BRMI
CONFERENCE 2018

Stress - It can be a GOOD Thing

May 12, 2018

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STRESS

Are you Stressed?

Burned Out?

Feel like you are Losing It?

Stress test

- The following picture was used in a case study on stress level at St. Mary's Hospital. Look at both dolphins jumping out of the water. Both dolphins are identical.

- The researchers concluded that a person is under stress if he/she finds both dolphins look different. If there are many differences found between both dolphins, it means that the person is experiencing a great amount of stress. So, if you see too many differences between the two dolphins, you are advised to pack your bag, go home immediately and take a rest.

What is stress?

- Stress is a natural and manageable part of life.
- We react physically, mentally, and/or emotionally to various conditions, changes and demands of life.
- The stress we experience is rooted in the “fight or flight” response.
- Constant demands of work or personal life can lead to stress overload.

TYPES OF STRESS

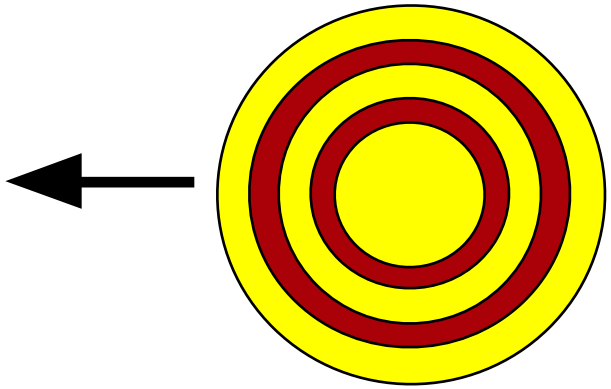
1. There is the positive kind called **EUSTRESS**, which is short term stress and actually arises to strengthen us for immediate action, creativity and times when we need inspiration and motivation.

It resolves itself in 1-2 days and no intervention is needed

TYPES OF STRESS

2. **DISTRESS** is negative and harmful and causes us to adapt to changing situations; there is the short-term variety of acute stress that passes quickly, and long-term chronic stress.
3. **HYPERSTRESS** is when we get so stressed out that we just overload because it is just too much for us to handle.
4. **HYPOSTRESS** means just not enough stress. We need a little bit in our lives, otherwise we feel bored and have nothing challenging us.

The Stress Target Zone



RUST OUT

(Boredom)

BURN OUT

(Distress)

Fatigue
Frustration
Dissatisfaction

EUSTRESS

(The optimal amount of stress)

Creativity
Problem solving
Change
Satisfaction

Over-stimulation
Ineffective problem solving
Exhaustion
Illness
Low self-esteem

A Few of the Many Causes of Stress

1. Major Life Changes

- marriage, baby, divorce, financial, legal, death

2. Everyday Problems (hassles)

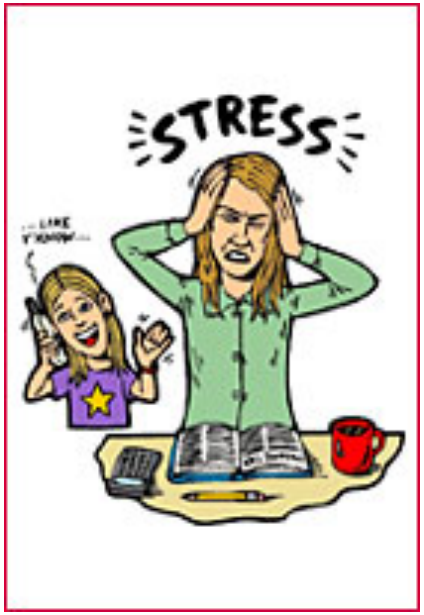
- work issues, relationships, acute illness

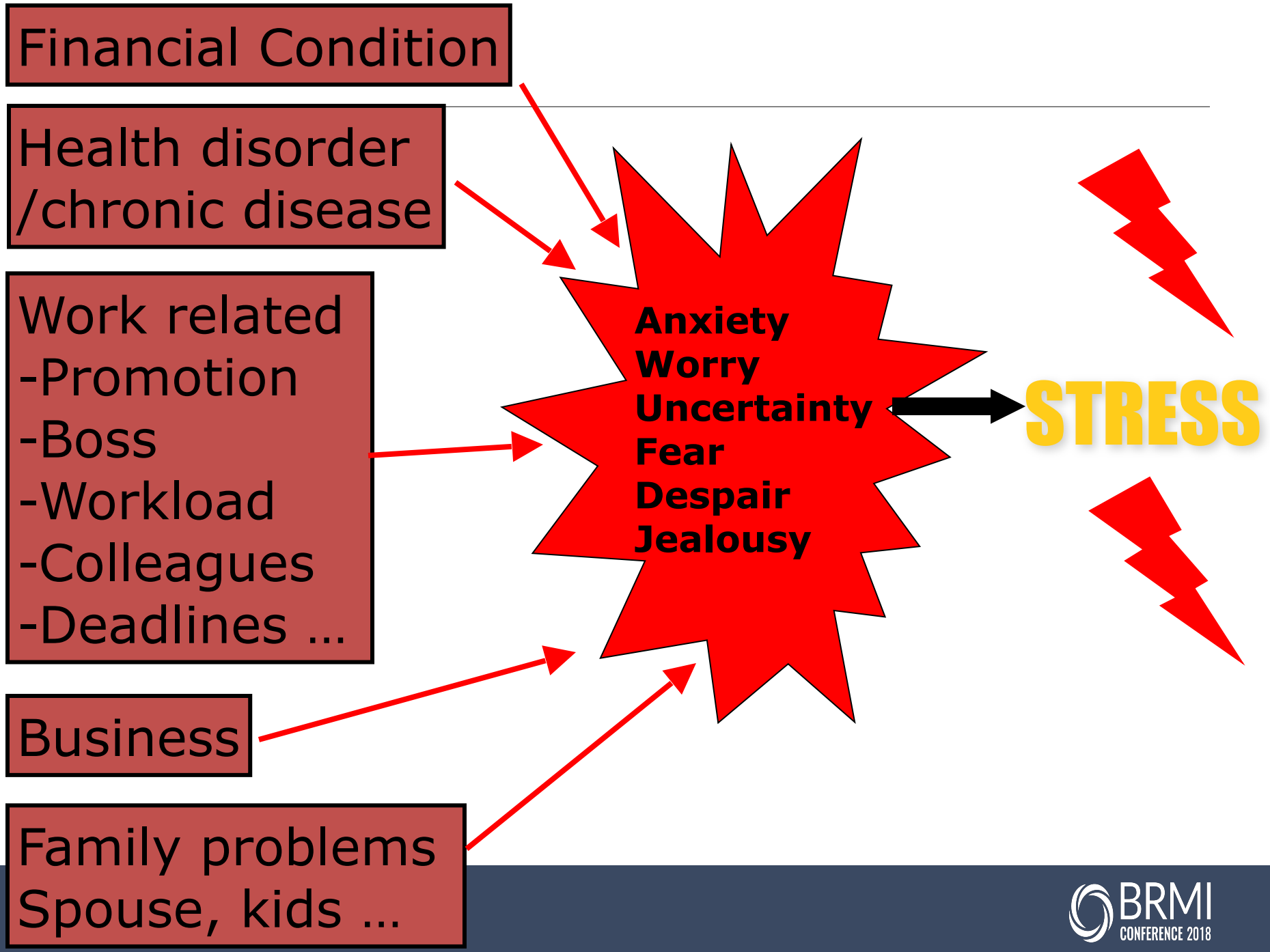
3. Physical Surroundings

- noise, crowded area, weath

5. Other Stressors

- conflicts, dates

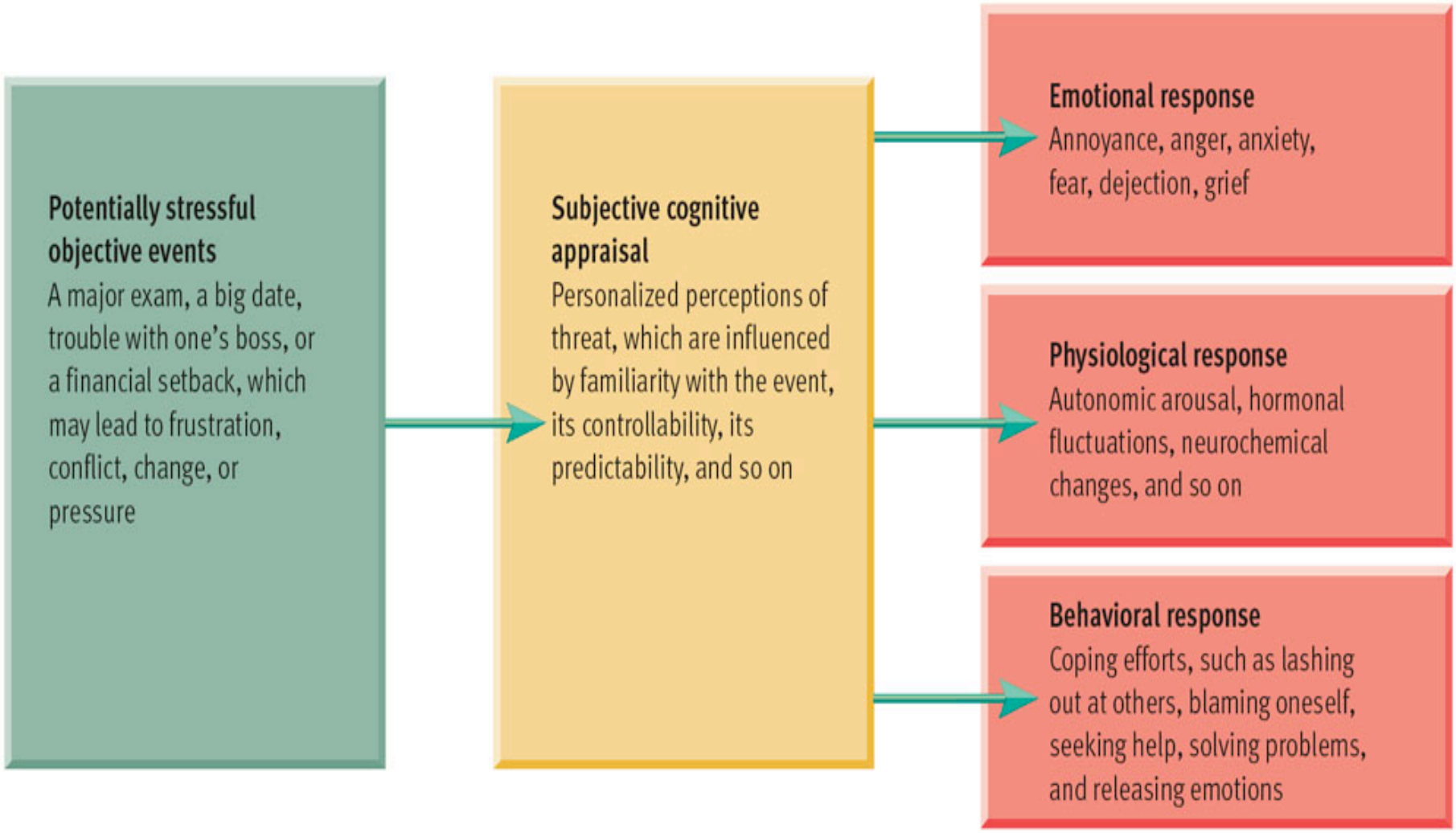



Financial Condition
Health disorder /chronic disease
Work related
-Promotion
-Boss
-Workload
-Colleagues
-Deadlines …
Business
Family problems
Spouse, kids …
Anxiety
Worry
Uncertainty
Fear
Despair
Jealousy
STRESS

Stress Over Time

- Stress that is continuous or builds up over time and is not managed effectively can have serious consequences to your health and overall quality of life.

Overview of the Stress Process



Physical Stress Symptoms

Short Term

- Dry mouth
- Cool skin
- Cold hands and feet
- Increased sweating
- Rapid breathing
- Faster heart rate
- Tense muscles
- Feelings of nausea
- Butterflies in your stomach
- Diarrhea
- A desire to urinate

Long Term

- Insomnia
- Change in Appetite
- Sexual disorders
- Aches and pains
- Frequent colds
- Feelings of intense and long-term tiredness
- Prone to illness

Potential Physical Responses to Chronic Stress

- Chronic pain in neck and/or lower back
- Change in appetite, GI issues (ulcers, IBS, IBD etc)
- Change in sleep pattern
- Lowered immune system
- Temporomandibular pain
- Aches and pains, headaches
- Increased risk for certain diseases/conditions

BEHAVIORAL STRESS SYMPTOMS

- Yawning
- Talking too fast
- Talking too loud
- Fiddling
- Twitching
- Nail biting
- Grinding teeth
- Drumming fingers
- Pacing

- Over reacting
- Emotional
- Defensive
- Irritable
- Irrational
- Defensive
- Hostile
- Critical
- Aggressive

Affects of Behavioral Stress on Performance

- Reduces your effectiveness
- Making you accident prone
- Causing you to be forgetful
- Causing you to be very negative
- You may neglect your appearance
- You may make poor judgments
- Causing you to make more mistakes
- Increasing your absenteeism

Potential Psychological and/or Emotional Responses to Chronic Stress

- Difficulty focusing and concentrating
- Mood changes
- Anxiety
- Panic attacks
- Depression
- Drug and Alcohol use

What Happens During Stress?

- Body releases stress hormones that are powerful neurotransmitter chemicals that carry signals between cells
- **ADRENALINE** – prepares the body for action but designed for short bursts
- **CORTISOL** – increases energy production in response to stress but leads to MANY problems, including weight gain (and the inability to lose weight).

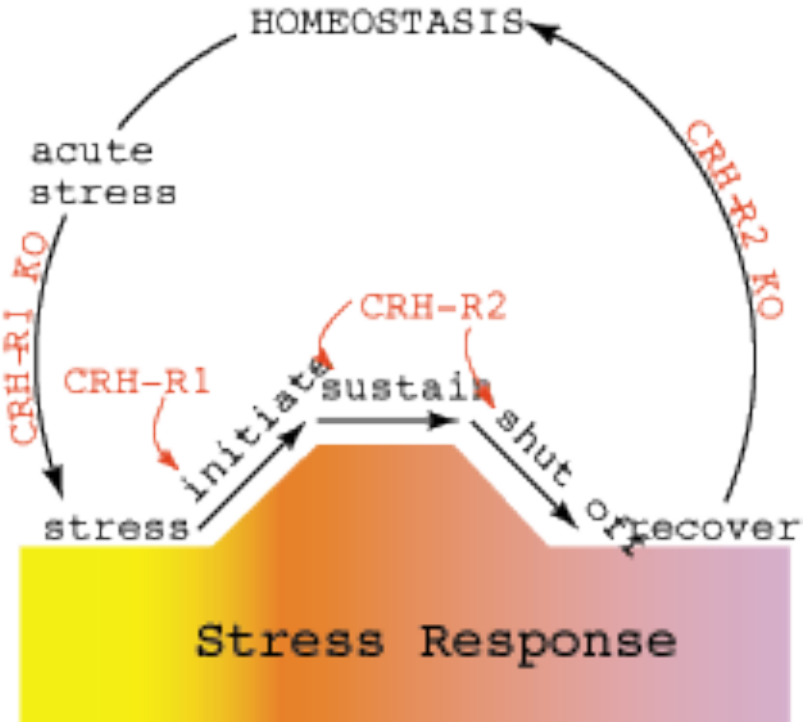
TYPICAL STRESS RESPONSE

In a typical day, we produce:

