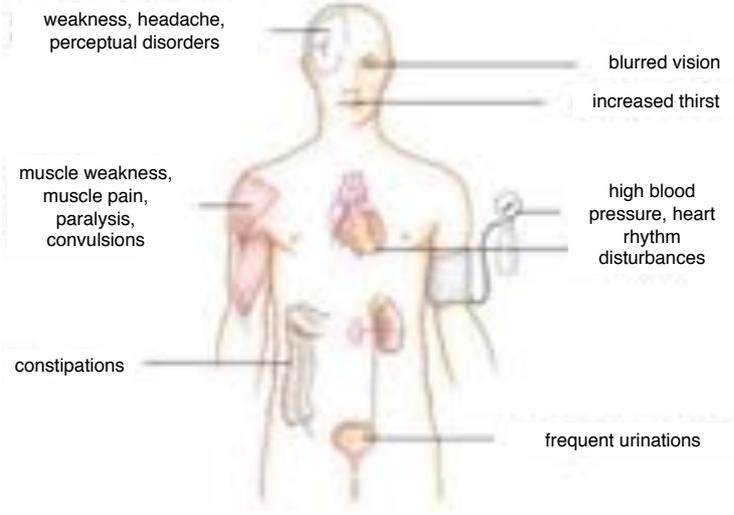
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Excess of mineralocorticoids: Conn's Syndrome



Primary hyperaldosteronism

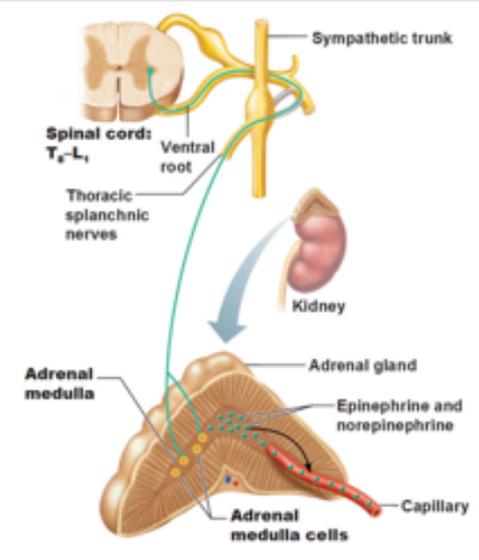
- 5-10% of the cause of hypertension
- It is associated with potassium deficiency, hypernatremia and metabolic alkalosis
- Caused by increased aldosterone production (primarily by adenoma, secondary by deficient in liver cirrhosis)
- Diagnostics via laboratory and MRI
- Therapy by adnectomy and treatment with mineralocorticoid receptor blockers (spironolactone, eplerenone)

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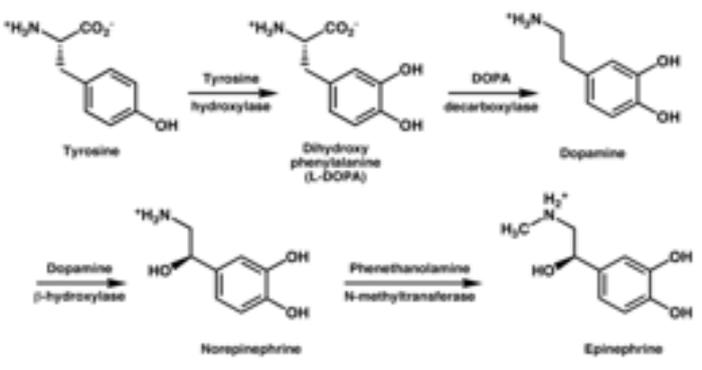
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Adrenal medulla: catecholamines



- Adrenal medulla is caused by the immigration of preganglionic neurons from the neural crest
- Are therefore also called sympathetic Paraganglia
- In the *A cells* (80%) adrenaline is formed, in the *N cells* (20%) norepinephrine



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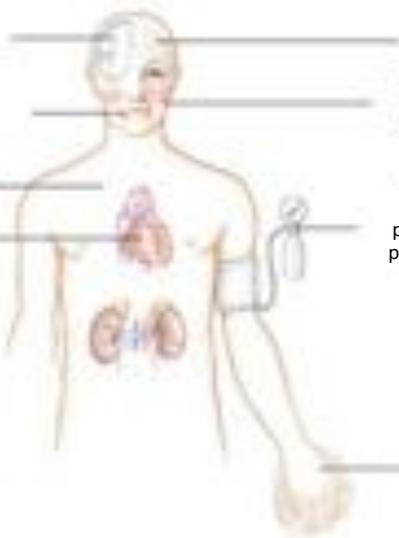
Tumor of adrenal medulla: pheochromocytoma

headache, fear feeling, vertigo

weight loss

pain in the chest

heart palpitation



sweating

paleness and red cheeks

high blood pressure, blood pressure attacks

tremble

Epinephrine and norepinephrine-producing tumors

- 90% in the NN Mark,
- 10% externally 0.5-0.7% of all newly diagnosed hypertension
- Clinical symptoms adjacent

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Chronique fatigue: the creeping adrenal insufficiency



Phase 1: early stage

- The so-called "fight or flight reaction" phase. The body raises its anti-stress response, in order to reduce the stress level initially. Increased cortisol and ACTH levels are the result.

Phase 2: resistance reaction

- Adrenals are increasingly struggling to meet the constant demands for more cortisol. Consequence: Cortisol sinks, whereas ACTH remains high. Unfortunately, as the body prefers cortisol production, it indirectly reduces the synthesis of other important hormones: DHEA, pregnololone, testosterone, and estrogens.

Phase 3: exhaustion

- The body is no longer able to self-regulate to maintain homeostasis. This process can last for several years (as well as the therapeutic regeneration time). It comes to the collapse of the so-called hypothalamic-pituitary axis. Additionally, there are severe imbalances in sex hormones.

Phase 4: collapse, burnout, total exhaustion

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Chronique fatigue: the creeping adrenal insufficiency



Main symptoms

- Fatigue, apathy / mild depression, frequent infections (mostly due to reduced secretion of immunoglobulin A),
- Difficulty concentrating (including blood sugar fluctuations with long-term increased risk of diabetes),
- Inability to lose weight (especially around the waist) despite enormous efforts (including water and salt retention)

Main causes

- Chronic stress (dysstress more like eustress), e.g. at work (bullying),
- Death of a loved one, illness, Relationship problems and more,
- excessive demands, Chronic infections,
- nutritional errors (too much sugar, coffee and consumption individually incompatible - generally possibly even considered as healthy - food),
- Sleep disorders,
- anxiety / congestion,
- Burned out, soul diseases,
- allergies, hypoglycemia

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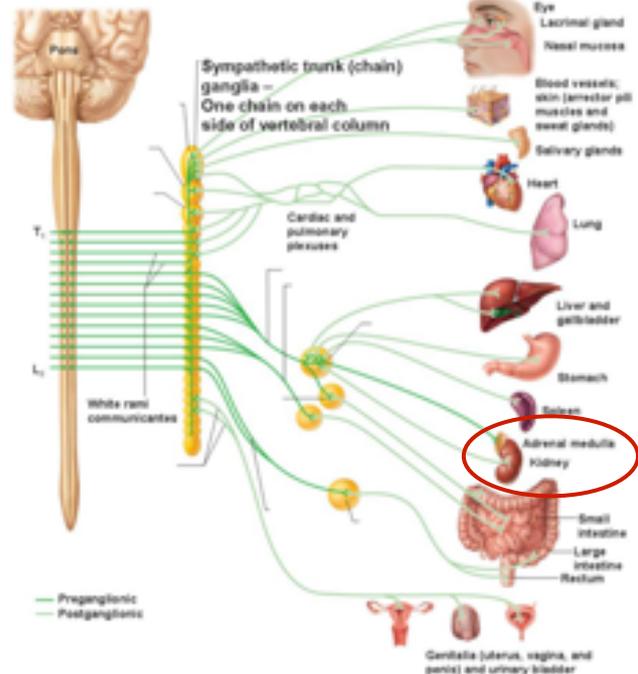
- **Diagnosis of adrenal diseases in the holistic context** (Coupling to meridians and chakras, odontomas, laboratory and imaging diagnostics)

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Adrenal medulla: part of autonomic nervous system

the largest sympathetic ganglia

- The cells are made of modified neurons that have short axons and no nerve processes.
- The adrenal cortex is an endocrine organ and the outer layer is the adrenal cortex while the inner layer is the medulla.
- When stimulated by preganglionic sympathetic fibers from T8-L1, they secrete large quantities of the excitatory hormones **norepinephrine** and **epinephrine** (adrenaline) into nearby capillaries.
- When these two hormones are released in the blood they amplify all of this fight or flight stuff to give you more energy.

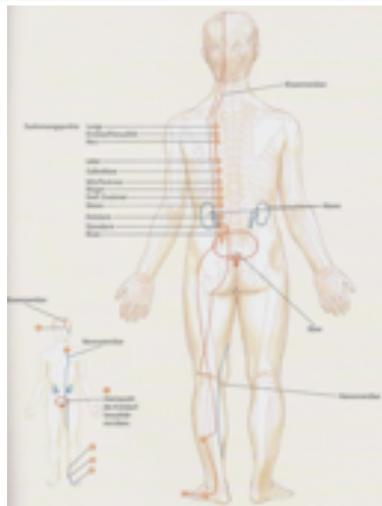


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Adrenal gland and Meridian system of TCM



Meridian: Bladder - Kidney

Belongs to bladder kidney meridian of the **front-rear axis**

Coupling to paired or mediate organs & structures

- Spine, cranio-sacral system
- Pain pattern: bend - stretch
- Segments C0 / 1, C8, Th3, L1 and S1-3
- Sinus frontalis and ethmoidalis
- Sense organ: ear
- Glands: adrenal, pituitary, epiphysis
- Teeth: anterior teeth, wisdom teeth, 9-region

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Adrenal glands and Odontomas

Glands	Heart	Lungs	Stomach	Small Intestine	Large Intestine	Bladder	Uterus	Vagina	Prostate	Testis	Penis	Bladder	Uterus	Vagina	Prostate	Testis	Penis
Organs																	
Teeth																	
Upper Jaw	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Lower Jaw	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Teeth																	
Organs																	
Glands																	
Element	Fire	Earth	Water	Air	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water

Odontomas:
Relationship between
Teeth and Body

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Adrenal glands and Chakras



- Seventh chakra or crown chakra
• Basic principle: Spiritual existence • Body allocation: Cerebrum
- Sixth chakra or forehead chakra
• Knowledge of existence • Face, eyes, ears, noses, cerebellum
- Fifth chakra or throat chakra
• Resonance of existence • Throat area, voice, bronchi, arms
- Fourth chakra or heart chakra
• Abandonment of existence • Heart, lower lung, blood, skin
- Third chakra or manipura chakra
• Shaping existence • Digestion, vegetative NS
- Second chakra or sacral chakra
• Creative reproduction of existence • Reproduction, humor
- First chakra or root chakra
• Bodily existence • Spinal column, bones, teeth, cell structure



