



STRESS

Master of Disguise

&

DIS-EASE!

STRESS & Adrenal Fatigue: Today's Saber Toothed Tiger

As we congregate together today, stress is shortening our lives!

In our ancient lives, it was easy to identify the hungry tiger and do our best to avoid being lunch.

In the 21st century, that tiger has many disguises, and they are so numerous and simultaneous that we are often unaware of their pervasive presence in our daily lives. Yet, they are every bit as deadly as that savage cat!

Today, in this very brief workshop, I'll do my best to share with you what I've learned about stress, what it looks like in our lives, how it manifests in our bodies, and what we can do to recognize and deal with it both before and after it enters our borders.

What Does Stress Look Like In MY Life? How Can I Recognize that “tiger”?



Some occupations are inherently stressful.



Stress has MANY faces

This kind of stress is probably the most closely related to the Saber toothed tiger analogy.

A sudden, frightening experience causes the adrenal glands to kick into action sending out adrenaline to help us make the fight or flight decision.





Is parenting sometimes more daunting than you ever imagined?

Do you feel that you can't cope? That you don't have the tools to help your child develop better coping skills?

This kind of stress puts added burden on your body and Diminishes your health!



Is your child feeling YOUR stress?

Although we often wonder why they never seem to hear when we speak to them.....

They hear EVERY word we wish they never heard.

They make our stress their own, often assuming blame for our "sadness" or "anger", however they perceive it.



Our anger, frustration.....STRESS.....is killing us.....through high blood pressure, anxiety & depression, high cholesterol, decreased brain function, adrenal exhaustion, liver and kidney failure.



And we perpetuate this pattern in our children.....



....who are also under stress every day.

Stress to earn..... the approval of their parents, teachers & peers.

This can be a daunting dicotome, indeed!



Today's economic challenges have brought many to the end of their Emotional ropes.....creating high stress.....and low immunity!

Couples struggling to make ends meet



Singles struggling to *FIND* the ends!

Another face of stress.....

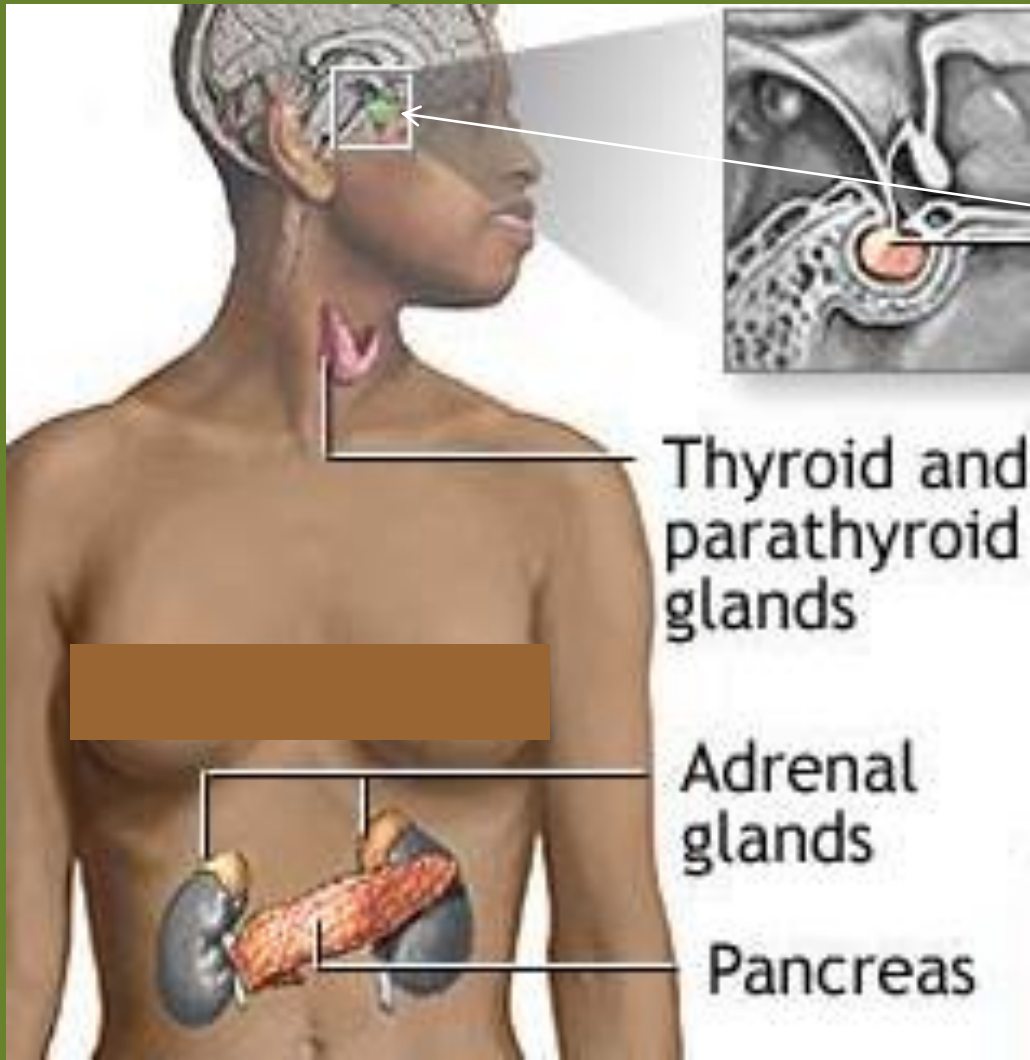


This kind of stress also calls for an adrenaline rush, but it's temporary because we KNOW the outcome.