40-50 mg of DHEA

25-35 mg of cortisol

3-5 mg of aldosterone



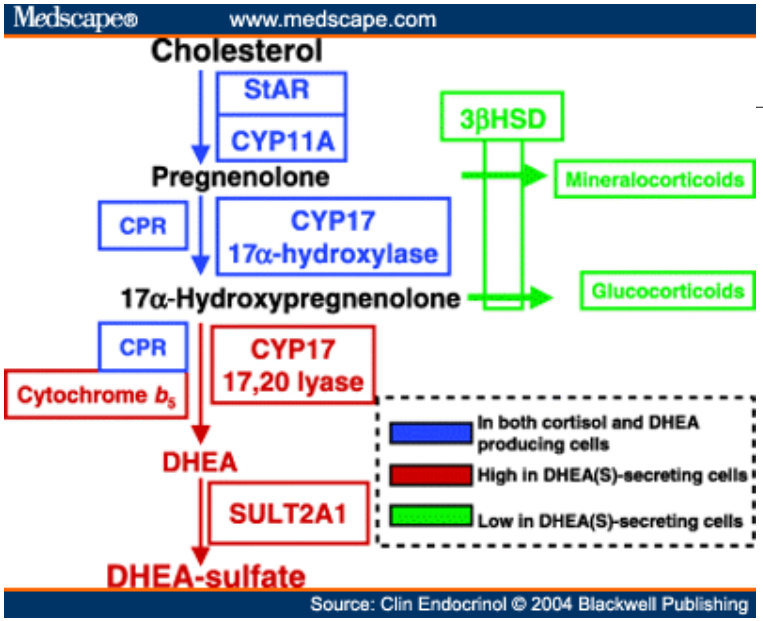
Daily Cortisol Production

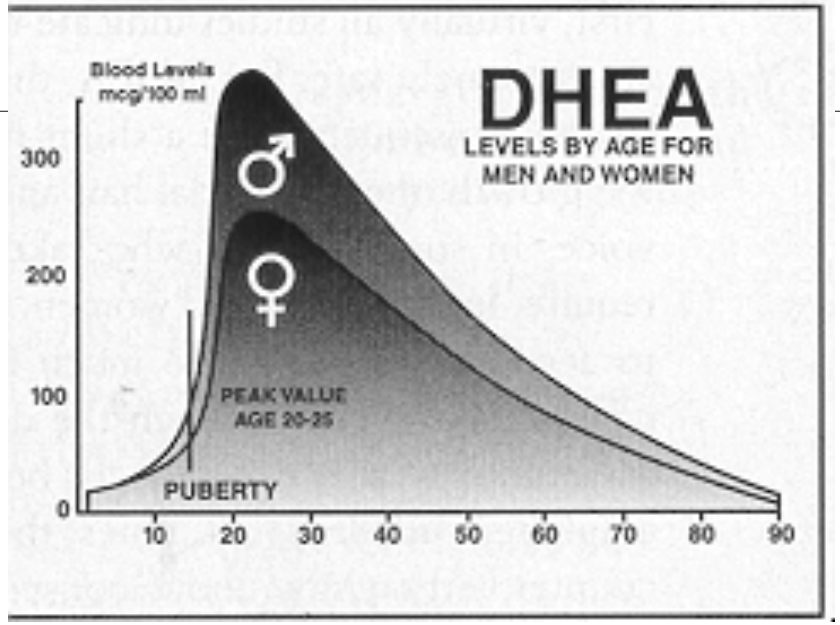
- Basal Cortisol Production = 8-25 mg/24hrs
- Cortisol Production can be ↑ 6-fold in stress
- Diurnal pattern of cortisol production lost in stress situations
- Cortisol $T_{1/2}$ = 70-120 min

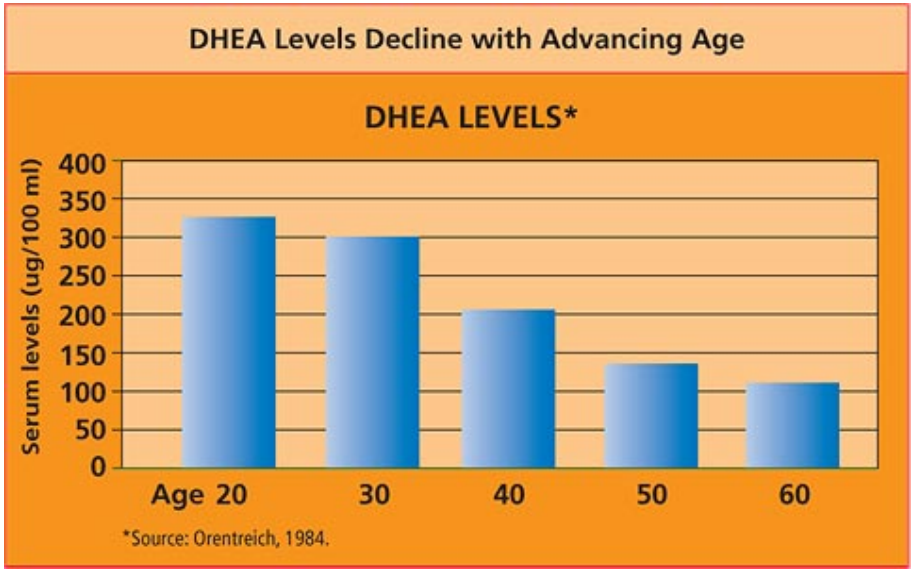
- Bound to circulating CBG, albumin, α1-acid glycoprotein
- 10% free = biologically active
- CBG ↓ rapidly in critically ill pts → ↑ free cortisol

A Few of the Functions of Cortisol

- Mobilizes & increases amino acids in blood & liver
- Stimulates liver to convert aa to glucose
- Stimulates increased glycogen in the liver
- Mobilizes and increases fatty acids in the blood from fat cells to be used as fuel
- Counters inflammation and allergies
- Prevents loss of Na in urine (acting as a mineral-corticoid) thus affecting BP
- Maintains resistance to stress (infections, physical trauma, temp. extremes, emotional trauma etc.)
- Maintains personality and emotional stability


Medscape®
www.medscape.com
Cholesterol
StAR
CYP11A
Pregnenolone
3βHSD
Mineralocorticoids
CPR
CYP17
17α-hydroxylase
17α-Hydroxypregnenolone
Glucocorticoids
CPR
Cytochrome b_5
CYP17
17,20 lyase
DHEA
SULT2A1
DHEA-sulfate
In both cortisol and DHEA producing cells
High in DHEA(S)-secreting cells
Low in DHEA(S)-secreting cells
Source: Clin Endocrinol © 2004 Blackwell Publishing


Blood Levels
mcg/100 ml
DHEA
LEVELS BY AGE FOR
MEN AND WOMEN
300
200
100
0
PEAK VALUE
AGE 20-25
PUBERTY
10
20
30
40
50
60
70
80
90


DHEA Levels Decline with Advancing Age
DHEA LEVELS*
Serum levels (ug/100 ml)
400
350
300
250
200
150
100
50
0
Age 20
30
40
50
60
*Source: Orentreich, 1984.

DHEA

- It has been called the "mother of all hormones" because it supports and regulates the functions of other steroids (testosterone, progesterone and cortisol) in their immune system activity.
- The function appears to be important in keeping the metabolic balance of youth (anabolism) as contrasted with the "wearing out" metabolism of old age (catabolism).
- Levels of DHEA are high in the developing fetus and continue to rise until about the age of 25, then DHEA production drops off sharply. A 50 year old woman has less than one-third the DHEA she had at age 19.

Functions of DHEA

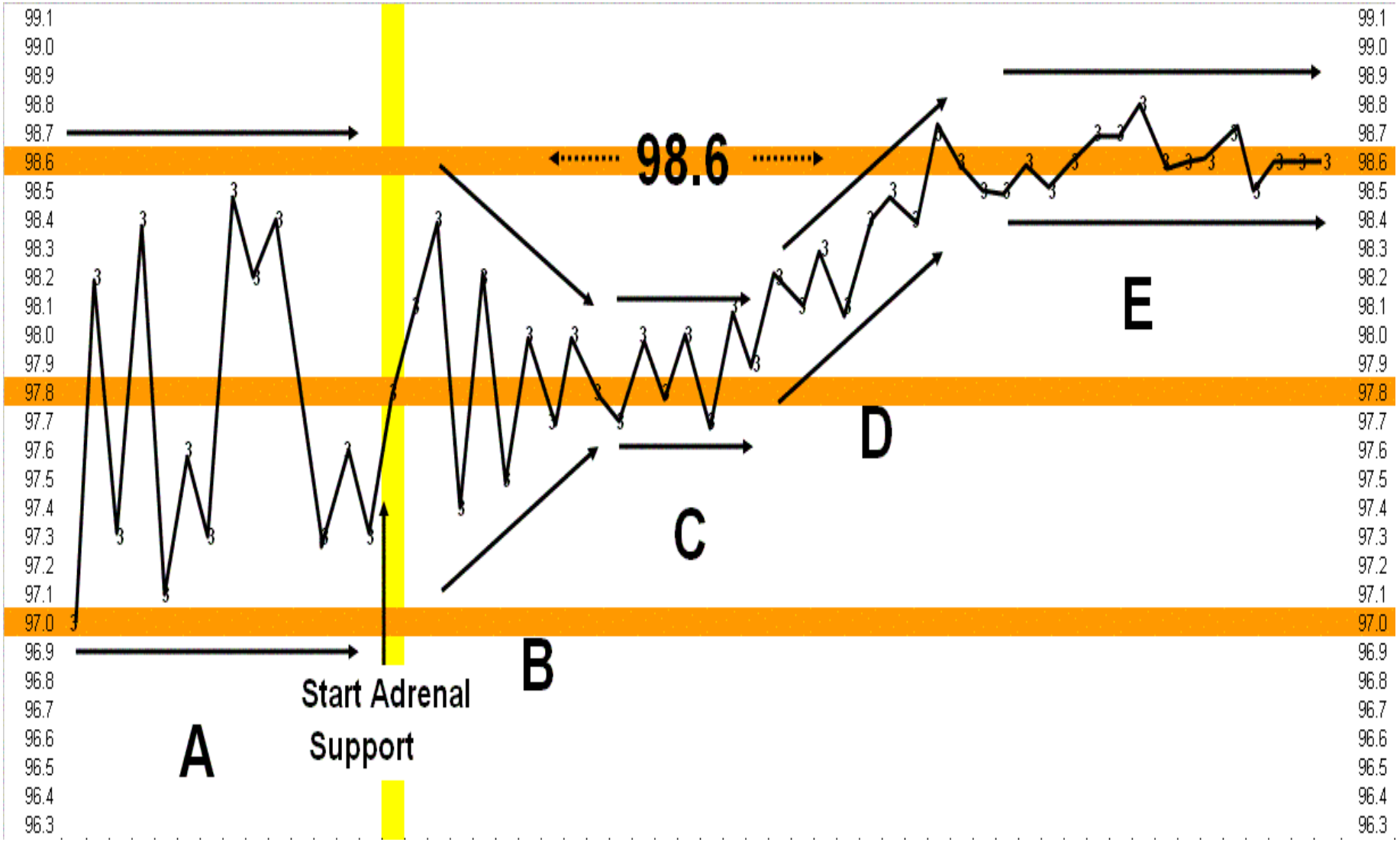
- Functions as an androgen with anabolic activity
- A precursor which is converted to testosterone
- A precursor to estrogen (E_2 and E_1)
- Modulate the immune system and in so improves resistance against virus, bacteria, candida, parasites, allergies etc
- Stimulates bone deposition and remodeling
- Lowers total and LDL cholesterol
- Increases muscle mass, decreases percentage of body fat,

  creates improvement in energy, vitality, sleep, PMS, mental clarity, and quicker recovery from acute stress (insufficient sleep, excessive exercise, mental strain)


time to evaluate

Adrenal Temperature

Typical body temperature when body is under chronic stress



Cortisol Testing

Cortisol Testing

Saliva - ASI
The vials are very stable, even after 10 days at room temperature only changes by 10% (it changes because bacteria start to metabolize it). There are no enzymes so it is stable.

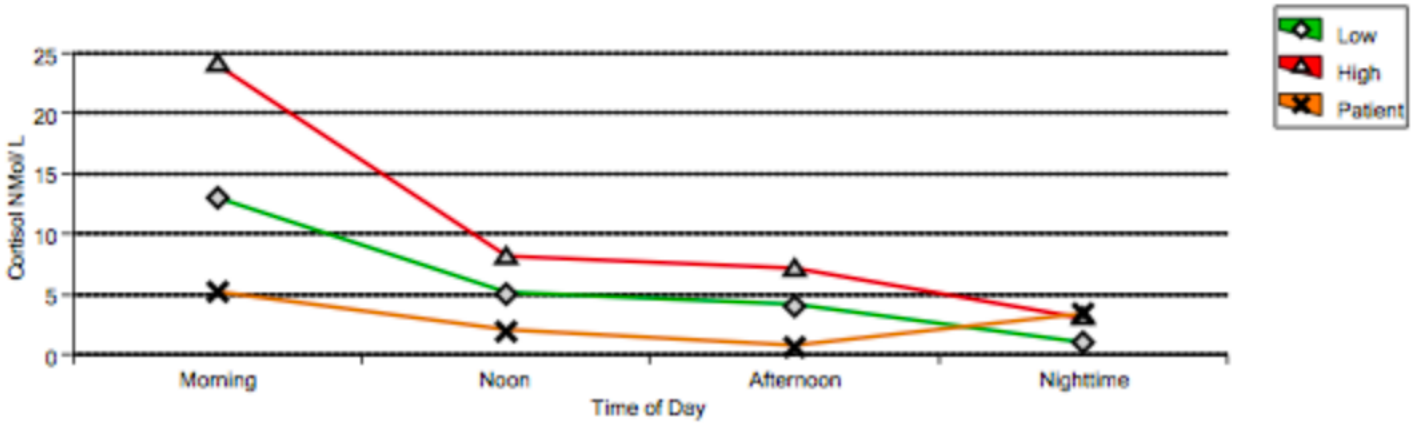
Free cortisol will correspond to ASI results
J Steroid biochemistry 1987; 27: 81-94

Serum - represents bound and does not give a sense of rhythm

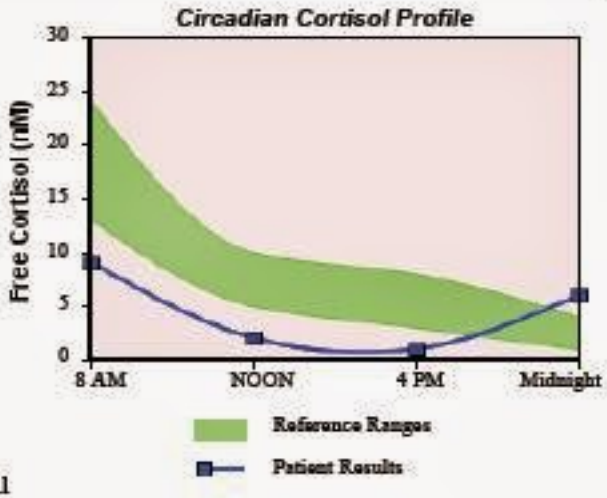
Urine – new testing also collects 4 different samples
Dried Urine Testing for Comprehensive Hormones (DUTCH)

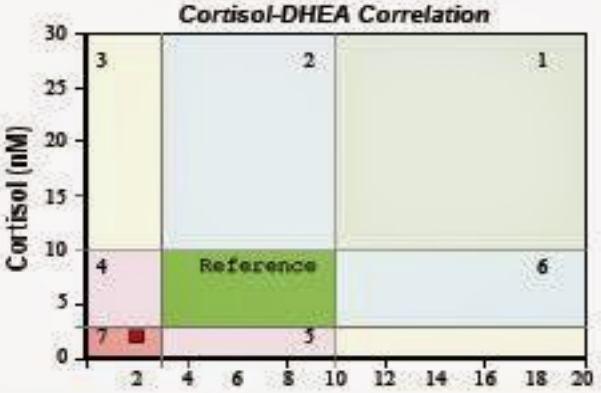
Simple test to collect 4 saliva samples during the Day gives essential information about your Adrenal (stress) gland

Parameter	Result	Reference Range	Units
Cortisol - Morning (6 - 8 AM)	**5.2***	13.0 - 24.0	nM/L
Cortisol - Noon (12 - 1 PM)	**1.9***	5.0 - 8.0	nM/L
Cortisol - Afternoon (4 - 5 PM)	**0.6***	4.0 - 7.0	nM/L
Cortisol - Nighttime (10 PM - 12 AM)	**3.4***	1.0 - 3.0	nM/L
Cortisol Sum	**11.0***	23.0 - 42.0	nM/L
DHEA-S Average	2.86	2.0 - 10.0	ng/mL
Cortisol/DHEA-S Ratio	**3.9***	5.0 - 6.0	Ratio