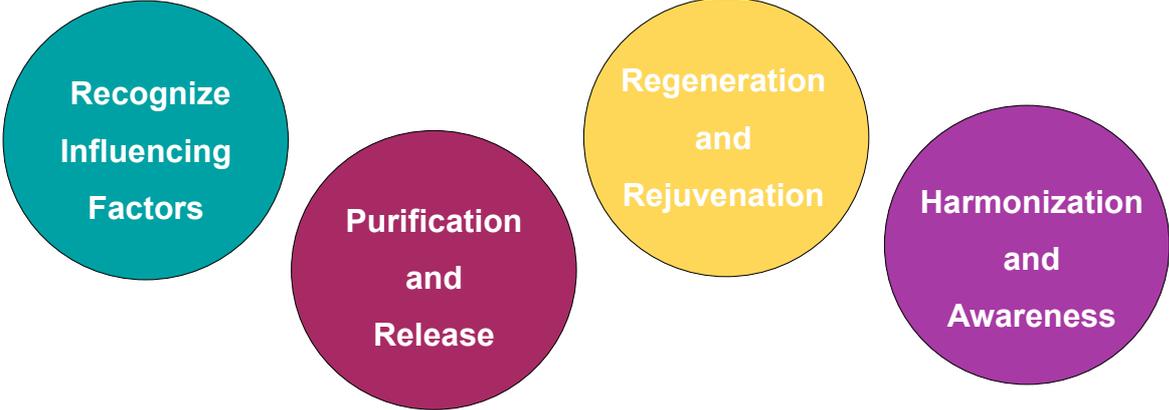
Organ Affiliation: Bladder, Kidney, Urinary Tract, Reproductive System, Skeletal System
central theme: aliveness, reproduction, energy center
Color: Orange
Element: Water **Symbol:** six-leaved lotus **Gems:** amber, carnelian, honey calcite

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The 4 pillars of „Integrative Biological Medicine & Dentistry“

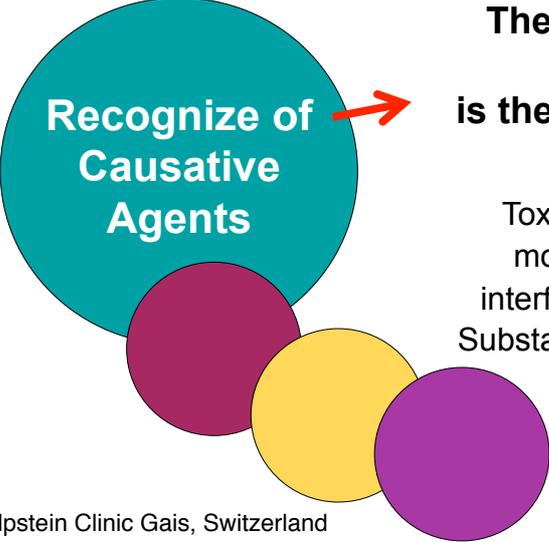


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BIO-logic Medicine in Prevention and Treatment



The knowledge of true reasons to become ill is the 1st stage to all healing and well aging!

Toxic loads (all biological levels), neuro-modulative triggers (inflammatory foci, interfering fields), Malnutrition, Lack of vital Substances, Energy Deficiency, Terrainfactors (Acid-base-houshold, free radicals, building biology, Overstress, Life Style and living conditions

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Factors influencing the adrenal gland

- **Metabolic factors:**
 - nutrients
 - food components
- Foci
- **Autonomic Nervous System**
 - epinephrine, norepinephrine, cortisol
- **Toxins / Radiation:**
 - heavy and light metals
 - radioactivity
 - Organic toxins
- **Psycho-mental problems and stress**

➔

- Holistic anamnesis and examination
- Adequate laboratory including inflammation and vital substances
- thermography
- Multi-element analysis (hair, oligoscan, DMPS mobilization test)
- HRV, 24-h HRV
- Global diagnostics, kinesiology, etc. for the verification of non-measurable loads

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Laboratory diagnosis of adrenal diseases

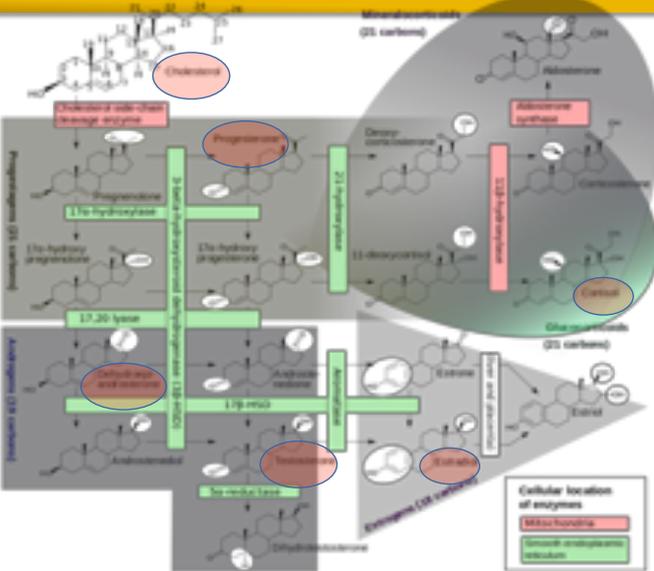
Suspicion diagnosis	Laboratory / Test method
Hypercortisolism (Cushing's Syndrome)	Cortisol and ACTH in the blood (morning value), cortisol profile saliva, dexamethasone inhibition test (DD between pituitary and adrenergic genesis),
Lack of cortisol	Cortisol and ACTH in the blood (morning value), cortisol profile saliva, ACTH test, Na and K.
Hyperaldosteronism (Conn's Syndrome)	Aldosteron in 24-h Urine, Na and K
Lack of Aldosteron	Aldosteron in 24-h Urine + Progesteron, Na and K
Adrenogenital Syndrom	DHEA and Testosteron in the serum, Na and K.
GENERAL	Na and K, cholesterol and subgroups, fatty acid and amino acids profile, cytokines

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The „dance“ of Steroids



Can be measured in the blood and saliva

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            graph TD
            Cholesterol["Cholesterol C27"] --> Pregnenolon["Pregnenolon C21"]
            Pregnenolon --> Progstagene["Progstagene C21"]
            Progstagene --> Glucocorticoide["Glucocorticoide C21"]
            Progstagene --> Androgene["Androgene C19"]
            Androgene --> Oestrogene["Östrogene C18"]
            Progstagene --> Mineralcorticoide["Mineralcorticoide C21"]
            
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Diagnosis in saliva

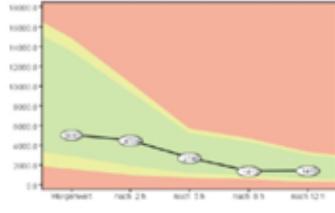
Hormone aus Speichel

DHEA im Speichel 8h	120		45 - 750	ng/L
Cortisol im Speichel 8 h	5.2		9.0 - 20.0	nmol/L
Cortisol im Speichel 10 h	keine Probe		6 - 14	nmol/L
Wir bitten höflichst um Nachsendung des geeigneten Probenmaterials.				
Cortisol im Speichel 12 h	6.8		4.0 - 8.0	nmol/L
Cortisol im Speichel 16 h	2.3		3.0 - 8.0	nmol/L
Cortisol im Speichel 00 h	0.6		1.0 - 3.0	nmol/L

Hormone aus Speichel

DHEA im Speichel 8h	220		45 - 750	ng/L
Cortisol Tagesprofil	-			
Cortisol im Speichel 8 h	1.7		9.0 - 20.0	nmol/L
Cortisol im Speichel 12 h	1.0		4.0 - 8.0	nmol/L
Cortisol im Speichel 16 h	0.2		3.0 - 8.0	nmol/L
Cortisol im Speichel 00 h	0.2		1.0 - 3.0	nmol/L