Dopamine is a chemical that occurs naturally in the brain. Bodily functions affected by dopamine include mood, sleep, learning and voluntary movements. It **binds to receptors signaling pleasure.**

How Does Stress Manifest In My Body?

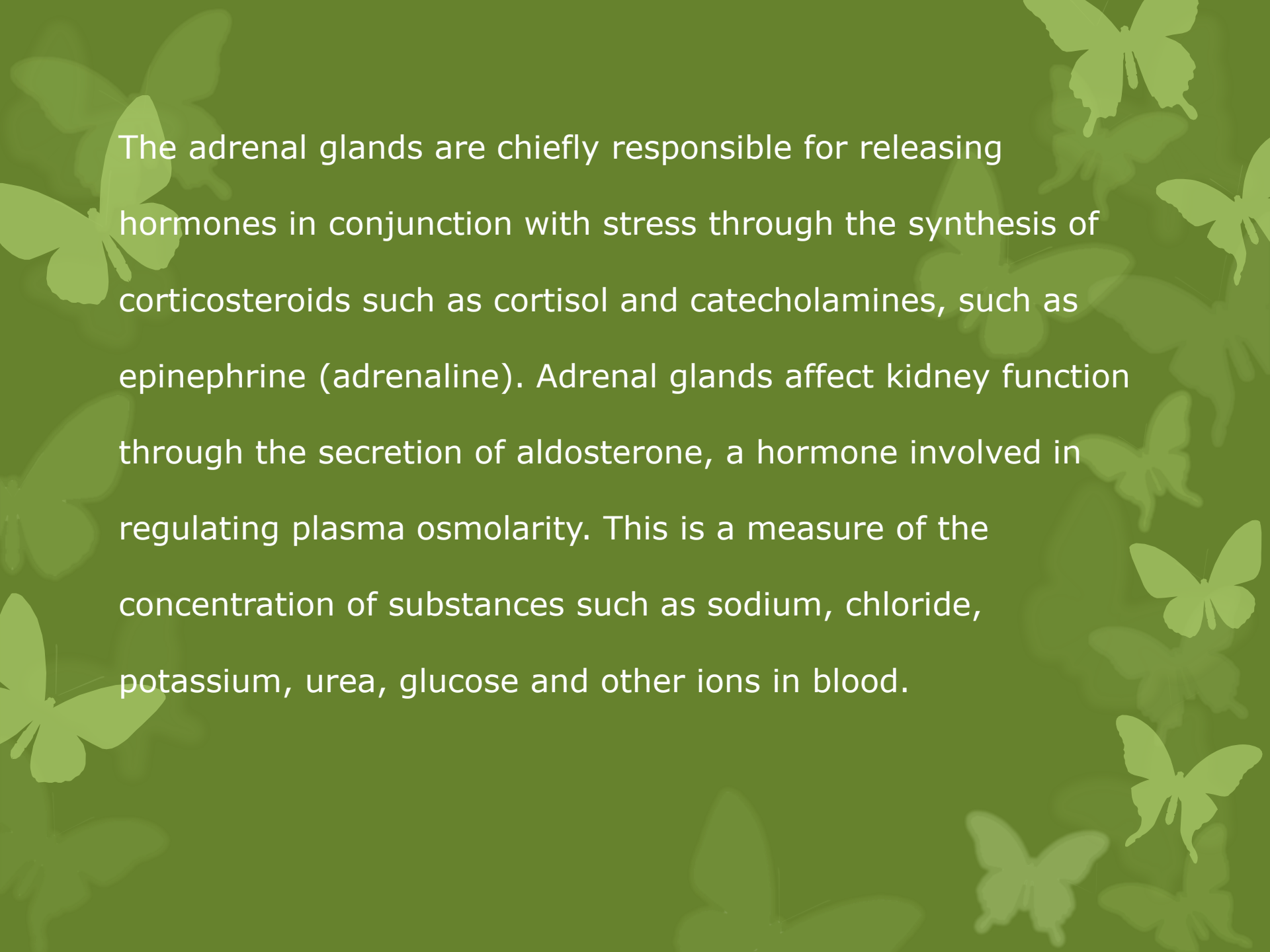


Adrenal Gland



Each adrenal gland is separated into two distinct structures, the adrenal cortex and medulla, both of which produce hormones.