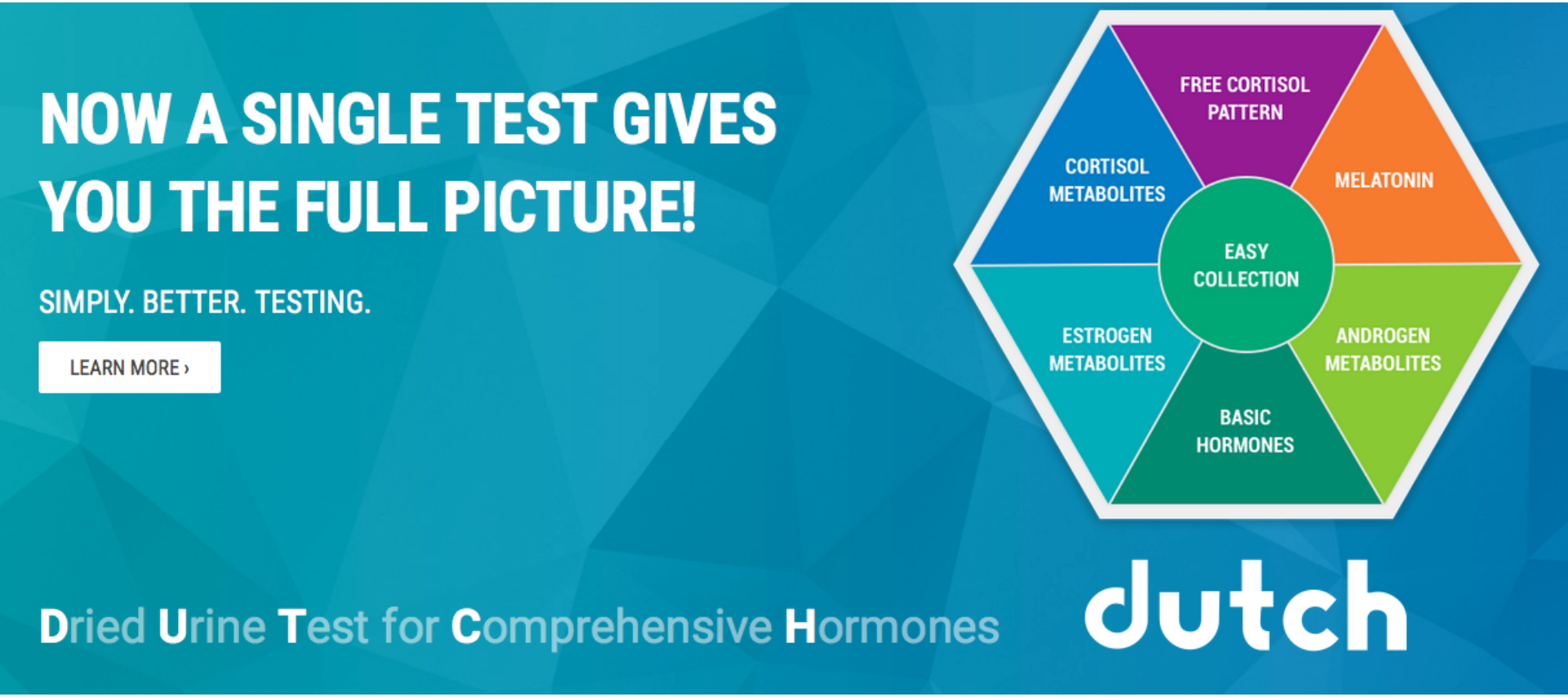
Test	Description	Result		Ref Values
NLASI	**CUSTOM ASI**			
TAP	**Free Cortisol Rhythm**			
	06:00 - 08:00 AM	9	Depressed	13-24 nM
	11:00 - Noon	2	Depressed	5-10 nM
	04:00 - 05:00 PM	1*	Depressed	3-8 nM
	10:00 - Midnight	6	Elevated	1-4 nM
	Cortisol Load:	18		*23 - 42 nM*
	* Interpret in context of other values.			
DHEA	**Dehydroepiandrosterone**			
		2	Depressed	Adults (M/F): 3-10 ng/ml



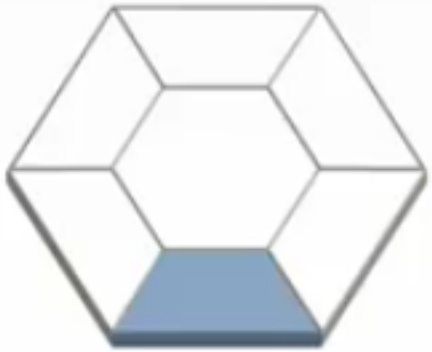


KEY: CORTISOL-DHEA CORRELATION

1. Adapted to stress.
2. Adapted with DHEA slump.
3. Maladapted Phase I.
4. Maladapted Phase II.
5. Non-adapted, Low Reserves.
6. High DHEA.
7. Adrenal Fatigue.

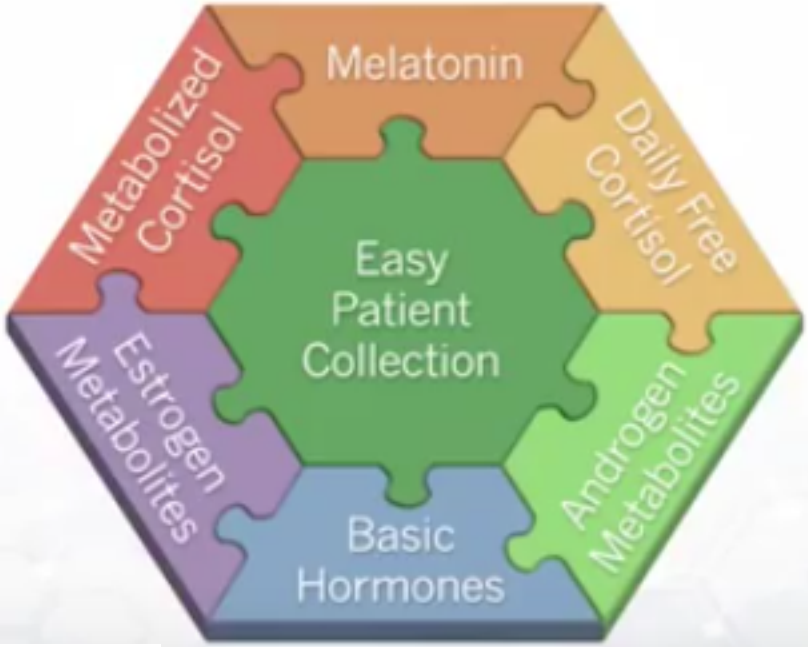

NOW A SINGLE TEST GIVES YOU THE FULL PICTURE!
SIMPLY. BETTER. TESTING.
LEARN MORE ›
FREE CORTISOL PATTERN
CORTISOL METABOLITES
MELATONIN
EASY COLLECTION
ESTROGEN METABOLITES
ANDROGEN METABOLITES
BASIC HORMONES
Dried Urine Test for Comprehensive Hormones
dutch