Cortisol during the day

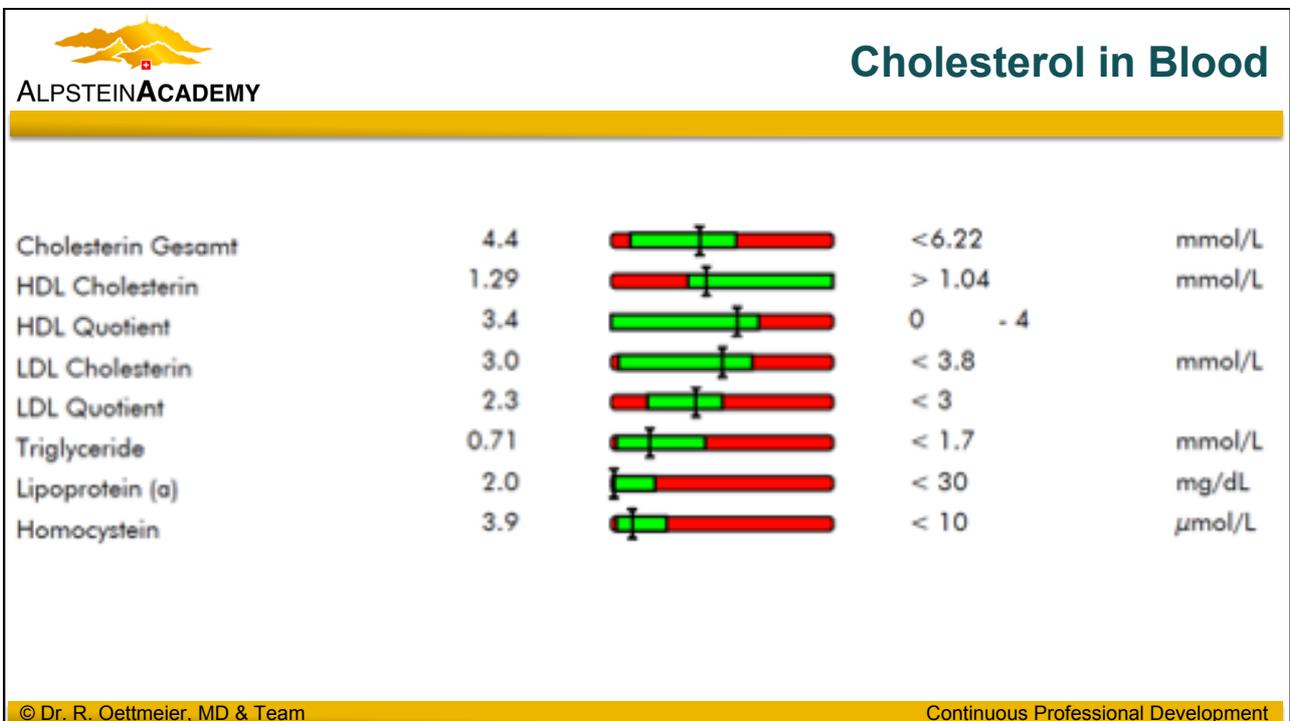
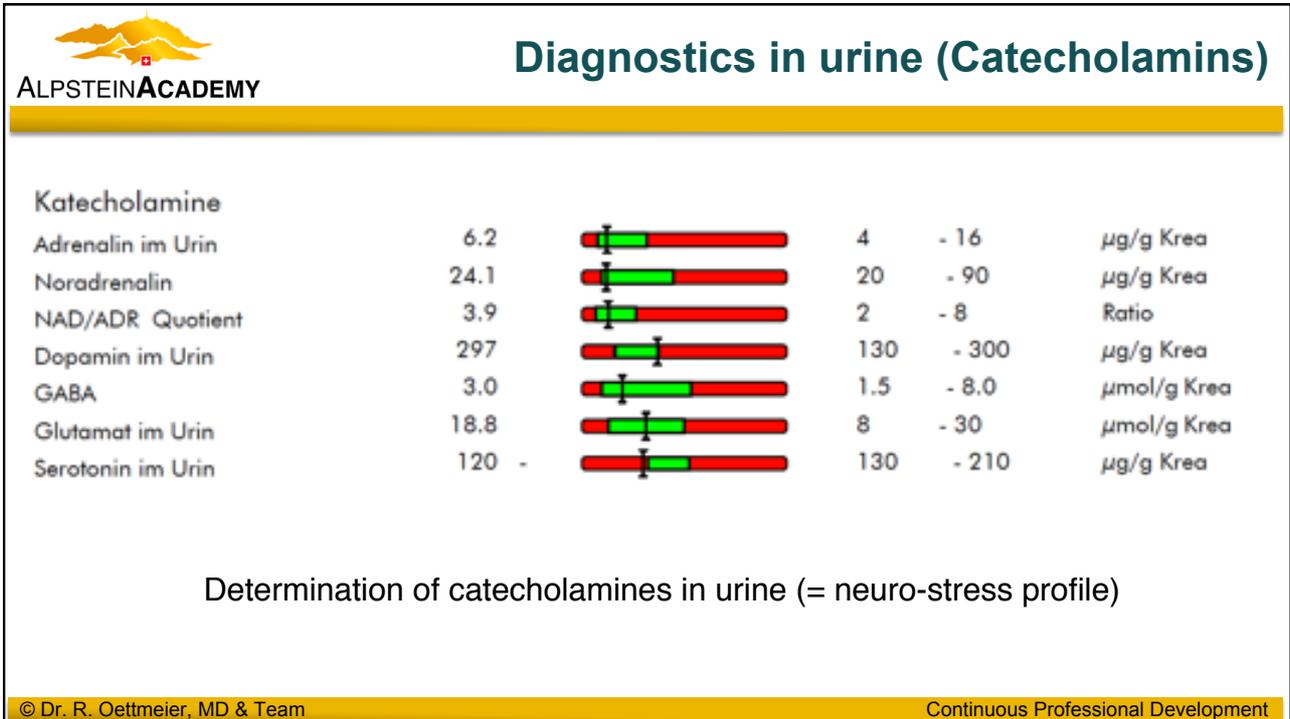


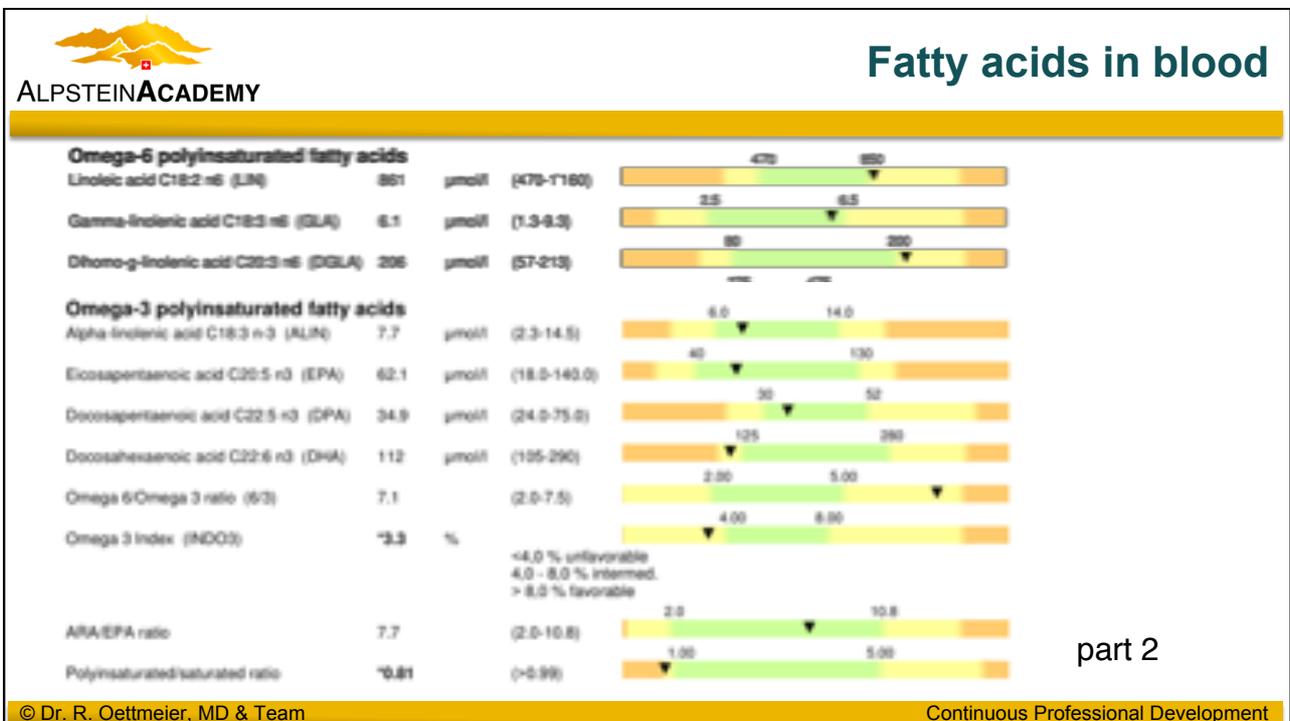
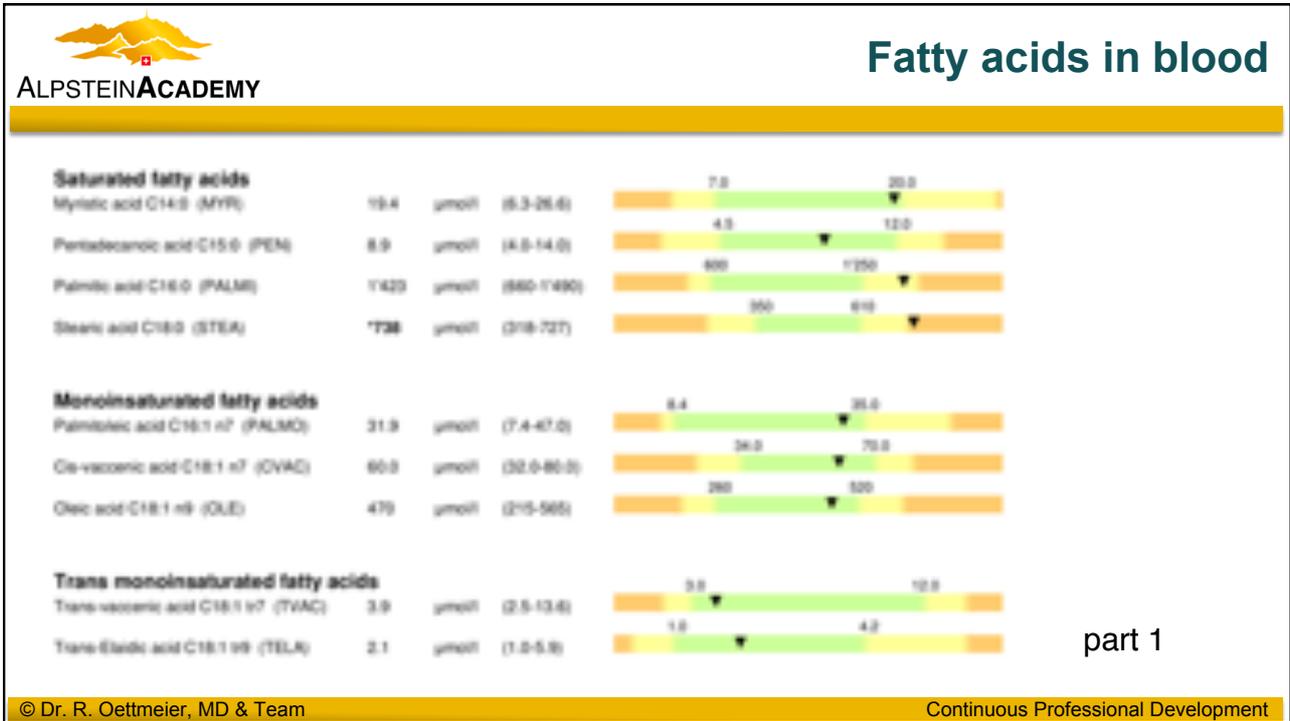
Adrenal cortical insufficiency