Saliva

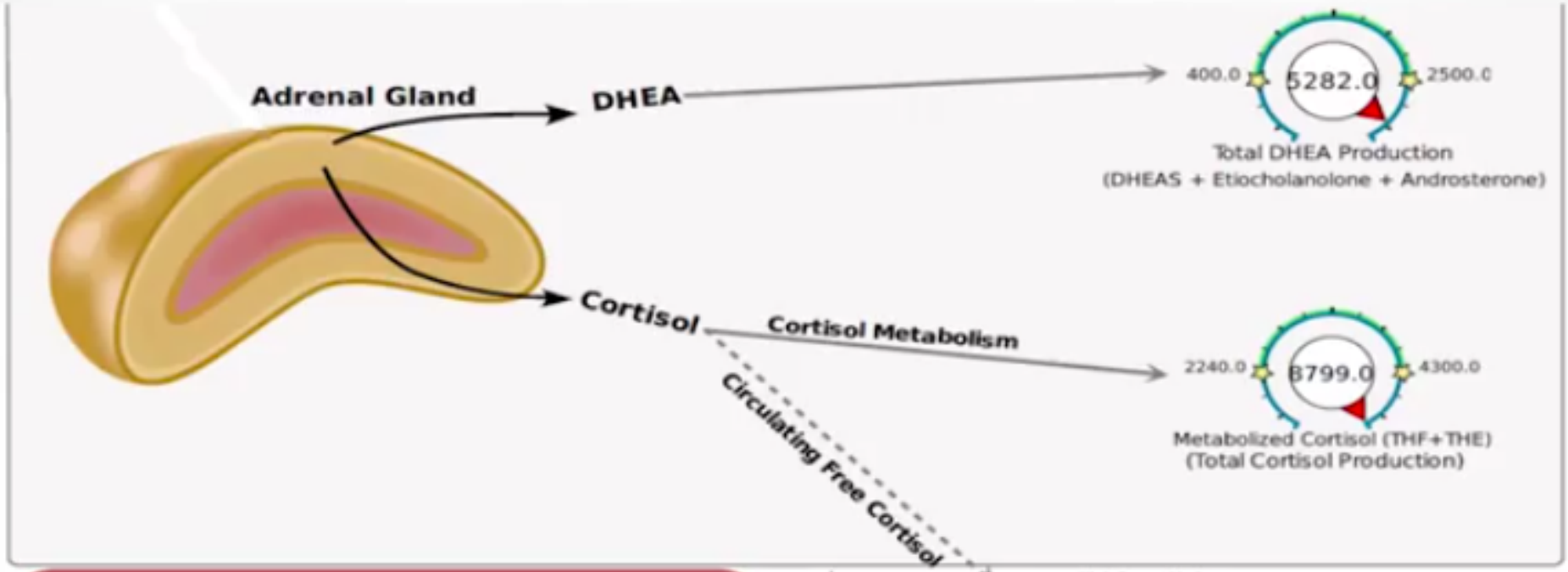


Blood

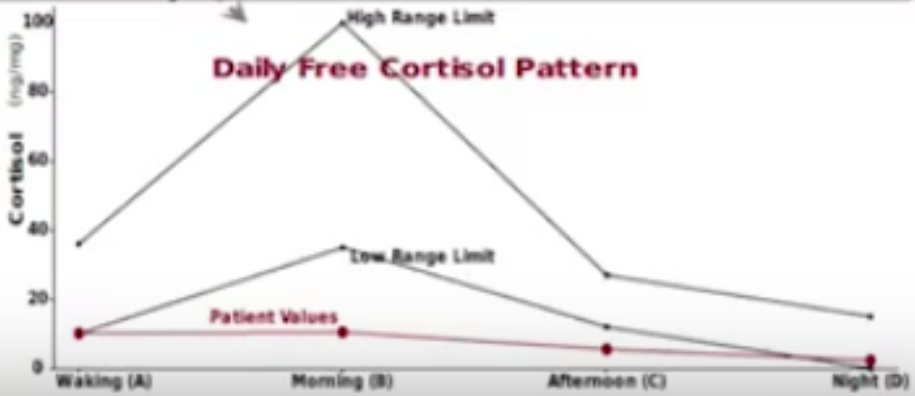
24-Hr Urine



DUTCH Testing

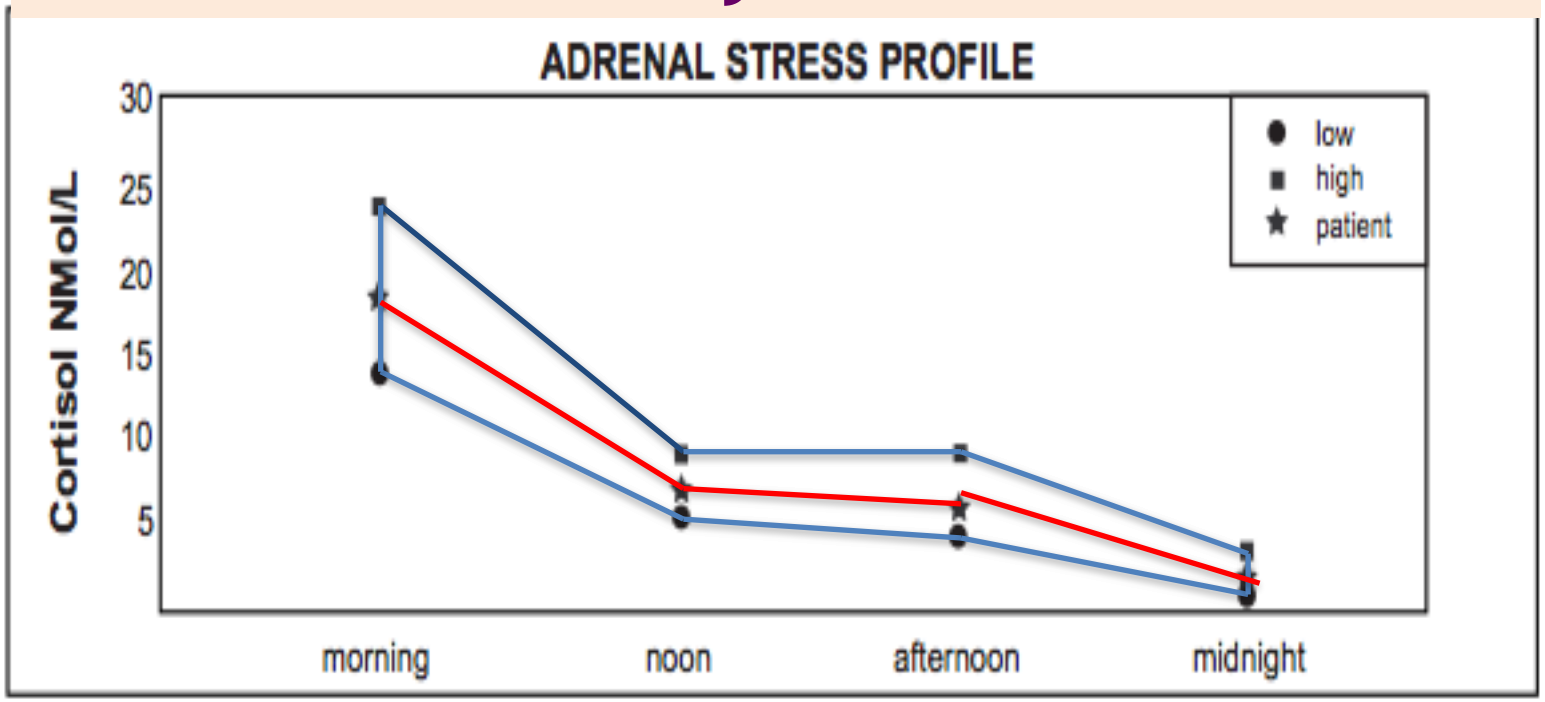


FREE CORTISOL



THE CIRCADIAN RHYTHMS ARE TIED TO THE CORTISOL RHYTHM

This is an "ideal" normal curve, rhythm

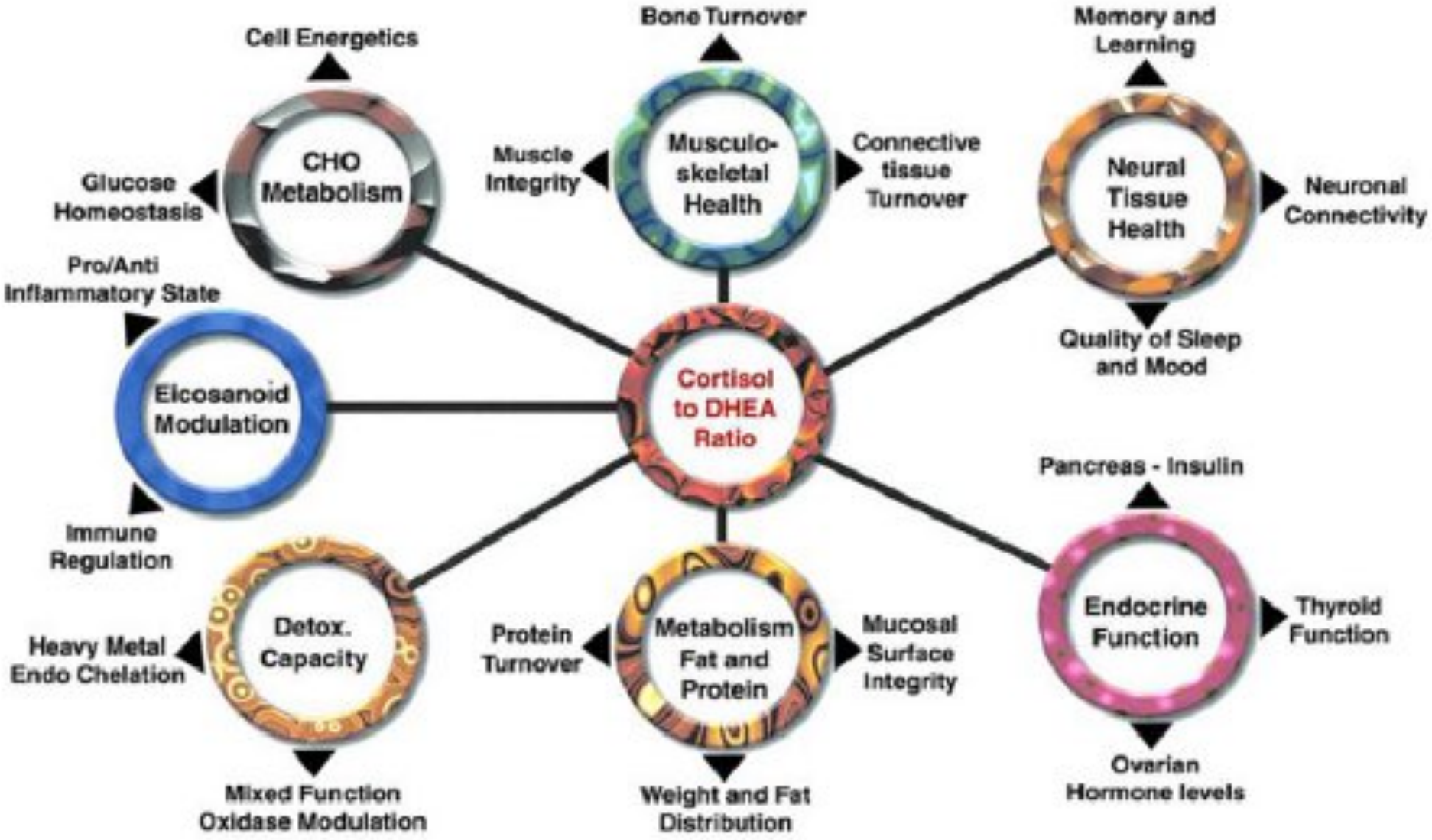


DHEA/CORTISOL ratio

The most important immune regulator in the body is the cortisol to DHEA level.
High cortisol levels will suppress cell mediated immunity - macrophages, lymphocytes, NK activity etc. become anergic, i.e. they don't recognize the antigen and so don't phagocyotize it. Adequate levels of DHEA will help the IS maintain its function.

As the ratio changes, the level of SIgA begins to drop which allows antigen penetration. As antigens increase, IgG's will also increase (so allergy tests will show positive results- are these false positive???) So the problem is not the allergies, it is a problem or reduced mucosal exclusion.

The ratio varies depending on the method of measurement- saliva, urine, blood

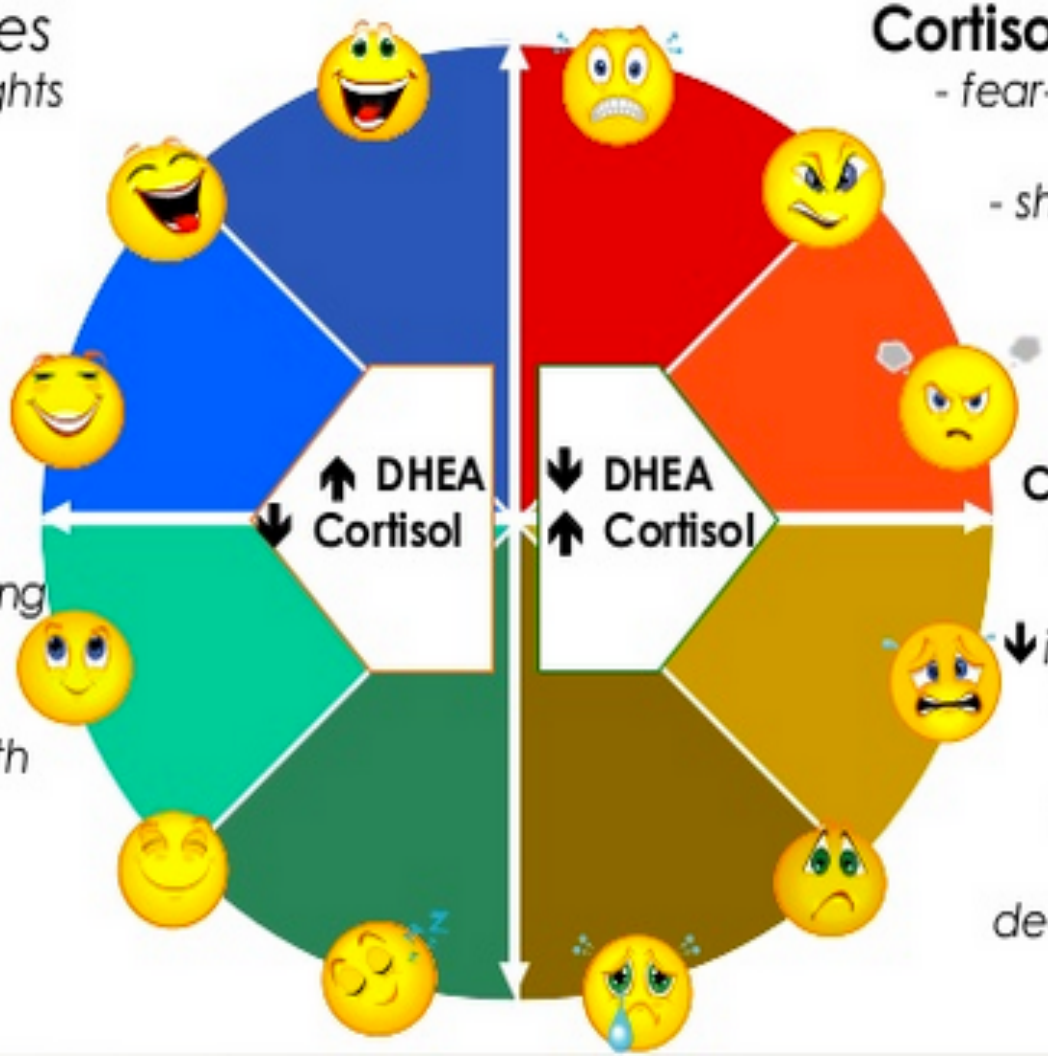


DHEA *Hormones*

- *love-based thoughts*
- *less stress*
- *deep breathing*
- *mindfulness*

Cortisol *Hormones*

- *fear-based thoughts*
- *stress*
- *shallow breathing*
- *mindlessness*



DHEA *Hormones*

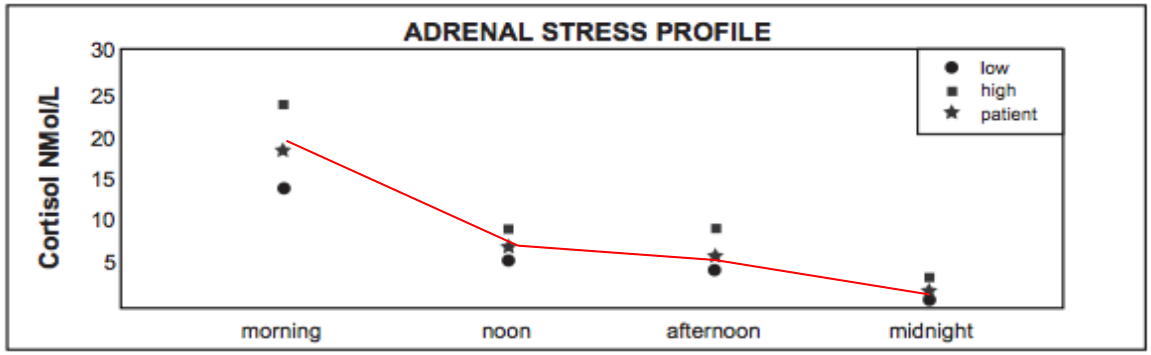
- ↑ *resiliency*
- ↑ *sense of well-being*
- ↑ *vitality*
- ↑ *memory*
- ↑ *lower risk of death or cardiovascular disease*[2]

Cortisol *Hormones*

- ↓ *impact health*
- ↓ *productivity*
- ↓ *immune function*
- ↓ *sleep patterns*
- ↓ *focus*
- ↑ *aging process physically decreases ability to hear, feel*

Ideal Cortisol/ DHEA Ratio

		NORMAL	ABNORMAL	UNITS	NORMAL RANGE
BHD #201					
MORNING	(6:00 - 8:00 AM)	18.2		nM	13.0 - 24.0
NOON	(12:00 - 1:00 PM)	7.0		nM	5.0 - 8.0
AFTERNOON	(4:00 - 5:00 PM)	5.1		nM	4.0 - 7.0
NIGHTTIME	(10:00 PM - 12:00 AM)	2.0		nM	1.0 - 3.0
CORTISOL SUM		32.3		nM	23.0 - 42.0
DHEA-S AVERAGE		6.2		ng/ml	2.0 - 10.0
TOTAL CORTISOL/DHEA-S RATIO		5.2		RATIO	5.0 - 6.0



	morning	noon	afternoon	midnight
low	13	5	4	1
high	24	8	7	3
patient	18.2	7	5.1	2

Additional ways to assess your level of stress

INDIRECT labs - suggestive of low adrenal function

Na:K ratio less than 30

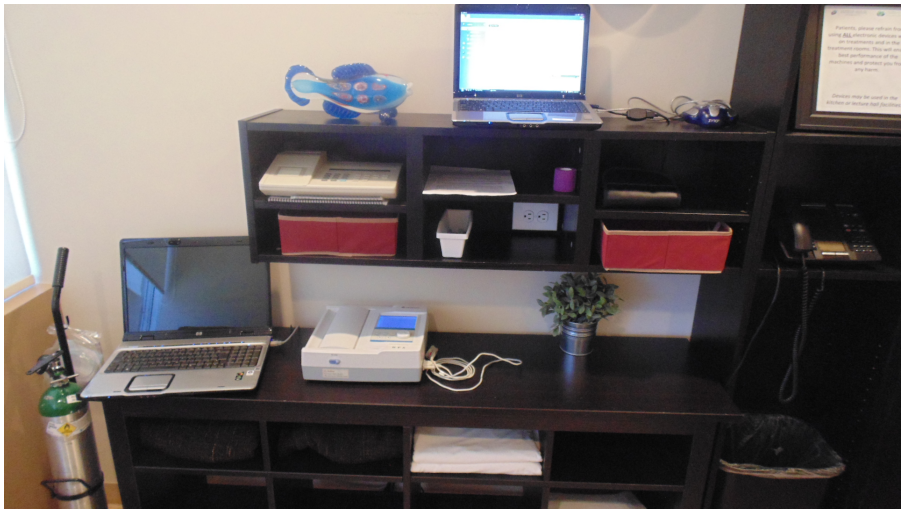
TSH low (less than 1)
Free T4 (low normal)
Free T3 (below normal)
 - so with adrenal stress, the pituitary decreases TSH so it will reduce T4 and then there is not conversion of T4 to T3 so the body will “slow” down.

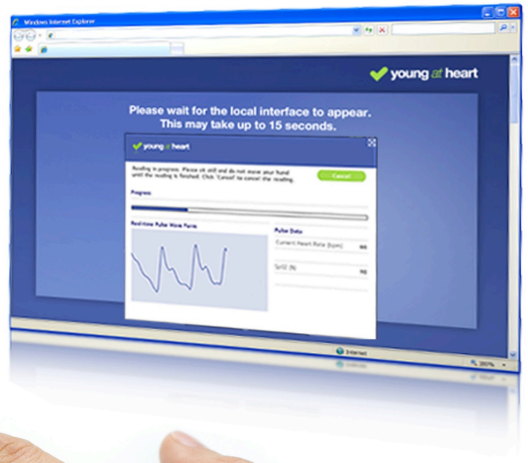
Sodium / Potassium/ Chloride

With **decreased adrenal fx** you may see an **increased serum potassium** and a **decreased serum sodium** dt the fact that aldosterone secretion is also decreased. In addition, when decreased aldosterone levels cause an increase in the amount of renal sodium excretion, there is an indirect effect of increasing chloride excretion, which will cause an **decrease in serum chloride**"

In a chronically stressed person, we'll see a chronic sodium-potassium imbalance (a loss of sodium and retention of potassium) and the nervous system will find it difficult to propagate normal action potentials. This is why the person demonstrates the hippus reflex and why it indicates adrenal fatigue.

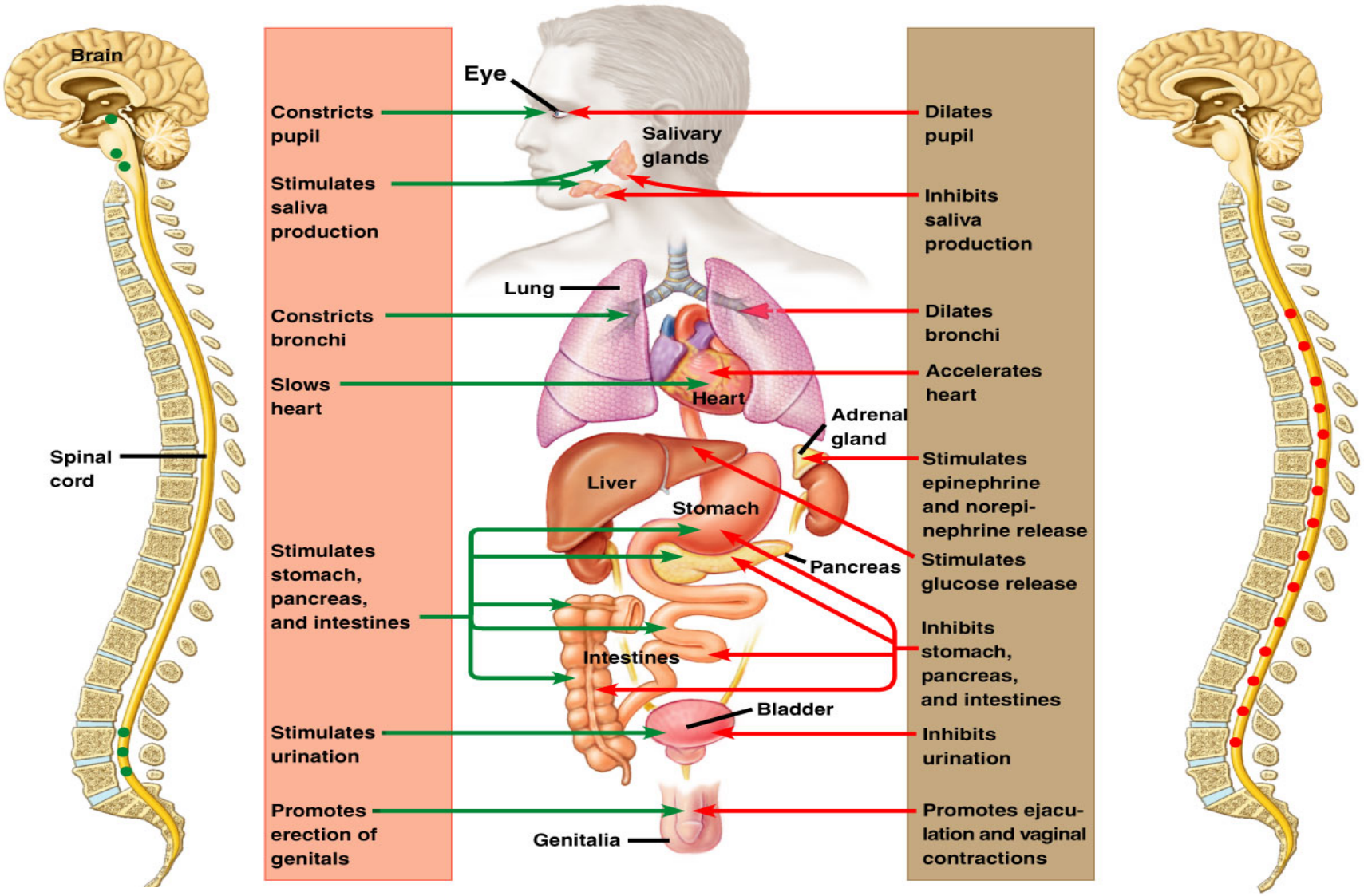
HRV – How **Stressed** is your Nervous System



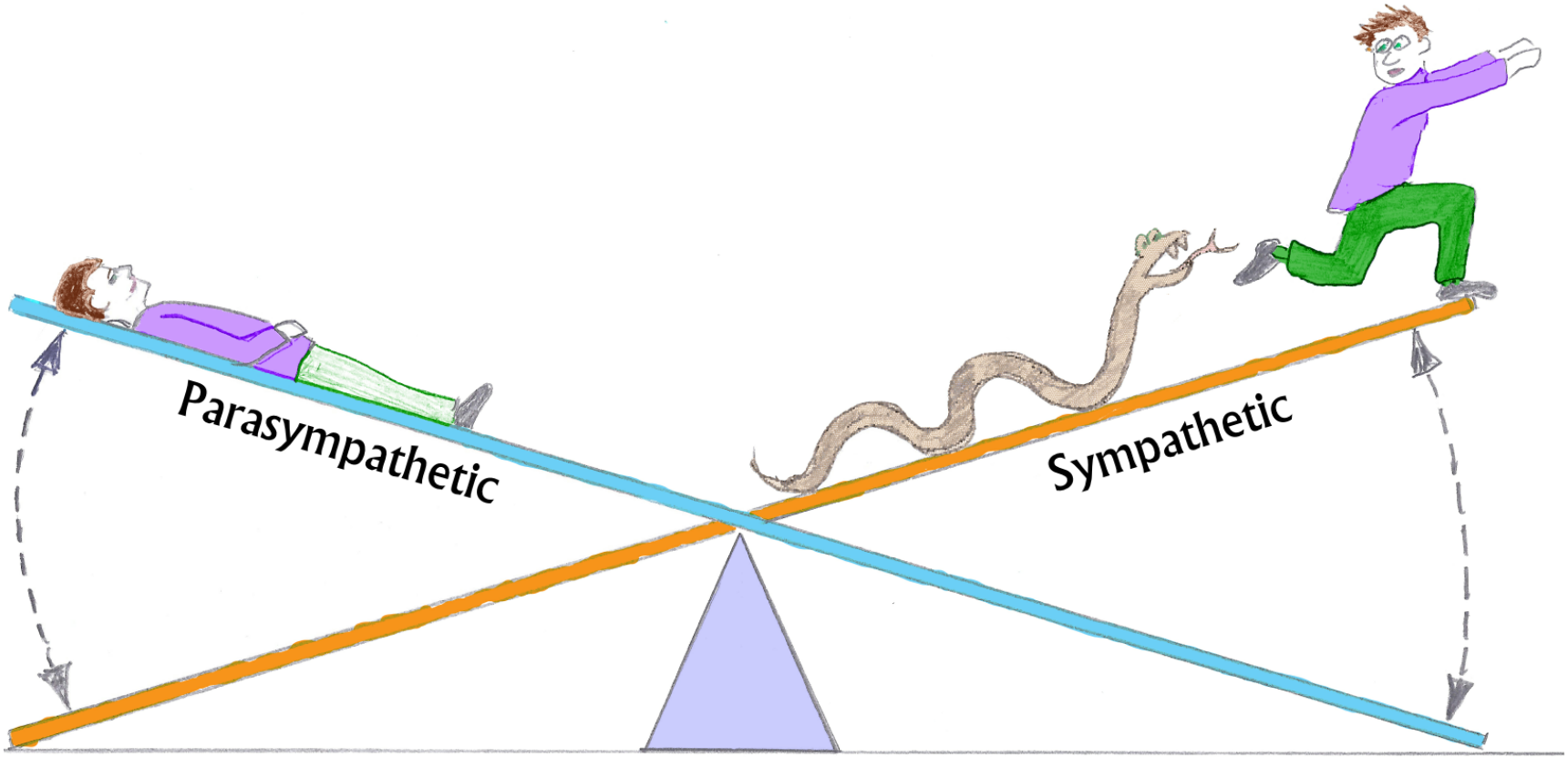


The Heart Rate Variability (HRV)

- A quick electrophysiology study of the **stress** on your **autonomic nervous system (ANS)**.
- Evaluates heart rate variability at rest and gives an assessment of the **adaptability** of the sympathetic and parasympathetic branches of the ANS.
- To achieve health and balance, the body needs to maintain a proper balance between the sympathetic, "fight or flight" and **parasympathetic** nerves "rest & digest" which is increasingly difficult due to the daily demands of the world.


Parasympathetic division
Sympathetic division
Brain
Spinal cord
Eye
Constricts pupil
Dilates pupil
Salivary glands
Stimulates saliva production
Inhibits saliva production
Lung
Constricts bronchi
Dilates bronchi
Slows heart
Heart
Accelerates heart
Adrenal gland
Liver
Stomach
Stimulates epinephrine and norepi-nephrine release
Pancreas
Stimulates glucose release
Stimulates stomach, pancreas, and intestines
Intestines
Inhibits stomach, pancreas, and intestines
Bladder
Stimulates urination
Inhibits urination
Promotes erection of genitals
Genitalia
Promotes ejacu-lation and vaginal contractions

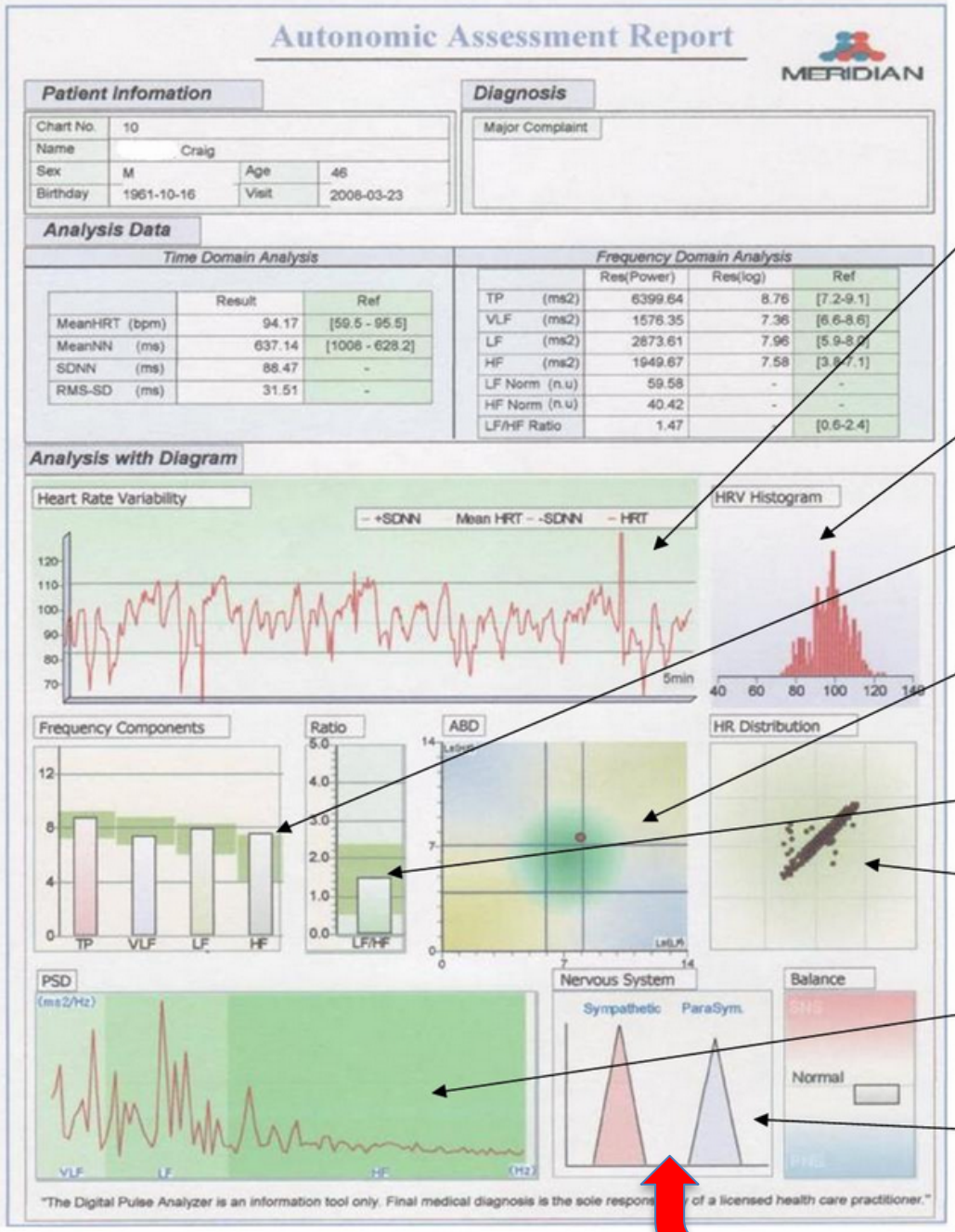
Homeostasis is a dynamic balance between the autonomic branches.



Rest and digest:
Parasympathetic
activity dominates

Fight or flight:
Sympathetic activity
dominates

The HRV report



standard deviation normal to normal beat is the most common index of HRV

histogram of heart beats shows heart variability distribution

power frequencies shows vitality across all frequencies

autonomic balance diagram indicates status of autonomic nervous system indicative of stress levels or health state

low frequency/high frequency balance

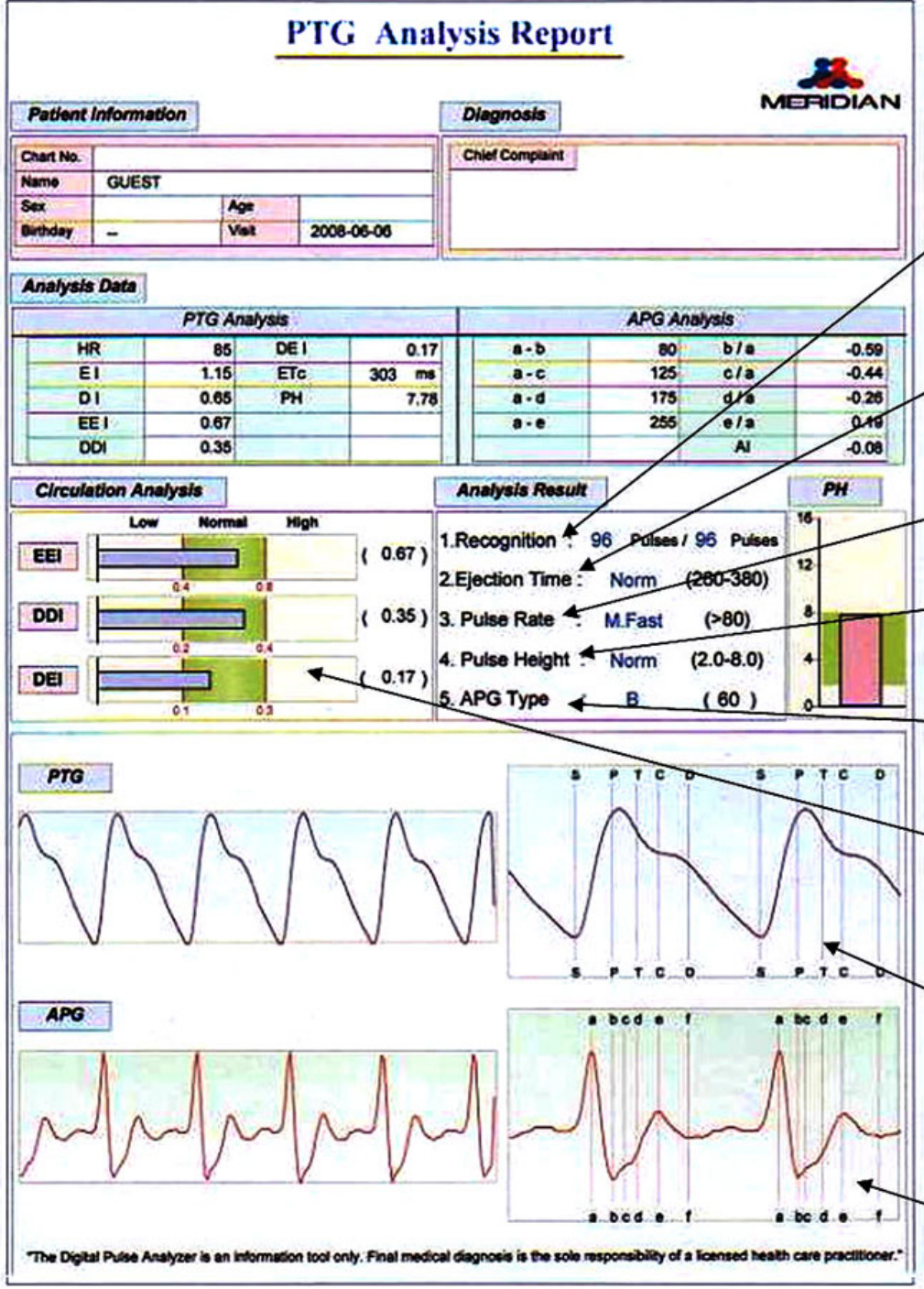
distribution of each heart beat

frequency spectrum graph

sympathetic/parasympathetic nervous system balance shows “fight or flight” response

DPA – How Stressed is your Cardio Vascular System

The DPA-PTG Report



PTG Analysis Report

MERIDIAN

Patient Information

Chart No.			
Name	GUEST		
Sex		Age	
Birthday	--	Visit	2008-06-06

Diagnosis

Chief Complaint

Analysis Data

PTG Analysis

HR	85	DE I	0.17
E I	1.15	ETc	303 ms
D I	0.65	PH	7.78
EE I	0.67		
DDI	0.35		

APG Analysis

a - b	80	b / a	-0.59
a - c	125	c / a	-0.44
a - d	175	d / a	-0.26
a - e	255	e / a	0.19
		AI	-0.08

Circulation Analysis

Low Normal High

EEI (0.67)

DDI (0.35)

DEI (0.17)

Analysis Result

1.Recognition : 96 Pulses / 96 Pulses

2.Ejection Time : Norm (280-380)

3. Pulse Rate : M.Fast (>80)

4. Pulse Height : Norm (2.0-8.0)

5. APG Type B (60)

PH

PTG

APG

"The Digital Pulse Analyzer is an information tool only. Final medical diagnosis is the sole responsibility of a licensed health care practitioner."

signs of missed beats, arrhythmias, fibrillations; similar to an electrocardiogram

strength of heart valve, similar to ejection fraction in an echocardiogram

pulse rate, or beats per minute

hydration levels of the blood

assigns a biological age to the arteries

degree of plaque build-up in the arteries, also known as atherosclerosis

plethysmograph waveform shows degree of arterial elasticity also known as arteriosclerosis

accelerated plethysmograph aids in indication of endothelium health

Contact Regulation Thermography (CRT)

- Functional analysis of 15 major **organ systems** in the body

Helps detect indications of irregular body processes including:

- Identify **blocked** organ systems
- Evaluating **lymphatic** health
- Functionally looking at **GI health**
- Assesses ability to adapt to stress

Stages of Stress

1. **Alarm Stage** – your body's response to a stressor

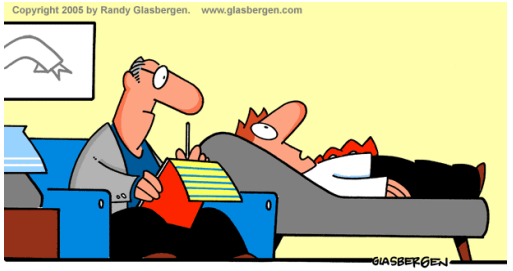
   - Homeostasis – body's normal balanced state

   - Adrenaline – a hormone secreted by the adrenal glands that gives you a burst of energy