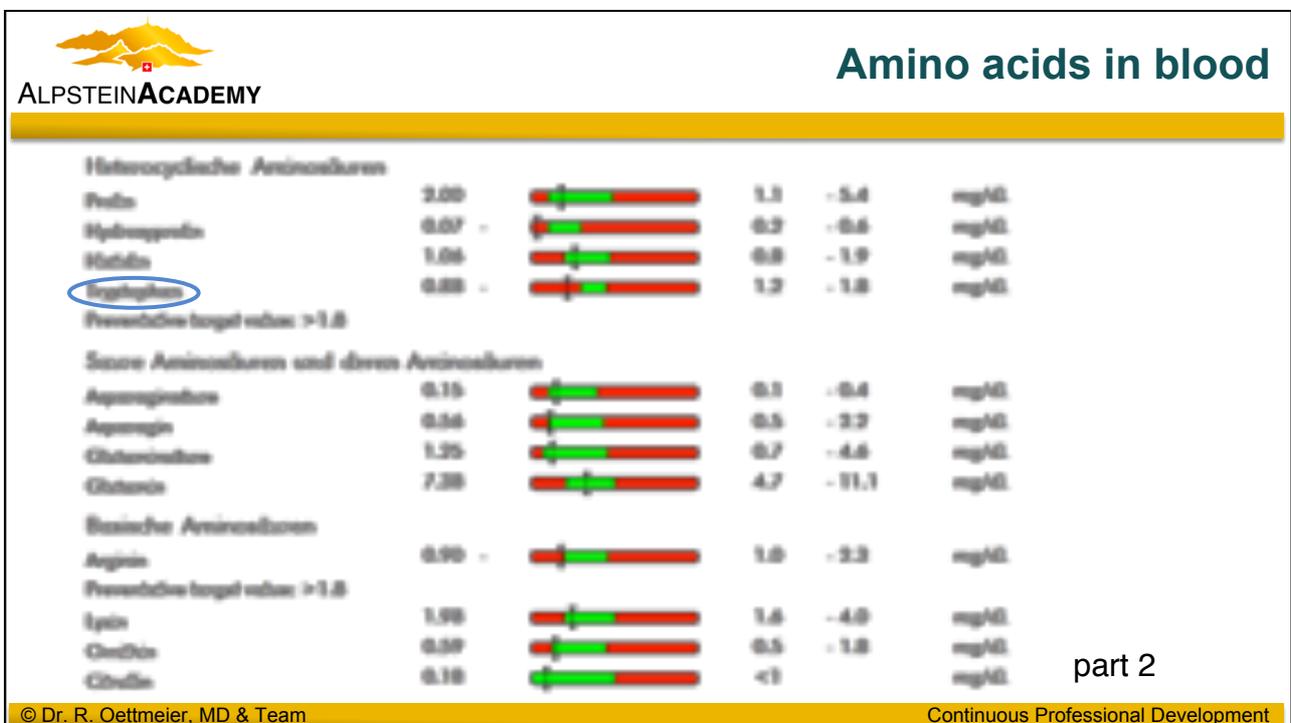
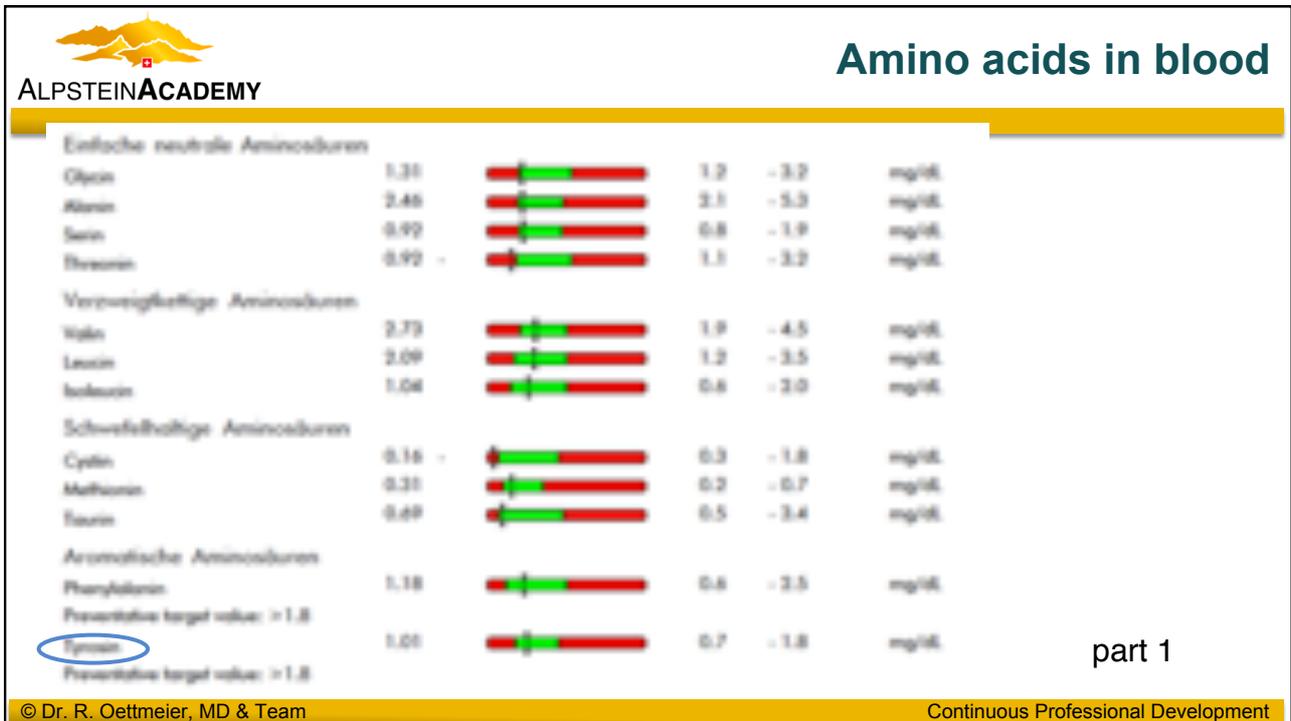
- above partially
- below totally

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Cytokines in blood

Cytokindiagnostik

Interleukin 6	2.2		<3.8	ng/L
Interleukin 1 beta	<2.0		<5	ng/L
Interleukin 10	<5.0		<9.1	ng/L
TNF alpha	8.5 +		<8.1	ng/L
Rantes	63.1 +		<30	µg/L

The normal range <30 is based on the question: "systemic inflammation related to jawbone osteitis/NICO"

The elevated RANTES level may indicate a local inflammatory reaction.



Proinflammatory cytokines incl. RANTES as an indication of NICO = inflammatory jaw osteitis

OPT of the same patient with massive ostitis around implant 45 and beginning at 22

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Adrenal cortex insufficiency: Addison´s disease

Differential diagnosis

Differentiation by laboratory

- (see below)

Imaging

- Sonography
- CT, MRI



Form	Natrium	Kalium	Cortisol	ACTH	Aldosteron	ACTH-Test	CRH-Test	NNR-Antikörper
primary	reduced	elevated	reduced	elevated	reduced	Cortisol no increase	Cortisol no increase ACTH steigt	often positive
secondary	normal	normal	reduced	reduced	normal	Cortisol increases	Cortisol no increase ACTH no increase	negative
tertiary	normal	normal	reduced	reduced	normal	Cortisol increases	Cortisol increases ACTH increases	negative

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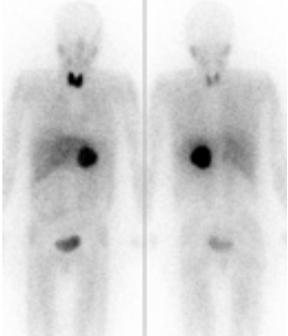
Tumor of adrenal medulla: Pheochromocytoma

Differential diagnosis

Laboratory differentiation

- Epinephrine, norepinephrine, dopamine and vanillin-malic acid in 24-h urine
- Clonidin test (inhibits release of catecholamines)
- Determination of plasma and salivary catecholamines





Imaging

- Sonography
- CT, MRI
- ¹²³Iodine Szintigraphy

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DMPS test: Toxic exposure to heavy and light metals

toxic element	reference range		urine-1	urine-2
	urine-1	urine-2		
aluminium (Al)	< 20	n.s.	n.s.	84,50
arsenic (As)	< 10	n.s.	n.s.	200,00
barium (Ba)	< 100	n.s.	n.s.	70,10
cadmium (Cd)	< 2	n.s.	n.s.	u.s. ng
cobalt (Co)	< 1	n.s.	n.s.	u.s. ng
gold (Au)	< 0,1	n.s.	n.s.	u.s. ng
iodine (I)	< 0,1	n.s.	n.s.	u.s. ng
copper (Cu)	< 100	n.s.	n.s.	2845,50
molybdenum (Mo)	< 50	n.s.	n.s.	80,10
nickel (Ni)	< 2,2	n.s.	n.s.	4,90
potassium (K)	< 0,100	n.s.	n.s.	u.s. ng
platinum (Pt)	< 1	n.s.	n.s.	u.s. ng
silver (Ag)	< 0,1	n.s.	n.s.	6,90
strontium (Sr)	< 500	n.s.	n.s.	n.s.
thallium (Tl)	< 0,1	n.s.	n.s.	u.s. ng
titanium (Ti)	< 1,0	n.s.	n.s.	u.s. ng
tin (Sn)	< 10	n.s.	n.s.	11,60
vanadium (V)	< 1	n.s.	n.s.	u.s. ng
mercury (Hg)	< 1	n.s.	1,90	198,40
cumulative TOX	< 2474,24	1,90		3085,90

	moderate	high	very high
Al	[bar chart]		
As	[bar chart]		
Ba	[bar chart]		
Cd	[bar chart]		
Co	[bar chart]		
Au	[bar chart]		
I	[bar chart]		
Cu	[bar chart]		
Mo	[bar chart]		
Ni	[bar chart]		
K	[bar chart]		
Pt	[bar chart]		
Ag	[bar chart]		
Sr	[bar chart]		
Tl	[bar chart]		
Ti	[bar chart]		
Sn	[bar chart]		
V	[bar chart]		
Hg	[bar chart]		

34-year-old female patient, increasing weakness., Concentration disorders, feels "as if drained", removed before 1 year 8 amalgam fillings

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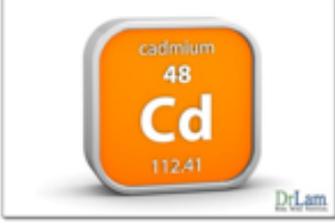
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ALPSTEINACADEMY

Environmental toxins and adrenal fatigue

This Heavy Metal May Be Linked to Adrenal Gland Dysfunction

Share Play



Exposure to cadmium has been linked to cardiovascular and respiratory disease and certain cancers as well as worsening adrenal gland dysfunction. Cadmium exposure can occur as a result of smoking cigarettes, consuming produce grown in contaminated soil, living or working near an industrial site, or occasionally from imported goods made with materials containing the element. New research suggests cadmium exposure may even age your cells prematurely. Aging of cells can increase risk of diseases associated with age, including type 2 diabetes, cardiovascular disease, kidney disease, and cancer.

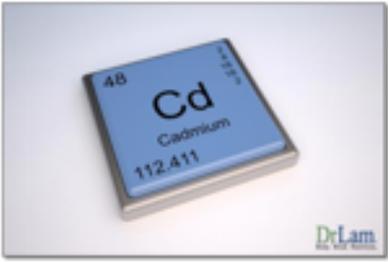
Researchers from George Washington University examined blood and urine from nearly 7,000 adults who were enrolled in the National Health and Nutrition Examination Survey between 1999 and 2002. Ami Zota, assistant professor of environmental and occupational health, led the study.

The researchers purified the DNA in the blood cells and measured the telomeres using a method known as polymerase chain reaction. Telomeres are a little piece on the end of the chromosomes. Every time a cell divides, the telomeres on the chromosomes get a little shorter until the telomere is gone and the cell dies. As the telomeres shorten, the risk of age related diseases increases. The researchers also measured the amount of cadmium in the blood and urine samples and divided participants into four groups based on their cadmium concentrations.

The researchers discovered that the group with the highest concentrations of cadmium, which was still a very small amount, had telomeres that were 6% shorter than the group with the lowest concentrations. This translates to cells that appear to be an average of 11 years older than the individual's chronological age.

The study also looked for a link between lead levels and telomere length, but no connection was found.

Zota explains that effects of cadmium were seen in people with levels a fraction of the World Health Organization levels of concern, suggesting that no amount of exposure to the heavy metal is safe.