   - Fight or Flight Response – Stand and fight or run away

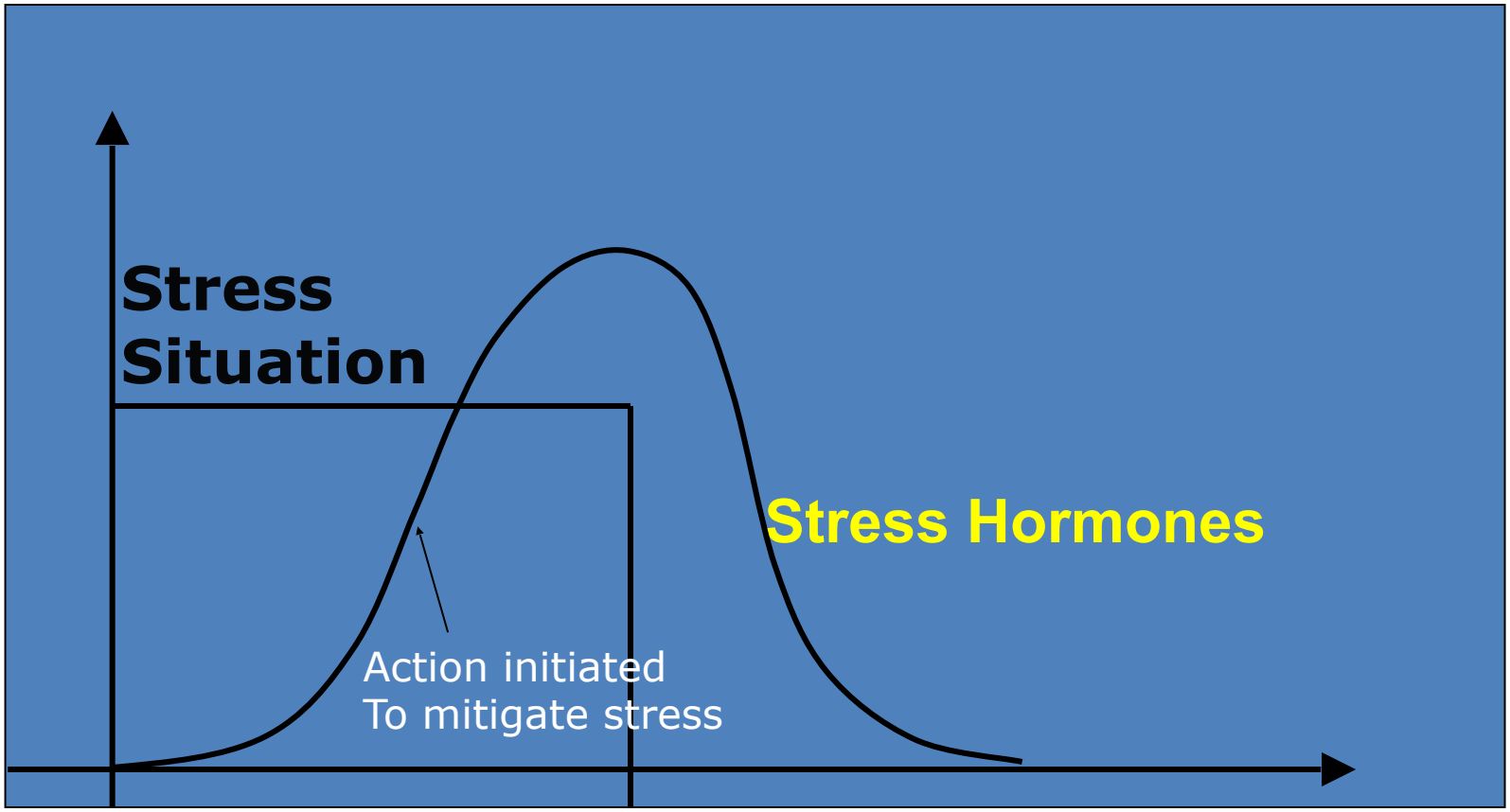
2. **Resistance Stage** – when your body tries to recover from the alarm stage however the stressor still remains

3. **Exhaustion Stage** – the body is worn down and no longer has energy to fight off the stressor

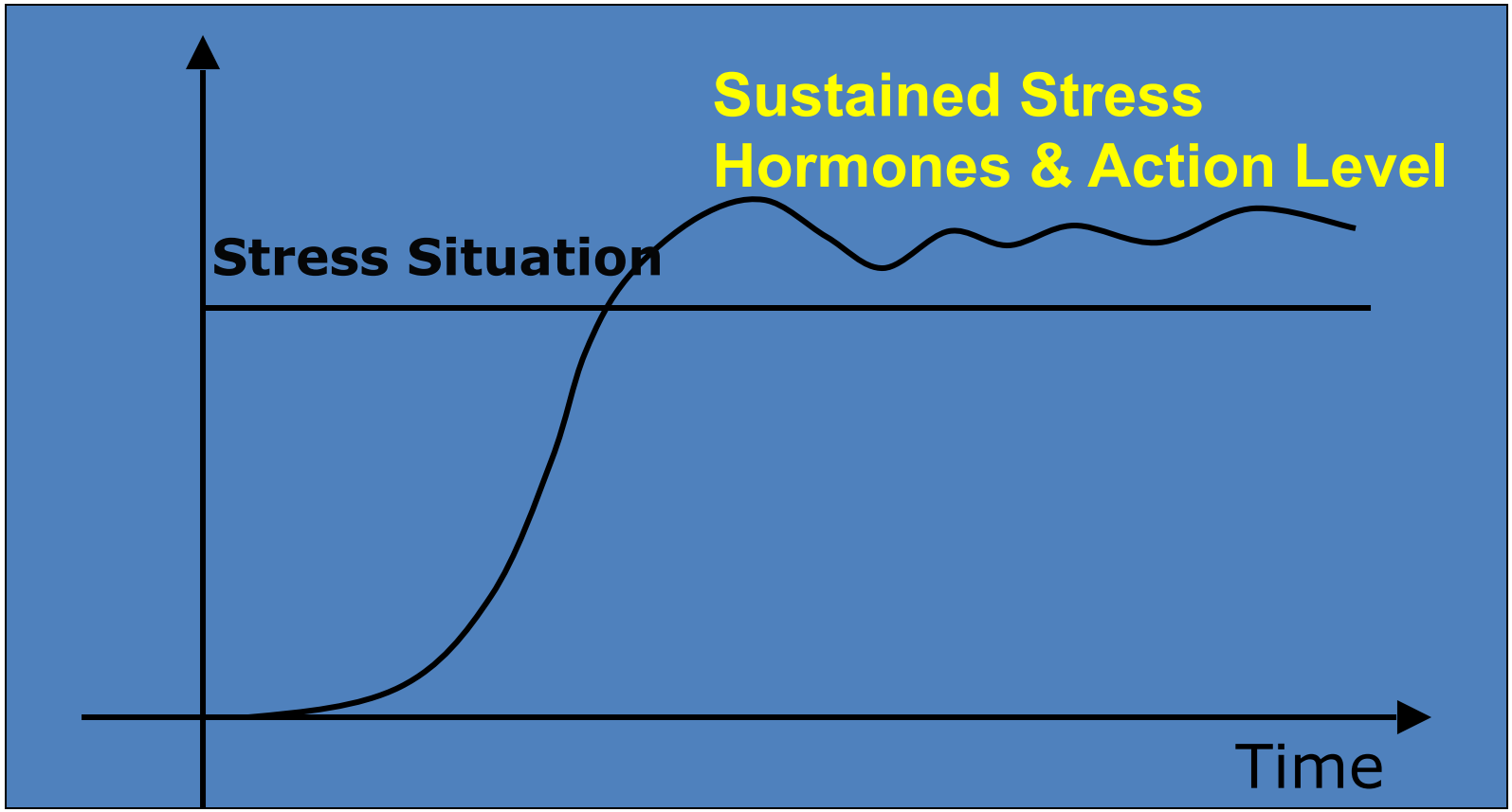


"I'm finally learning how to relax.
Unfortunately, relaxation makes me tense."

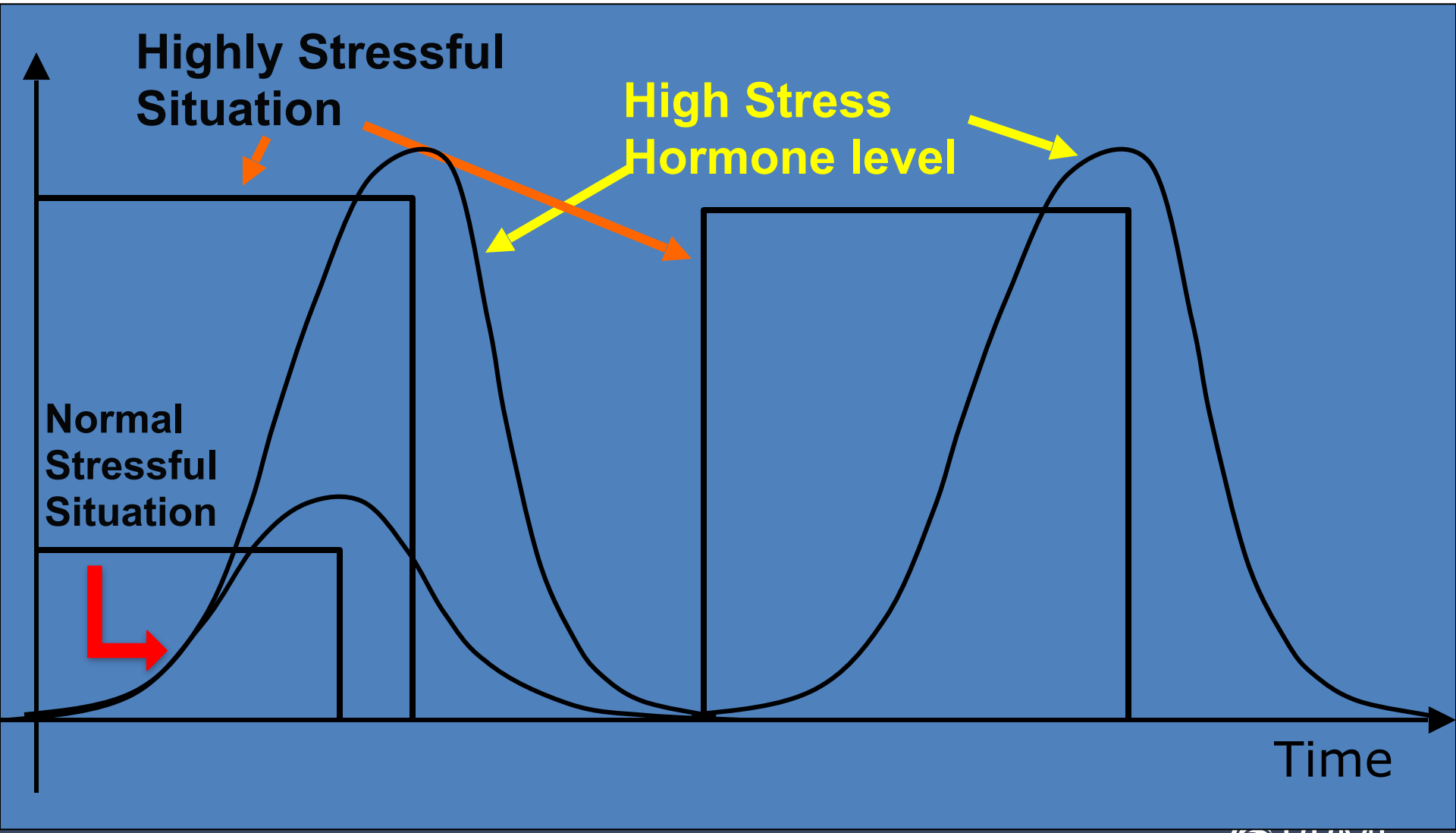
Simple Stress Situation



Problem Stress Situations (1)



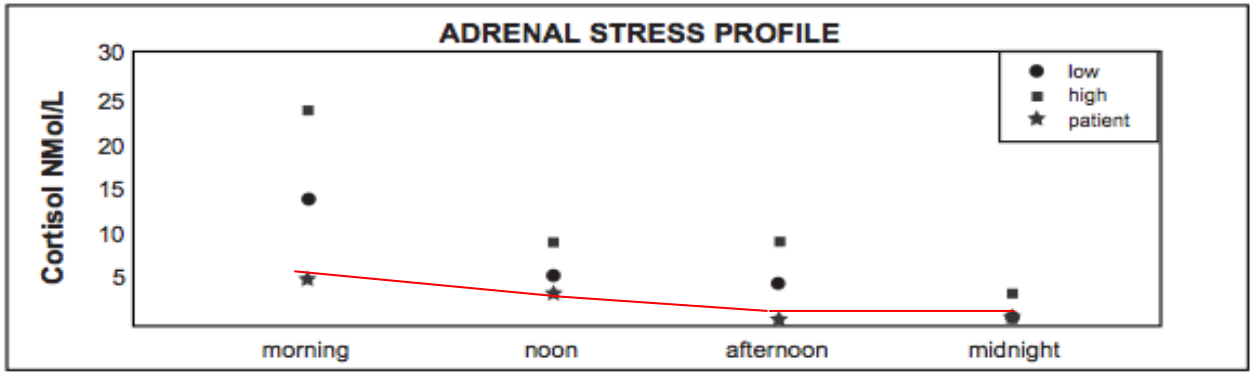
Problem Stress Situations (2)



Sample case- chronic stress

BHD #201

		NORMAL	ABNORMAL	UNITS	NORMAL RANGE
MORNING	(6:00 - 8:00 AM)		4.8	nM	13.0 - 24.0
NOON	(12:00 - 1:00 PM)		3.0	nM	5.0 - 8.0
AFTERNOON	(4:00 - 5:00 PM)		1.0	nM	4.0 - 7.0
NIGHTTIME	(10:00 PM - 12:00 AM)		1.0	nM	1.0 - 3.0
CORTISOL SUM			9.8	nM	23.0 - 42.0
DHEA-S AVERAGE			.04	ng/ml	2.0 - 10.0
TOTAL CORTISOL/DHEA-S RATIO			245.0	RATIO	5.0 - 6.0



	morning	noon	afternoon	midnight
low	13	5	4	1
high	24	8	7	3
patient	4.8	3	1	1

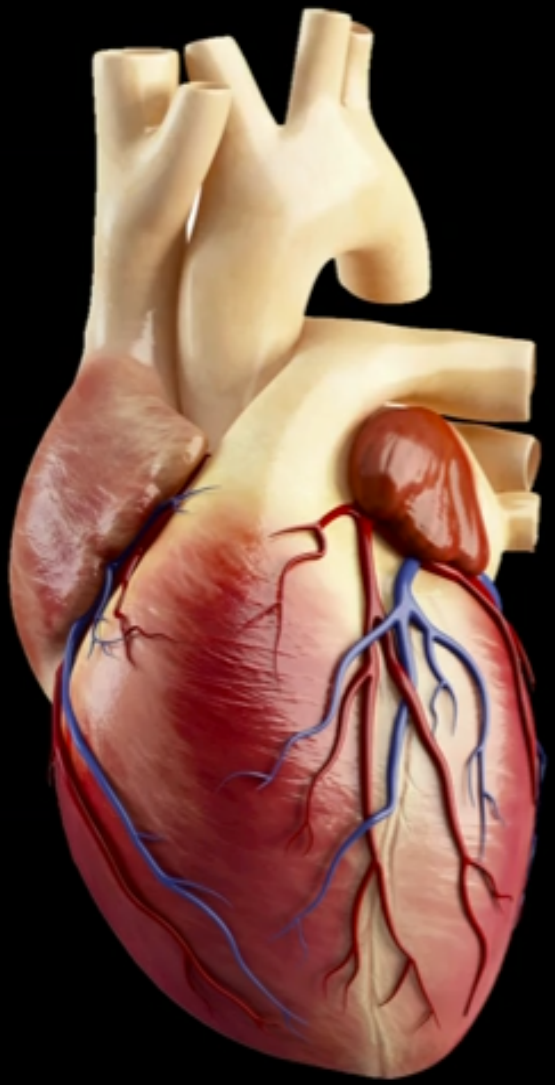
Most People Believe **Stress** is **Harmful** to their **Health**?

With all this said, can stress be your **FRIEND**?