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ALPSTEINACADEMY

Environmental toxins and adrenal fatigue

Hum. Toxicol. Environ. Res. 2014 Jun;18(1):1-14. doi: 10.1007/s12011-014-0023-7. Epub 2014 Jun 6.

Perspectives in endocrine toxicity of heavy metals—a review.

Raza SY¹.

© Author information

Abstract
An attempt has been made to review the endocrine/hormonal implications of a few environmentally significant metals, viz. lead, mercury, cadmium, copper, arsenic and nickel, in man and animals. Special emphasis has been given to the adrenals, thyroid, testis, ovary and pancreas. Toxic metals can cause structural and functional changes in the adrenal glands. Their effects on steroidogenesis have been reviewed. It has been reported that thyroid hormone kinetics are affected by a number of metallic compounds. Occupational exposure to a few of these metals can cause testicular injury and sex hormone disturbances. Protective effects of a few antioxidants on their reproductive toxicity have also been discussed. Information gathered on female reproductive toxicity of heavy metals shows that exposure to these metals can lead to disturbances in reproductive performance in exposed subjects. Certain metals can cause injury to the endocrine pancreas. Exposure to them can cause diabetes mellitus and disturb insulin homeostasis. The need to develop molecular markers of endocrine toxicity of heavy metals has been suggested. Overall information described in this review is expected to be helpful in planning future studies on endocrine toxicity of heavy metals.

Environ Sci Technol. 2009 Aug 14;43(8):4014.

Suppressed adrenocortical responses and thyroid hormone levels in birds near a mercury-contaminated river.

Wada H¹, Cristol DA, McHale JM, Hopkins WA.

© Author information

Abstract
Much of the research on sublethal, adverse effects of mercury (Hg) has focused on impairment of neurological function and reproduction in fish and fish-eating vertebrates. Here we examined the associations between Hg and endocrine function (adrenocortical responses and plasma thyroid hormone concentrations) of insectivorous tree swallow nestlings adjacent to a Hg-contaminated river and nearby reference rivers in Virginia. Nestlings from the contaminated sites had blood Hg concentrations that exceeded those from the reference sites by more than an order of magnitude (354 +/- 22 vs 17 +/- 1 ppb wet weight). A regression of age and Hg concentrations suggested dietary Hg at the contaminated sites exceeded the nestlings' capacity to eliminate Hg through deposition into growing feathers. Although blood Hg concentrations among nestlings at the contaminated sites were lower than those typically associated with abnormal behavior or altered physiology in young birds, adrenocortical responses, plasma triiodothyronine, and thyroxine concentrations were suppressed, relative to reference levels, by the end of the nesting period. These results suggest that (1) Hg may disrupt endocrine systems of terrestrial avian young and (2) adverse effects of Hg on endocrine systems may be most evident once endocrine axes are fully developed.

Hum. Toxicol. 2009 Jun 10;78(1):59-66. Epub 2009 Mar 6.

Effects of Cu on plasma cortisol and cortisol secretion by adrenocortical cells of rainbow trout (*Oncorhynchus mykiss*).

Gagnon A¹, Jaramila C, Stotela A.

© Author information

Abstract
Fish are exposed to multiple stressors, often acting concurrently, in their environment. To evaluate the potential of Cu to act as a chemical stressor, rainbow trout (*Oncorhynchus mykiss*) were exposed to Cu (30 or 80 microg/l) for 30 days in the laboratory and they were subjected to a physical stressor (1 min air exposure) before sampling. Physiological stress indicators in the whole fish as well as cortisol secretion by adrenocortical cells in vitro were measured. Fish exposed to Cu had a lower condition factor, hepatosomatic index, plasma glucose, hepatic glycogen and gill Na⁺/K⁺-ATPase activity compared to controls. Exposure to Cu did not have an effect on basal plasma cortisol (fish sampled without air exposure stress) however, the air exposure-induced increase in plasma cortisol was lower in fish exposed to Cu. Cortisol secretion stimulated by ACTH in vitro was greater in adrenocortical cells isolated from fish exposed to Cu in vivo but in vitro exposure to Cu consistently impaired cortisol secretion. Our results indicate that Cu at high concentrations disrupts cortisol secretion through a direct toxic effect on adrenocortical cells while low concentrations resulting from a 30-day exposure to environmentally relevant Cu concentrations enhances cortisol secretion in response to ACTH in vitro.

Indian J Exp Biol. 2009 Jun 47(7):537-48.

Endocrinal toxicity of industrial solvents—a mini review.

Verma V¹, Raza SY.

© Author information

Abstract
Endocrine system can be affected by various organic compounds. The review describes the effects of major industrial solvents on adrenal, thyroid and parathyroid glands in man and experimental animals. Further, their toxicity in pancreas, pituitary, testis and ovary has also been discussed. An attempt has been made to offer a historical and general information on solvent toxicity in endocrine glands. Possible mechanisms, in brief, have also been discussed. Endocrine toxicity caused by industrial solvents deserves more attention than hitherto paid. An understanding of hormonal disorders caused by industrial solvents will be important from occupational health point of view.

From pubmed database

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Acid-Base-Analysis






EPOC System (Fa. Siemens)

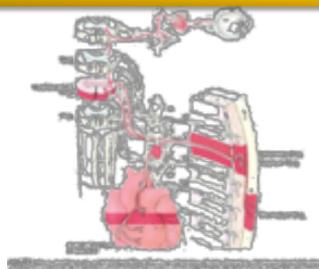
Analyte	Result	Reference range	Critical range	Reportable range	Status
pH	7.488	7.350 - 7.450	5.500 - 9.000	6.500 - 8.000	High
pCO2	32.8 mmHg	35.0 - 48.0	4.0 - 251.0	5.0 - 250.0	Low
pO2	70.3 mmHg	83.0 - 108.0	4.0 - 751.0	5.0 - 750.0	Low
Na+	135 mmol/L	136 - 146	84 - 181	85 - 180	Low
K+	4.9 mmol/L	3.5 - 4.5	0.5 - 13.0	1.5 - 12.0	High
Cl-	100 mmol/L	98 - 107	84 - 141	85 - 140	
Ca ⁺⁺	1.17 mmol/L	1.15 - 1.33	0.30 - 5.00	0.25 - 4.00	
Glucose	7.9 mmol/L	4.1 - 5.5	1.0 - 38.8	1.1 - 38.5	High
Lactate	3.46 mmol/L	0.96 - 1.39	0.30 - 21.00	0.30 - 20.00	High
Creatinine	0.88 mg/dL	0.51 - 1.19	0.30 - 16.00	0.30 - 15.00	
Hct	36 %	38 - 51	9 - 70	10 - 75	Low
Hgb	12.2 g/dL	12.0 - 17.0	2.3 - 26.0	3.3 - 25.0	
dHCO3-	24.9 mmol/L	21.0 - 28.0	0.0 - 86.0	1.0 - 85.0	
eTCO2	25.9 mmol/L	22.0 - 29.0	4.0 - 51.0	5.0 - 50.0	
BE(ecf)	1.6 mmol/L	-2.0 - 3.0	-31.0 - 31.0	-30.0 - 30.0	
BE(b)	1.9 mmol/L	-2.0 - 3.0	-31.0 - 31.0	-30.0 - 30.0	
cSO2	95.3 %	94.0 - 98.0	-1.0 - 101.0	0.0 - 100.0	
AGap	10 mmol/L	7 - 16	-15 - 96	-14 - 95	

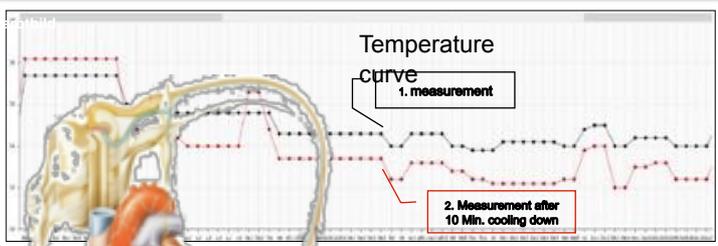
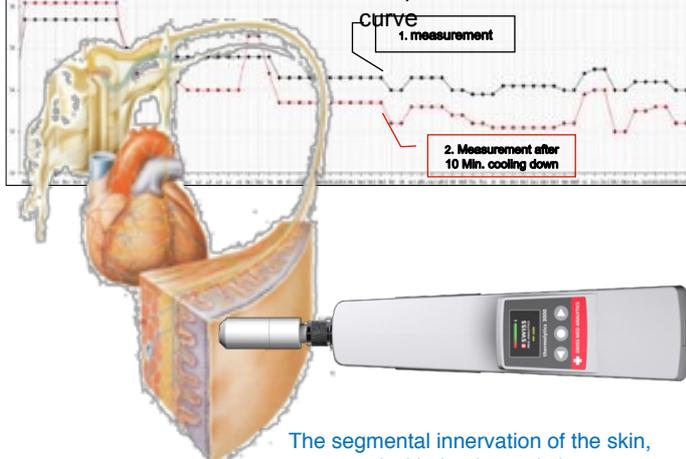
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The diversity of reflexology



The segmental innervation of the skin, measured with the thermolytics-3000

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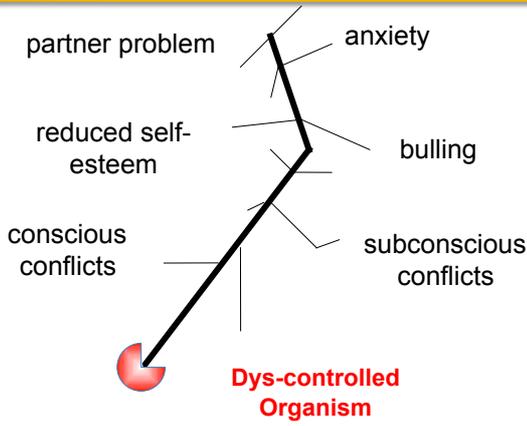


Too much stress



Exzessiver negativer Stress führt zum Crash des BIO-computers

from: "Say YES to LIFE..." from Reuter / Oettmeier / Vizkelety



Deformed "antenna" in the basic system and VNS due to negative emotions

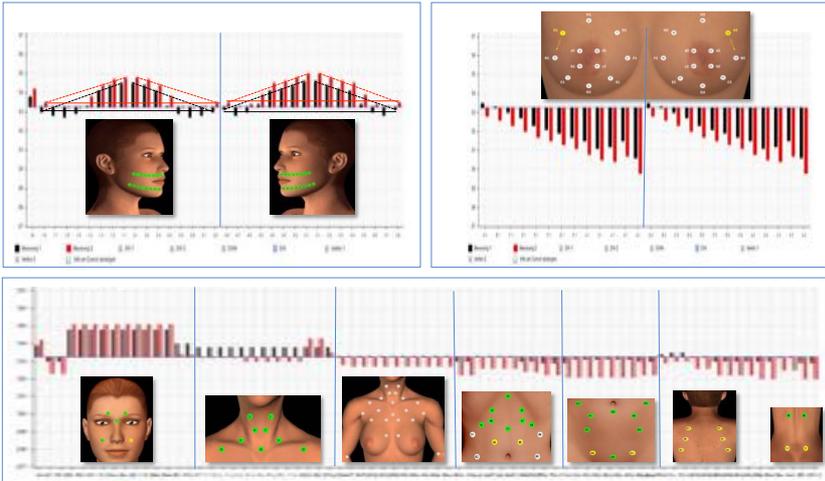
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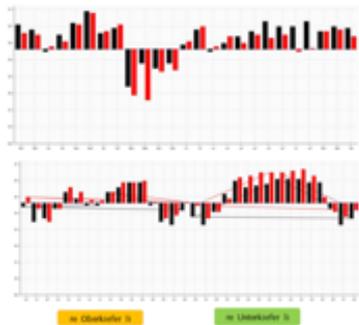