So it is time to change our mind about Stress and Disease

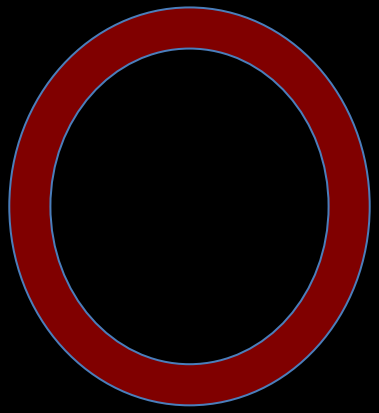
- When we change our mind about stress, we change our bodies reaction to the stress
- Study at Harvard in 2012, asked people to think of their stress as helpful.
- A typical response, BP increase and the blood vessels constricts
- But if viewed as a good thing, the vessels do not constrict, similar to what happens in moments of joy and courage.

Jamieson, Nock, & Mendes 2012
Harvard University Department of Psychology



So instead of the vessels constricting

They look like this



Jamieson, Nock, & Mendes 2012
Harvard University Department of Psychology

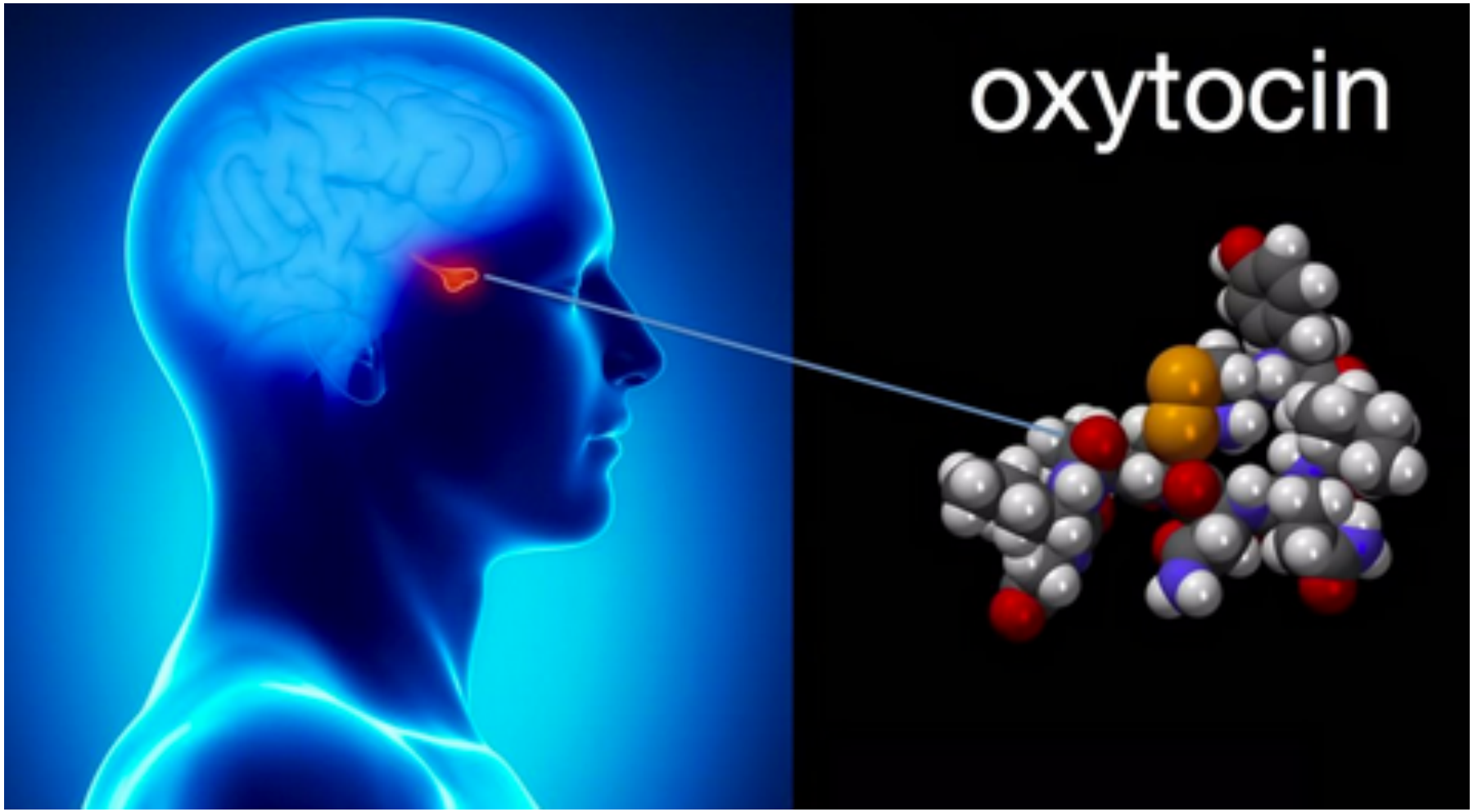
So it is time to change our mind about Stress and Disease

- So the goal is not to get rid of your stress but simply make you better at understanding and appreciating your stress, viewing the stress response as helpful

- The next time you feel stress, tell yourself this, “my body is helping me rise to meet the challenge”. Your body will believe you and the stress response is now healthier

There is another VERY important hormone released during stress

The “Cuddle” Hormone, released when you hug someone



Oxytocin- A Stress hormone!

- Is a neuro-hormone that fine tunes the brains social instincts
- Primes you to do things that strengthens close relationships
- Makes you crave physical contact with friends and family, increases empathy, and raises your desire to care for people you care about

Oxytocin- A Stress hormone!

- When released it is motivating you to seek support to tell someone how you feel Vs holding onto it
- When life is difficult, the stress response wants you to be surrounded by people who care about you
- Oxytocin also acts on body and protects the CVS from the affects of stress.

Oxytocin- A Stress hormone!

- And all these physical benefits are enhanced by social contact and social support and so when reach out to others to seek support or to help others, more hormone is released and the stress response is healthy

- The stress response has a built in mechanism for stress resilience and that mechanism is **HUMAN CONNECTION**

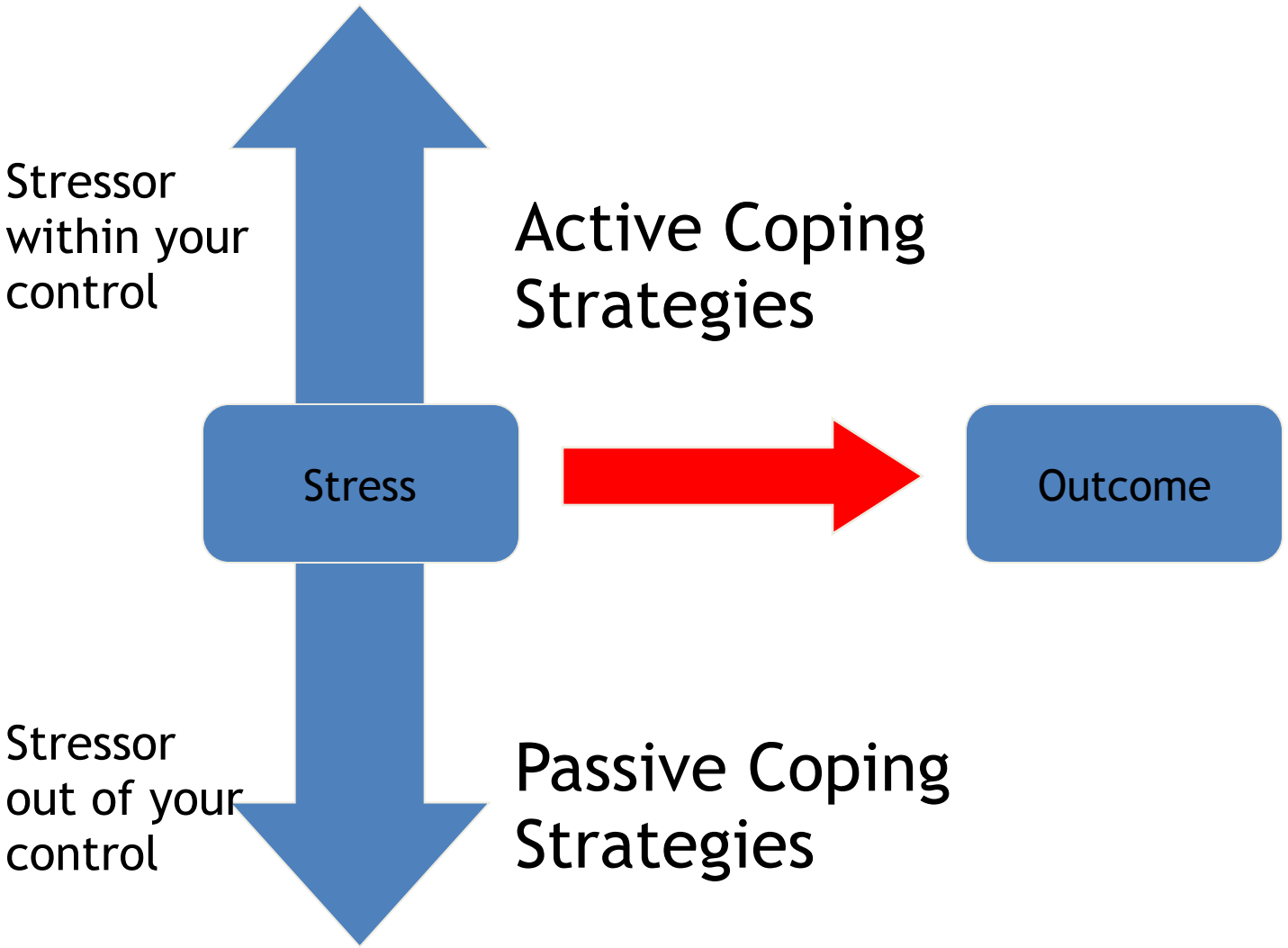
Management

Managing Stress

WHAT IS/ARE YOUR FAVORITE STRESS RELIEVER(S)?

Coping with Stress

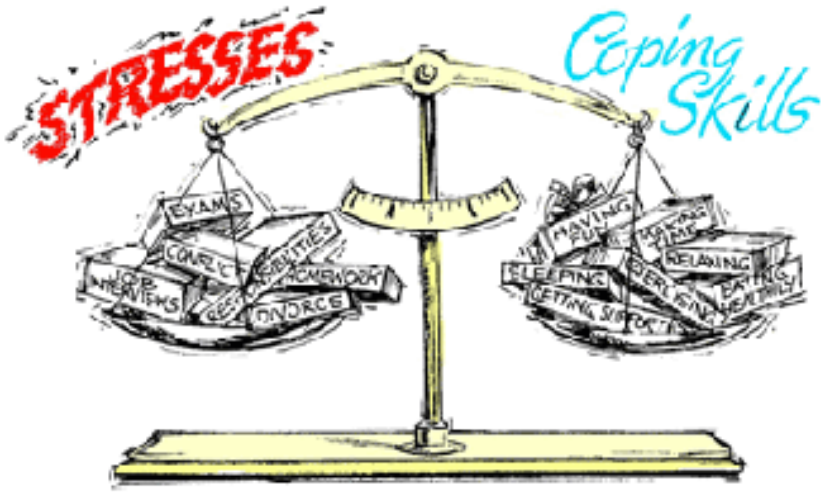
Coping with Stress



Types of Coping Strategies

- ***Active Coping Strategies***
  - Accepting
  - Re-Appraising
  - Praying
  - Problem Solving
  - Controlling
  - Seeking Social Support
- ***Passive Coping Strategies***
  - Ignoring
  - Escaping
  - Confronting
  - Relaxing
  - Exercising
  - Seeking Social Support

The Basics of Coping with Stress



- Eating and drinking sensibly
- Remembering that it is okay say no
- Stopping smoking
- Exercising regularly
- Relaxing every day

- Taking responsibility for your actions
- Examining your values and living by them
- Setting realistic goals and expectations
- Reminding yourself about things that you do well
- Getting adequate rest


HEALTHY
EATING

Diet Suggestions

- Diet: A sugar and high refined carbohydrate diet is stressful to the adrenal gland.
- However a fatigued adrenal gland may not be able to tolerate high protein diets like the Atkins diet.
- A balanced diet with complex carbohydrates (mostly vegetables, quinoa, millet, amaranth), healthy fat (olive oil, coconut oil, avocadoes, nut butters) and protein is best.
- Frequent small meals and avoidance of prolonged hunger is recommended.
- Salt intake should be liberalized.

"What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?"

THE ACTIVITY PYRAMID

EACH WEEK, TRY TO INCREASE YOUR PHYSICAL ACTIVITY USING THIS GUIDE. HERE'S HOW TO START...

IF YOU ARE INACTIVE
(Rarely do activity)

Increase daily activities at the base of the Activity Pyramid by
- taking the stairs instead of the elevator
- hiding the TV remote control
- making extra trips around the house or yard
- stretching while standing in line
- walking whenever you can

IF YOU ARE SPORADIC
(Active some of the time, but not regularly)

Become consistent with activity by increasing activity in the middle of the pyramid by
- finding activities you enjoy
- planning activities in your day
- setting realistic goals

IF YOU ARE CONSISTENT
(Active most of the time, or at least four days each week)

Choose activities from the whole pyramid by
- changing your routine if you start to get bored
- exploring new activities

ABOVE ALL... HAVE FUN AND GOOD LUCK!

YOGA is a useful stress reducing exercise. The harmony with which the body moves, in sync with the breath has therapeutic and calming effects.

- Breathing: practice deep breathing
- Progressive muscle relaxation
- Guided Imagery
- Meditation
- Tapes, CDs etc.: Either something structured (commercial) or soothing music
- Choose and schedule it in

Cognitive (Thoughts)

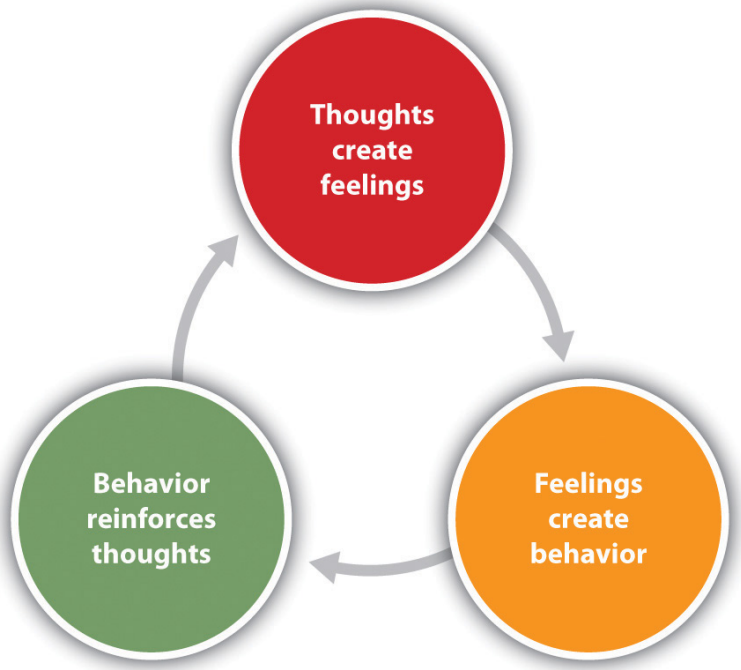
- Pay attention to what you say to yourself
- Identify negative thinking and irrational beliefs
- Negative thinking leads t