Physiological ideal thermogram of dynamic regulation and case study

whole body profile captures teeth, breast, head, thorax, abdomen and back



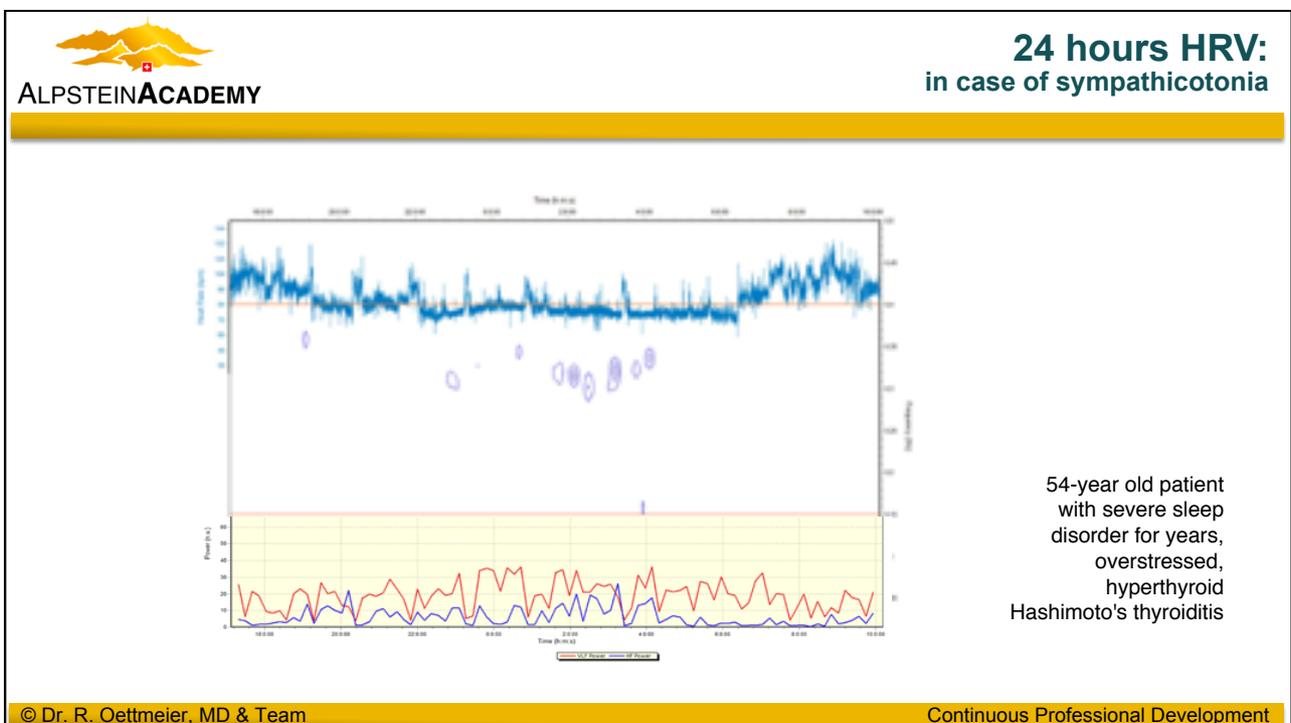
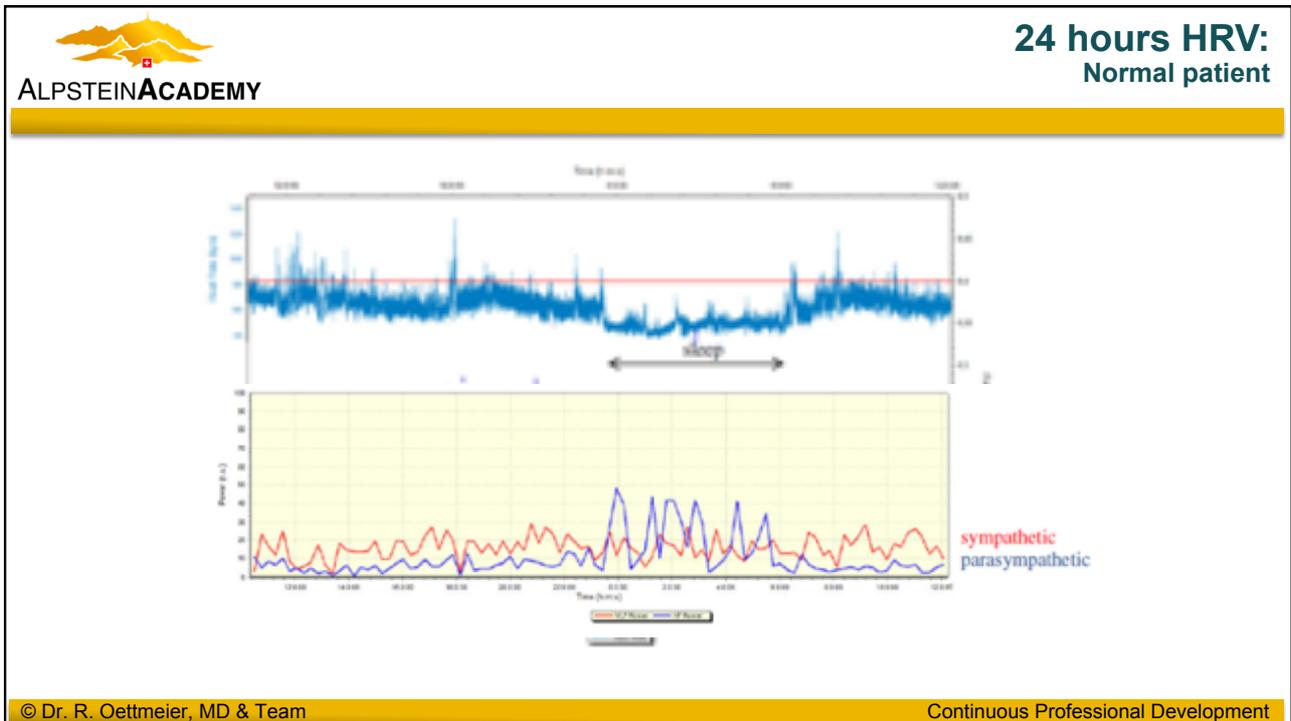
Black bar, 1st measurement; **red bar** 2. Measurement after 10 minutes of cooling

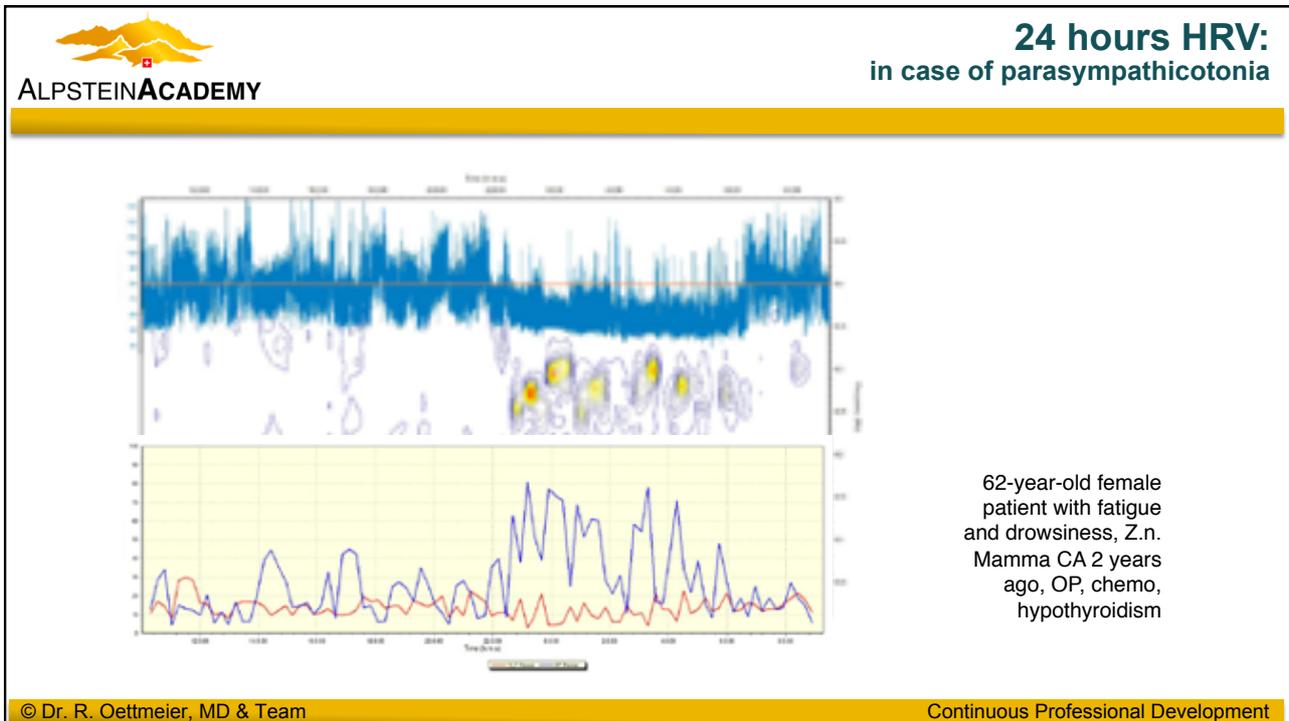


Example of a patient with chronic fatigue, titanium implants, front top, 3 amalgam fillings

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ALPSTEINACADEMY

content

3

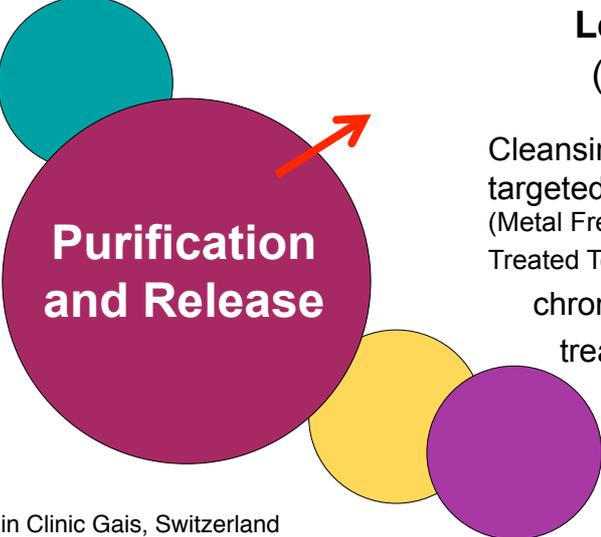
- **Approved holistic-biological therapies in adrenal gland diseases** (causally oriented therapy with supplementation, excretion and de-poisoning, BIO-IN2 neural therapy, psycho-somatic, wholeness harmonization)

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 **ALPSTEINACADEMY**

BIO-logic Medicine in Prevention and Treatment



Purification and Release

Let loose all inner waste
(of body, mind and soul)

Cleansing of inner organs and intestines, targeted detoxification and tooth sanitation (Metal Free Restoration, Removal of Root Canal Treated Teeth & Jaw Cavitations), removal of chronic inflammations, holistic pain treatment, BIO-IN² neural therapy, psycho-mental detox and emotional relief ...

by Alpstein Clinic Gais, Switzerland

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 **ALPSTEINACADEMY**

Detox instead of Intox!

- **Testing of toxic load and intestinal situation** (dark field microscopy, stool analysis, DMPS mobilization test, Oligoscan, hair multielemental analysis)
- **General Detox Measures**
- **Specific Removal and Detox Techniques**
 - Liver cleansing, fasting, diet, colonics
 - Detox with biological remedies (plants, homotoxicologics, homeopathic remedies, Spagyric, anthroposophic and isopathic remedies)
 - Whole body hyperthermia, Sauna, IR-cabine
- **„psycho-mental detox“ and Selfcare**

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Detoxification orally:
heavy and light metals

ALPSTEIN ACADEMY

- Algae (Chlorella, 3x3-6)
- Antioxidants (Vitamin C 1-2g, Zinc 15-30 mg, Selenium 200-600 µg)
- Organ supporters (Taraxacum comp., Solidago comp., Hepar suis, Ren suis, Mucosa comp.)
- Intestinal Health -> “blotter effect” (isopathic up-building, probiotics, L+lactic acid, Actovomin, Regulat Niemeyer, Paracelsus diet)
- Chelation (Dimaval caps., Pleo-Chelate drops)
- Specific nervous system detox with Coriandrum and Allium ursinum

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**Detoxification orally: organic
toxins and Xenohormones**

ALPSTEIN ACADEMY

- Antioxidants (Vitamin C 1-2g, Zinc 15-30 mg, Selenium 200-600 µg)
- Organ supporters (Taraxacum comp., Solidago comp., Hepar suis, Ren suis, Mucosa comp.)
- Intestinal Health -> “blotter effect” (isopathic up-building, probiotics, L+lactic acid, Actovomin, Regulat Niemeyer, Paracelsus diet)
- In-saturated fatty acids
- Medical Carbon (Myrrhinil intest 2-3x2)
- Lava Stone Powder (Zeolith 2-3x2 caps.)
- Spagyrics
- Nosode drops

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Biological detox therapy

the American way to clean the body and activate appropriate organs

- **Hevert Detox Lymph**
 - Relieves symptoms of lymphatic system dysregulation
- **Hevert Detox Liver**
 - Relieves symptoms of liver & gallbladder dysregulation
- **Hevert Detox Intestinum**
 - Relieves symptoms of upset stomach and indigestion
- **Hevert Detox Kidney**
 - Relieves symptoms of kidney and urinary tract
- **Hevert Stress Relief**
 - Add when stress symptoms present



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Proven detoxification measures

- **External Applications:**
Baths, sauna, wraps, Kneipp, oil and honey massages
- **Colon cleansing:**
Klyso, medical intestinal lavage (CHT), coffee and oil enemas
- **Diet:**
Fasting, deriving diets
- **Infusions:**
Special Infusions, Procaine Base, ProcCluster®, DMPS, EDTA
- **Organ stimulating remedies:**
Phytotherapy, Spagyrics, Homotoxicologics, Algae, charcoal



Colon
Hydromat
comfort Fa.
Hermann AB

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Especially developed from us ...

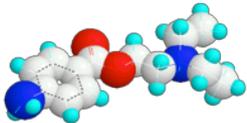
BIO-IN² Neural therapy

=



Words have the power to heal.





natural **I**njectables + healing **I**nformation + neural therapy with **P**rocaine

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Special injection
adrenal gland / kidney

- **Bladder 23 (mainpoint 1)**
 - 1,5 fingerbreadth beside lower margin processus spinosus L2
 - Action on adrenal gland, Hypophysis, bone
 - Anabolic point
- **Important additives:**
 - HEVERT Calmvalera comp.
 - Gl. Suprarenalis (Injeel, WALA)
 - Hypophysis suis
 - Latensin (Bac. cereus) D6
 - Ubichinon comp. Heel
 - ev. Deca Durabolin (anabolic)

Chronic
fatigue,
Burnout,
Cancer,
general
Chronicity

-

Stimulation
of adrenal
gland and
kidneys

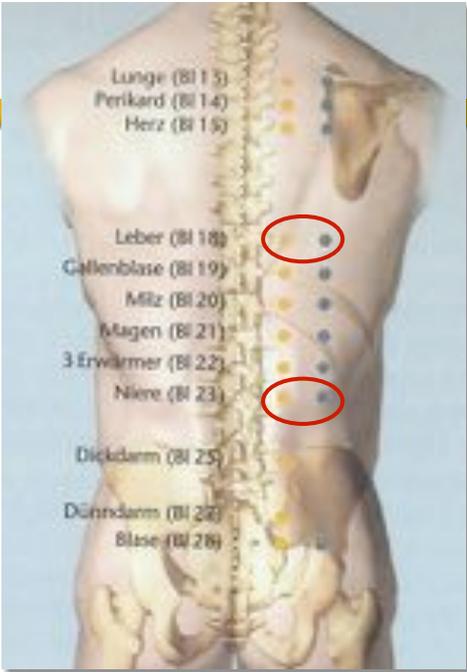



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Segmental Injection



often indicated in case of chronic fatigue

- **SHU MU Points**
 - Are located 1,5 and 3 fingerbreadth behind the lower edge of spinous process (= bladder meridian)
 - To influence inner organs and functions

- Lunge / Lung
- Milz / Spleen
- Perikard / pericard
- Herz / heart
- Leber / Liver
- Magen / Stomach
- Gallenblase / Gall bladder
- Niere / kidney
- Blase / bladder
- Dickdarm / large intestine
- Dünndarm / small intestine

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ALPSTEIN ACADEMY

Special injections for adrenal support



Therapeutic Intervention 1:
Bilateral paraspinal injections:

- Hevert® Calmvalera™ Comp. Rx
- Hevert® Hepar Comp. Rx
- Hevert® Lymphaden™ Comp. Rx



The American way ...

Supported by





Therapeutic Intervention 2:
Adrenal subcutaneous injections; "circling the dragon" with Hevert® Calmvalera™ Comp. Rx

See also the following movie with instruction:
<https://spaces.hightail.com/receive/1adrPrmsS0>

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Holistic Physical Medicine





- 1. Using Nerve Pathways and Reflexing Zones**
 - Manual therapy, special Massage
- 2. Using the vegetative Nervous System**
 - Heart-Sound Therapy
 - Myoreflex Treatment, Breathing Techniques
- 3. Using Somatotopies and complex Connections**
 - Acupuncture / Acupressure, Laser Light
 - „Reflexing Zone“-Massage, Osteopathy, Dorn and Breuss Technique
- 4. Using the large Intestine**
 - Colon Hydro Therapy, Enema (with coffee or oil)
- 5. Using higher Temperature**
 - Whole Body Hyperthermia
 - Local deep Hyperthermia (Indiba, I-therm)

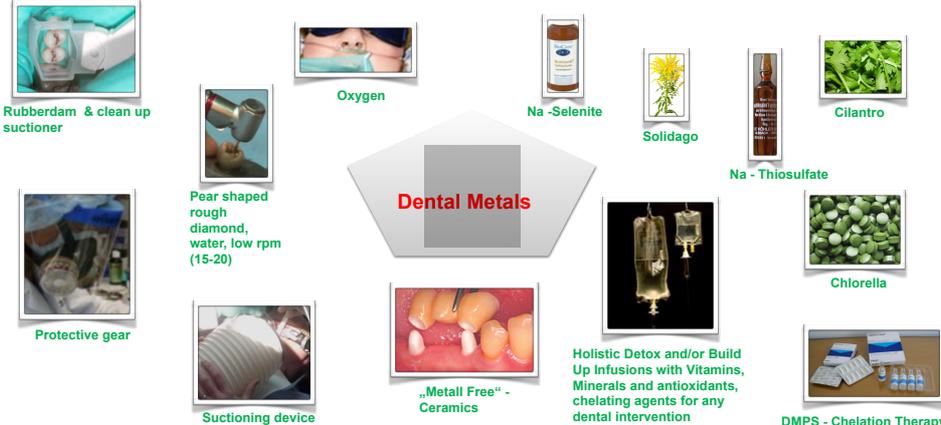
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Protective measures for metal removal & detoxification

! Interdisciplinary work between Doctor and Dentist !



Dental Metals

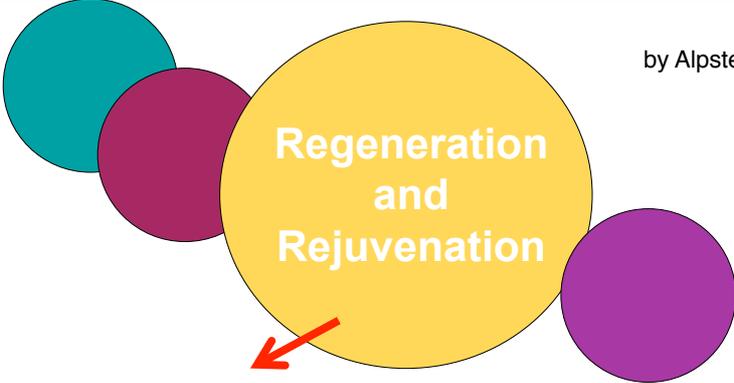
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 **ALPSTEINACADEMY**

BIO-logic Medicine in prevention and treatment

by Alpstein Clinic Gais, Switzerland



Regeneration and Rejuvenation

Biostimulation and –regulation by the use of natural remedies and methods

Intestinal Health by Pre- and Probiotics, Homeopathy, Isopathy, Spagyrics, Supplementation, Phytotherapy, Organ-cell-extracts, Hyperthermia, physical Treatments, bioidentical Hormones, BIO-IN² Injection Therapy, proper function of bite and mastication