stress and anxiety

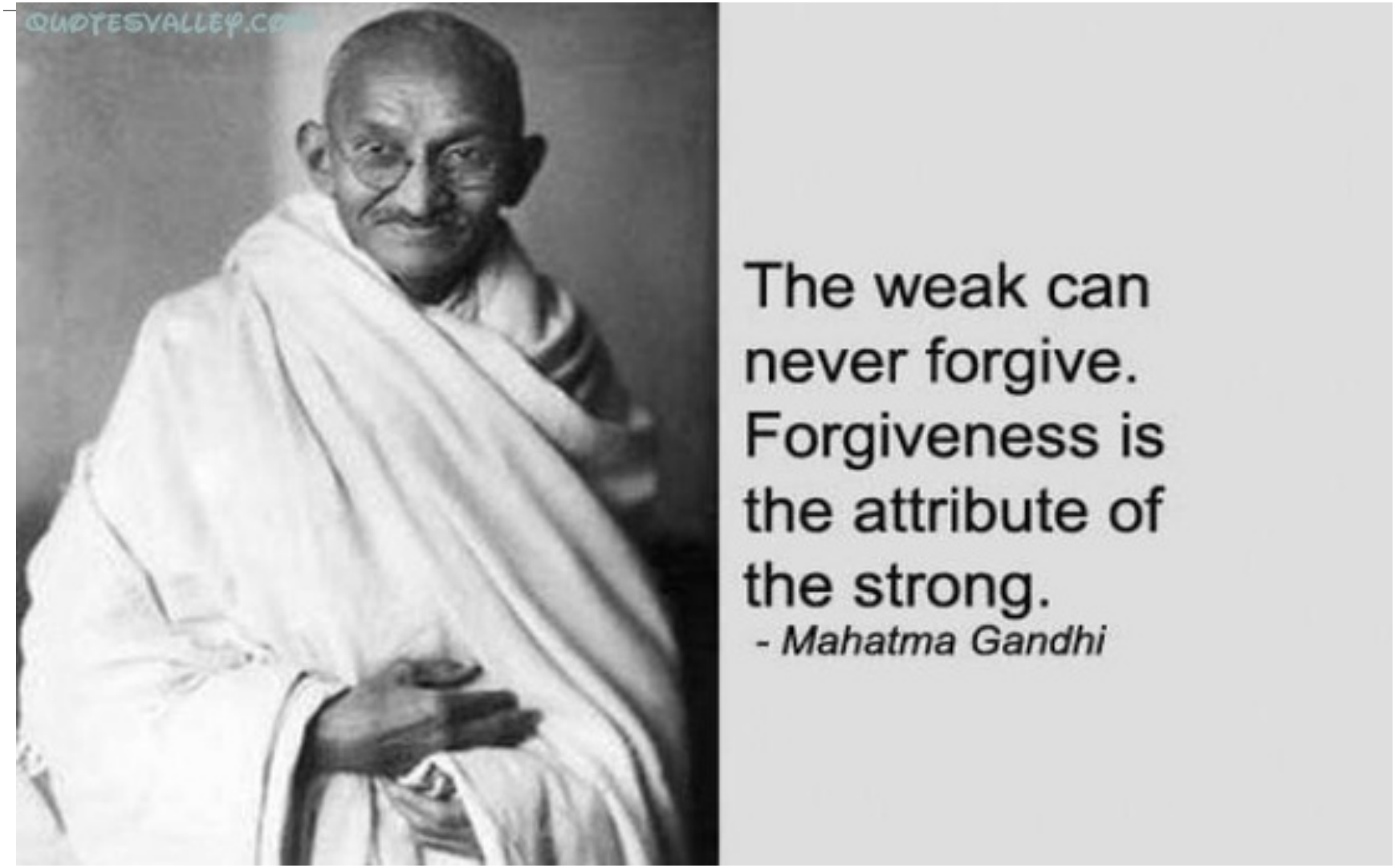
- Teach thought-stopping

techniques

- Teach affirmations

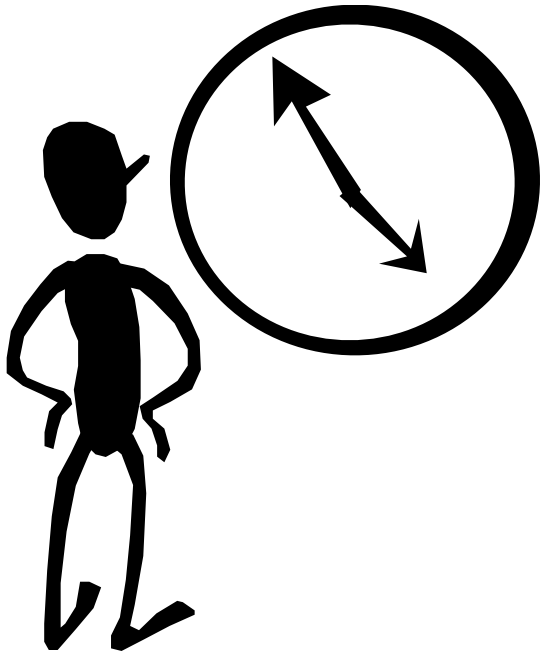


Forgive Others & Yourself



Goals and Expectations

- Get organized
- Get structured
- Set short term goals
- Set long term goals
- Use a planner:
  - daily schedule and “To Do” list



GET ADEQUATE SLEEP & REST

Laughter

- Is very beneficial as it increases oxygen supply and relaxes muscles in the diaphragm and chest.
- Your brain produces endorphins which are neurotransmitters of happiness.
- Laughing is contagious. If you get a group of friends together and watch funny movies – if one starts laughing, soon all the others join in.

Play Therapy

- Fill your life with fun things to do!!!!
- Keep your sense of humor!!!!
- Act like a kid (again)

HAVING HOBBIES HELPS

- Church, etc
- Help others
- Spend quiet time every day
- Be thankful
- Think positively
- Put your faith to work!

"I am at peace in the midst of chaos or madness.
No person, place or thing has the power to upset me."

BIO-MAT

FDA-REGISTERED MEDICAL DEVICE

• Combines state-of-the-art **far infrared (FIR)** light and **negative ion** technology with **AMETHYST**.

- ➢ Improves Circulation and Cardiovascular Function
- ➢ Improves Immune System Function
- ➢ Relieves Pain
- ➢ Burns Calories and Controls Weight
- ➢ Eases Joint Pain and Stiffness
- ➢ Reduces Stress and Fatigue
- ➢ Improves Skin
- ➢ Removes Bodily Toxins and Assists in Detoxification

MASSAGE CAN BE HEALING!

Vibroacoustics- Sound Bed therapy

an Ultimate for the Nervous System

Vibroacoustic

s

- Melt Away Your Stress
- Achieve Deep Relaxation
- Soothe Body, Mind and Spirit
- Feel Balanced, Peaceful and Rejuvenated
- Lower Blood Pressure
- Manage Pain - and MORE -
- Without Meds …

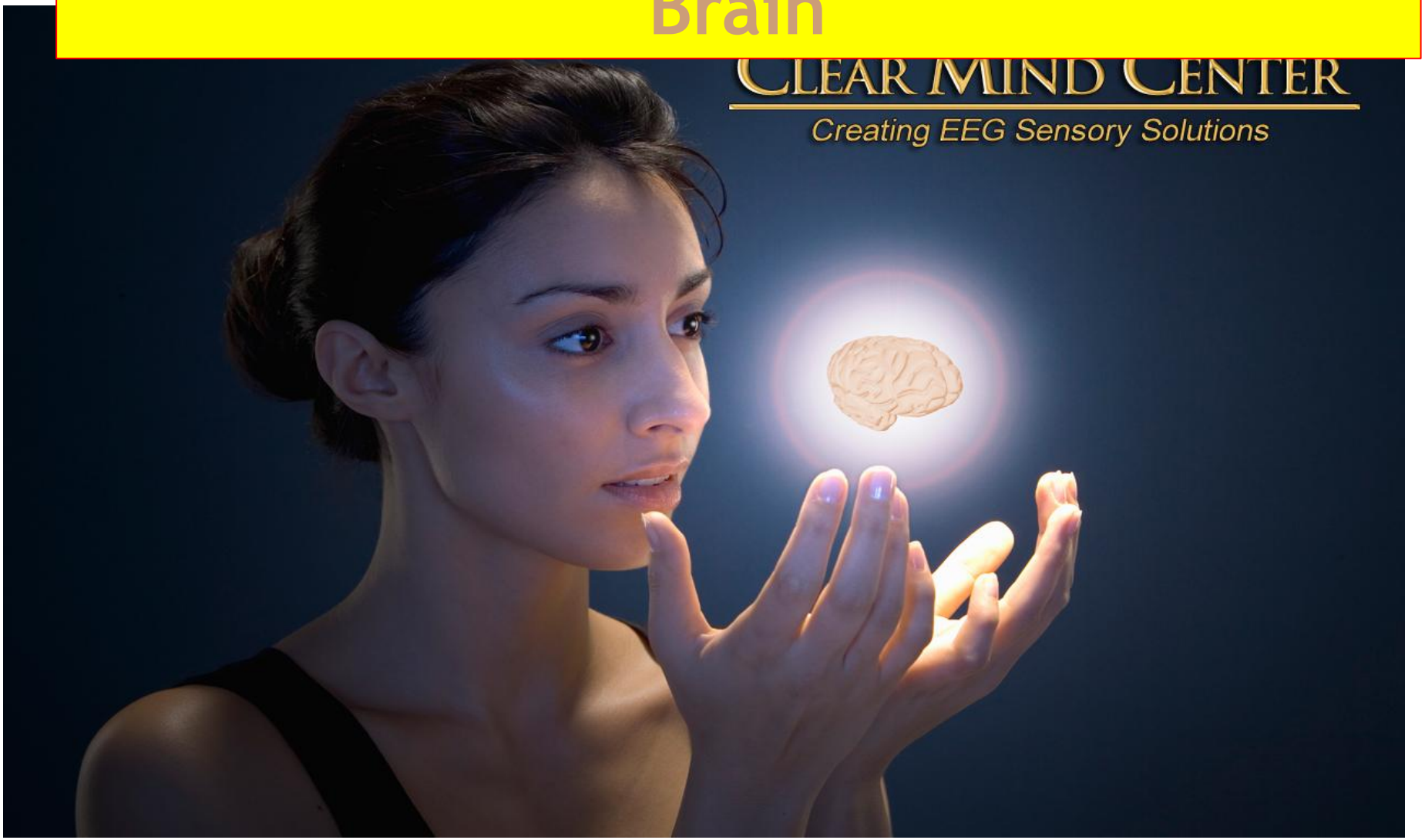
THE ZONE

- the ultimate system for deep relaxation and healing
- balance the autonomic nervous system
- de-stressing the body; detoxification

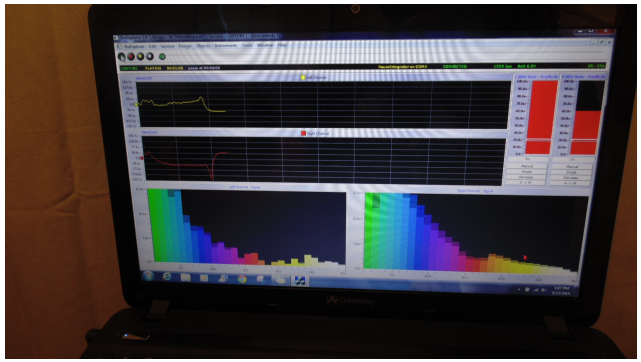
Uses

***Vibration**, **Sound** and **Light Waves** which assist the body to enhance it's Natural Healing Ability.*

NEUROFEEDBACK – to RETRAIN the Brain



NEUROFEEDBACK – to RETRAIN the Brain



Clinical protocol for Adrenal problems

Number 1 support for the adrenal glands is?

ROUTINE

Protocol Ideas for Adrenal Dysfunction

- RHYTHM is essential and the most important treatment
- Stress management techniques
- ALL THE BASICS - water - 6-8 glasses
- B complex (Vitamin B12, Vitamin B Complex, Vitamin B5, Vitamin B6)
- Fish Oils, Flax seed oil
- Potassium
- Magnesium and Liquid Magnesium (glycinate)
- Zinc
- Vitamin E
- Vitamin C

Protocol Ideas for Adrenal Dysfunction

Adrenal tissue

- Organo (homeopathic)
- Glandular
- Protomorphagen

DHEA

Pregnenolone

Herbs

- **Maca root**
- **Panax ginseng**
- **Licorice**
- **Ashwagandha**
- **Siberian Ginseng**
- **Rhodiola Rosea**
- **Holy Basil (Tulsi)**

Adrenal recovery – BE PATIENT

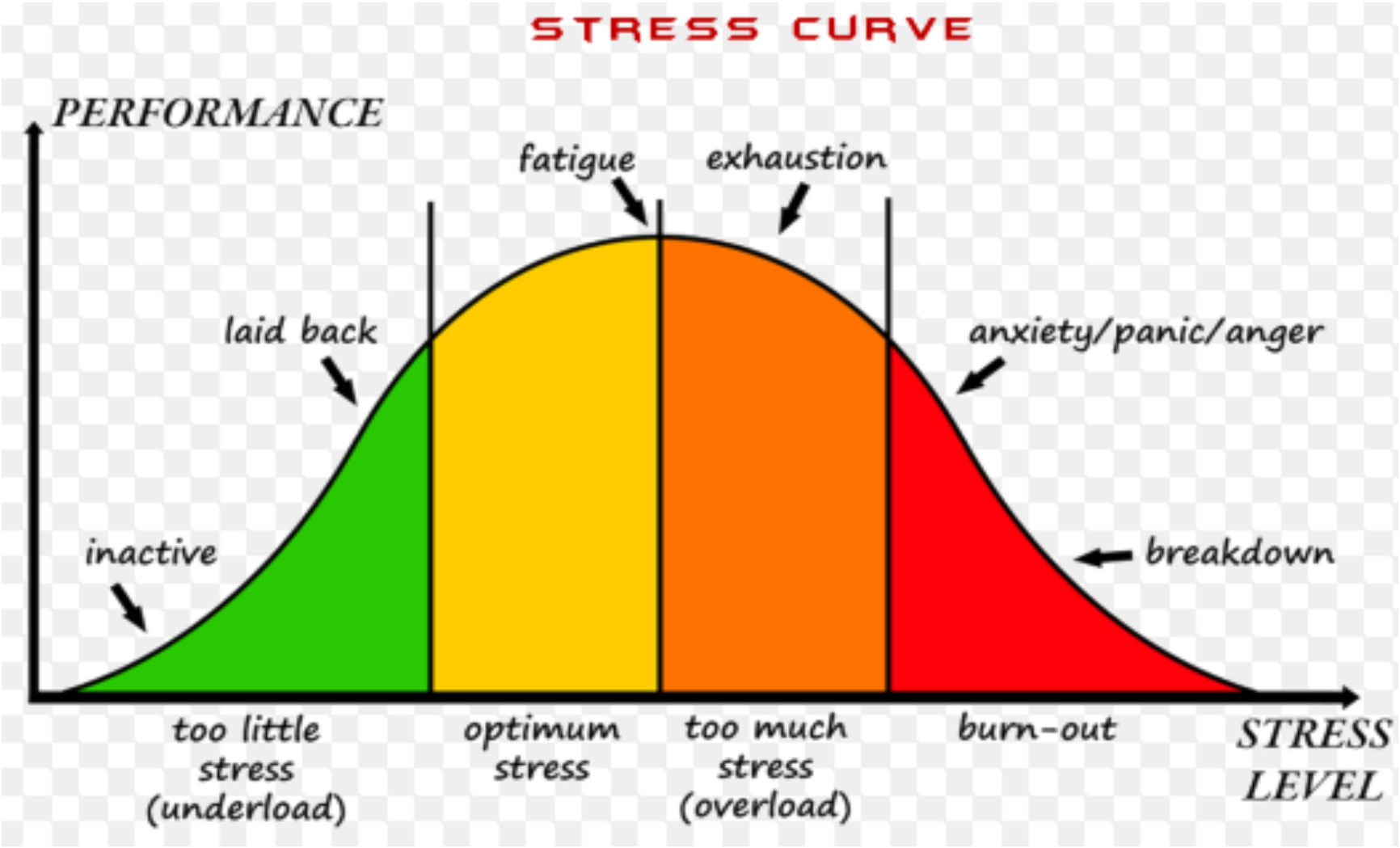
It takes 3-6 months to move back from stage 1 to normal

It takes 6-12 months to move back from stage 2 to 1

It takes 12+ months to move from stage 3 to 1

It takes up to 2 years to move from stage 3 to normal

So Stress does NOT have to be BAD!



Stress is not all bad!!!

- Every human activity is related to stress
- Stress
  - We are born out of stress
  - Motivates to take new actions, new directions
  - Helps focuses energy
  - Brings out inner potential
  - Improves performance
  - Improves retention and memory
  - Stress situations are like exams
    - Success improves self-confidence
    - Increases inner strength

Conclusion

You may not be able to smooth out the surf, but you can learn to ride the waves!