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 **ALPSTEINACADEMY**

Principles for up-building adrenal glands

1. Stimulation of regenerative capacity of inner organs (*esp. liver, kidney*)
2. Vitamins, minerals, good fats and trace elements
3. Essential amino acids and good fats
4. Stabilization and optimization of intestinal function
5. Individually dosed bio-identical hormones (*esp. DHEA, Pregnenolone*)
6. Organopeptides and autologous blood (homing effect according to Prof. Blobel), PRP
7. Psycho-emotional stimulation and relief of the organs (e.g., via BIO-IN² neural therapy)
8. Bioenergetic Stimulation (Vital Field Therapy)

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ALPSTEIN ACADEMY

Healthy food for the adrenals



SPECIAL in adrenal insufficiency

- MEIDEN: sugar, gluten, caffeine, dried fruit, white flour
- Lots of drinking: tea, water, pinch of herbal or Himalayan salt
- More protein and fats: Build-up amino acids, protective fats optimized for fatty acid profile, avocados, coconuts, nuts, seeds and sprouts are favorable
- Nutritious foods: bone stock, algae
- Strengthen the intestines: chamomile and sage tea, probiotics, fermented drinks
- Prebiotics: flaxseed, artichoke, onion, tobinambur
- Take note: especially a powerful breakfast is important

General

- Avoid allergies
- Healthy food culture
- A lot of fruits and vegetables
- Organic farming
- Avoid fast food

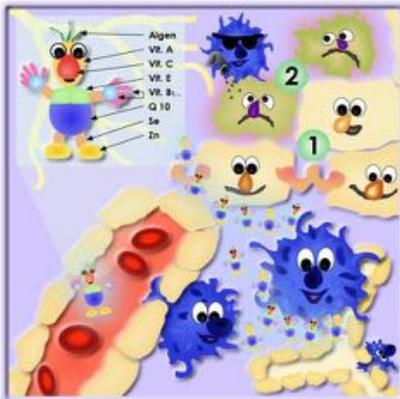
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ALPSTEIN ACADEMY

Orthomolecularia for the adrenals



from: "Say YES to LIFE..."
from Reuter / Oettmeier /
Vizkelety

- Magnesium
- Selenium, Zinc
- Vitamin B5
- Vitamin C
- Beta Carotene
- Folic acid
- fat- and amino acids
- DHEA (10-30 mg)
- Pregnenolon (25-50 mg)



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Plant substances for the adrenal glands







Blackcurrant (*ribes nigrum*): Flavonoglycosides of Aglyka Isorhamnetin, myricetin and quercetin, including astragalin, isoquercitrin and rutoside, promotes cortisol production of AG
daily dose: 2-3x 5 drops of mother tincture

Chia Seeds and Oil: Contains high concentration of omega-3 fatty acids, has a stimulating effect on the metabolism, antioxidant and anti-inflammatory
Ingestion: 2x daily 1 tsp. of powder

Ashwagandha is a plant widely used in Ayurvedic medicine. Has the ability to reduce stress and anxiety. daily dose: 300-500 mg

Ginkgo tree (*Ginkgo biloba*) for the treatment of adrenal fatigue according to TCM known besides the Chinese Rehmannia herb
daily dose: 2-3x 5 drops of mother tincture

Chinese caterpillar fungus (*Cordyceps sinensis*) Scientifically, it has been proven on the basis of animal experiments that the medicinal mushroom stimulates the body's own production of corticosteroids, ie the adrenal gland activates daily dose: 2-3x 1 capsule

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Schüssler salts for the adrenals

- **No. 2: Calcium phosphoricum** (stability, relaxation)
- **No. 3: Kalium jodatatum** (exhaustion, weakness, Hypothyreosis, source for iodine)
- **No. 5: Kalium phosphoricum** (relaxation, weakness, for better sleep)
- **No. 8: Natrium chloratum** (regulation water household)
- **No. 22: Calcium carbonicum** (Burnout, overstress)

- **Approved combination:** over 4 weeks 5 tab. of each daily
- additionally:
 - No. 7: Magnesium phosphoricum as „hot 7“ for additional relaxation



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Homeopathy for the adrenals

1. Single remedy after constitutional analysis
2. Anthroposophic remedy
 - Glandula suprarenalis WALA
3. Homeopathic complexes
 - HEVERT stress relief tablets
 - Cimicifuga racemosa 4X, Cocculus indicus 6X, Cypripedium pubescens 6X, Ignatia amara 6X, Liliium tigrinum 6X, Passiflora incarnata 3X, Platinum metallicum 8X, Valeriana officinalis 2X, Zincum valerianicum 4X
 - Phytocortal (Steierl Pharma GmbH)
 - Celandine (Chelidonium majus), D5, Daisy (Bellis perennis), Yams root (Dioscorea villosa). D5



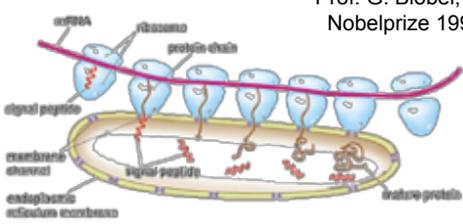

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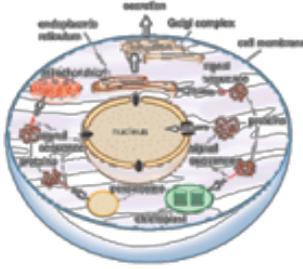

Organotherapy by using the Homing Effect

Prof. G. Blobel, NY
Nobelprize 1999



Organ-typical signal peptides directs in ER the new synthesis of organ-typical proteins using RNA and ribosome and the direction to transport channels.

See: www.nobelprize.com



Newly synthesized proteins are provided with special "address tags", signal sequences, which direct the proteins to a correct place within the cell and allow them to cross the membranes.

We like the us of:

- Kidney (NeyDil No. 7, 27)
- Adrenal gland (NeyDil No. 20)
- Hepar (NeyDil No. 26)
- Hypophysis (NeyDil No. 51)



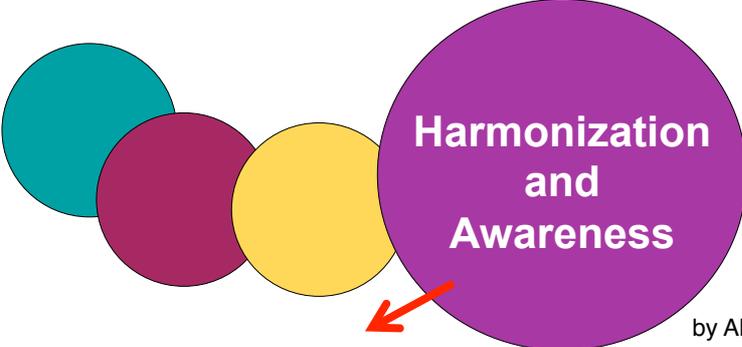
www.vitorgan.de

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BIO-logic Medicine in prevention and treatment



by Alpstein Clinic Gais, Switzerland

Body, Mind and Soul in Conformity with the Creation

Say YES to LIFE, Find the inner Sources of Energy, Bring the Family in Harmony, change Thinking Patterns, use the Power of own Trust and Believe Concept, synchronization of body. Mind and soul, develop an environmental Awareness for future Generations

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Kidney / adrenals and psychosomatics

	Organ	Conflict	Examples
after HAMER	Kidney	Existential conflict, refugee conflict, all lost, as burned out, "digging the water"	Surprisingly lost work, credit can not be serviced, bankruptcy
	Organ	Atlas of Emotions	Positive Affirmations
after atlas of emotions from TCM	Kidney	Fear, guilt, hatred, anger, insecurity, paralyzed will, recklessness, partner conflict, selfishness, disappointment, without compassion, injustice	<i>My sexual energies are in harmony, I lovingly accept my partner</i>
	Bladder / genital Organs	To be ashamed, frightened, panicked, frustrated, impatient, unfulfilled desire for love, self-pity, paralyzed will, lies, deceit, offended, bias	<i>I am balanced, I am peaceful, I am in harmony</i>

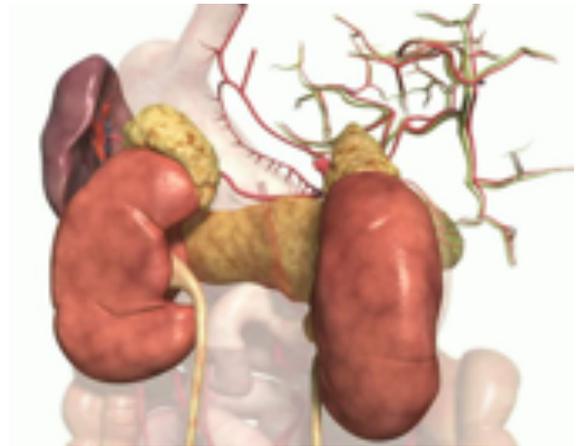
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Special injection adrenal gland / kidney

- Healing Affirmation (with closed eyes)
 - *"With the stimulation of blood and lymph flow, all blockages and healing obstacles in this region are eradicated. The now improved kidney and adrenal function is soothing and energetically stimulating. The stress management is now significantly better"*
 - *Simultaneously with the stimulation of blood and lymphatic flow, all blockages and obstacles to healing as well as emotional traumas in the kidney area are removed. In particular, content that has something to do with insecurity, existential anxiety, congestion, and stress that have "gone to the kidneys" has a meaning. (often in cancer patients)*
 - Belongs to the third chakra (**Sustenance**)



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Bring your Soul into harmony with Nature



by using the nature



refresh your body and soul

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Relax and Relish



leave your sorrows behind, order your thoughts and find inner harmony.

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ALPSTEINACADEMY

Find good Balance between rest and activity





Sport without overwork

- Sport relaxes and gives the mind rest.
- The organs are better supplied with blood and thus better supplied with nutrients. Excess stress hormones of the day are broken down.
- This makes it easier to rest for the night. Overall, the load capacity and the resistance to stress increases. At the same time endorphins, **lucky hormones are released.**

Restful sleep (start before midnight!)

- Sleep serves for the recovery of the body.
- Should not be disturbed by **Wi-Fi**, stimulants or a full stomach.
- Even watching **TV** or sitting in front of the screen disturbs sleep (problematic blue light)
- Also sleep should be **long enough** for a suitable recovery.
- The sooner before midnight the bed is visited, the more restful it is for the body.

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 **ALPSTEINCLINIC**

Biological medicine and dentistry with passion and love



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Das Team der Alpstein Clinic

**Thank you
for your
attention!**



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ALPSTEIN ACADEMY

ANNOUNCEMENTS for 2019

- **More webinars monthly**
 - Next topics: “*Dental filling materials*”, 20th Feb. 2019
 - *see information attached*
- **New seminar circle with Dr. R. Oettmeier in New York**
 - “*Advanced neural therapy and European Biological Medicine*” *see information attached*
- **Practical Internship seminar at Alpstein Clinic Switzerland**
 - Planned from 11.-13. October 2019
- **New Publication** *order one book for free*
 - Book: “*Say YES to LIFE*” from Reuter/Oettmeier/Vizkelety