The **cortex** mainly produces cortisol, aldosterone, and androgens, while the **medulla** chiefly produces epinephrine (adrenaline) and norepinephrine (noradrenaline).

The background of the slide is a solid green color, decorated with numerous light green butterfly silhouettes of various sizes and orientations scattered across the surface.

The adrenal glands are chiefly responsible for releasing hormones in conjunction with stress through the synthesis of corticosteroids such as cortisol and catecholamines, such as epinephrine (adrenaline). Adrenal glands affect kidney function through the secretion of aldosterone, a hormone involved in regulating plasma osmolarity. This is a measure of the concentration of substances such as sodium, chloride, potassium, urea, glucose and other ions in blood.

What Creates That “Stressed Out” Feeling?

Every challenge to the mind and body creates a demand on the adrenal glands.

- lack of sleep
- commute to work
- a demanding boss
- the threat of losing your job
- financial pressure,
- personality conflict,
- yo-yo dietin,
- Relationship turmoil
- death or illness of a loved one
- skipping meals
- reliance on stimulants like caffeine and carbs
- digestive problems
- over-exercise
- illness or infection or surgery
- unresolved emotional issues from our past or present, and more!

The result is adrenal glands persistently on “high alert.”

Two hormones responsible for the stress response are critical to our survival:

What is **cortisol**?

In its normal function, cortisol helps us meet challenges by converting fats and proteins into energy, keeping us alert, balancing electrolytes, calibrating heart beat and pressure, and counteracting inflammation. In the short run, that's great — even protective and restorative. But paradoxically, **sustained high levels of cortisol will gradually tear your body down.**

Sustained high cortisol levels:

- destroy healthy muscle and bone
- slow down healing and normal cell regeneration
- co-opt parent molecules needed to make other vital hormones
- impair digestion, metabolism and mental function
- interfere with healthy endocrine function; and
- weaken your immune system.
- Ovulation & Tissue repair shut down

The cumulative effects of such wear and tear can damage the body, mind, and spirit. Adrenal imbalance may be a factor in many conditions, including fibromyalgia, hypothyroidism, chronic fatigue syndrome, depression, arthritis, and more. It can also be associated with a host of unpleasant signs and symptoms, from acne to hair loss.

Stress and Ulcers

- In the 1960's, it was thought that the only physical effect of stress was peptic ulcers.
- In the 1980's H-pylori bacteria was thought to be the cause of the ulcers and the idea of stress as the cause was abandoned. Antibiotic treatment was recommended.
- A few years later the research showed the bacteria was not unique, since about 2/3 of the world population has it. This brought us back to the consideration of stress.
- The Immune system shuts down with stress, allowing the bacteria to take hold and begin rotting the stomach.

Another way that stress manifests is in arterial plaque.

- Stress hormones can trigger a violent cardiac response.
- Artery walls weaken and become susceptible to cholesterol plaque buildup, restricting blood flow and jeopardizing cardiac health.

Brain cells can also be damaged by chronic stress.

- Brain cells actually shrink under stress.
- Brain circuits are affected.
- Acute stress negatively affects short term memory.

Stress can make us feel miserable

Dopamine binds to receptors signaling pleasure. When dopamine is deficient, the sun seems to never shine, depression ensues. Life expectancy is shortened.

Heart disease, diabetes, cardiovascular disease and a host of other illnesses may ensue .

Stress effects are long reaching

- Lingering effects of famine for example. Fetuses of women of the Dutch famine, Dr. Rosebloom identified a potential 2500 people effected. Babies exposed to fetal stress experienced the chronic stress 60 years later. Babies conceived during the famine were generally in poorer health than those conceived before/after the famine, as well as increased cardiovascular disease.
- Brain capacity is affected by stress. Vulnerability to psychiatric disorders, bipolar disorder, anger management issues, depression.

Is Everyone Equally At Risk?

Acute vs. Chronic Stress

In research done with baboons over a 30 year period by Richard Sopolsky, it was discovered that stress hormones are lower in troop high rankers; low rankers have increased BP and elevated stress hormones, weak immune system, clinical depression type symptoms, leading to a shortened life.

Position in hierarchy is directly related to health, the higher-ups having generally better health and longer life, because they feel less stress.

The alpha glories in power while the underlings suffer chronic stress.

- People belong to multiple hierarchies, i.e. a company, softball team, home. So a janitor who's captain of the softball team is at the top of a hierarchy.
- Find a place where you feel in control.
- Living/working conditions are critical to good health.
- When people feel well treated at work, health problems go down.
More say, more rewards, more productive and healthier workplace.

How can we create a society that has conditions that promotes human flourishing?

Be nice. Be kind. Give everyone a voice.

Are we brave enough to learn from baboons?

Will *YOU* be the one to take a step?

Trail of stress:

Taking The Effects of Stress to the Nuts & Bolts Level of How Cells and Genes Work

Telomeres are the protective caps at the ends of chromosomes in cells. Chromosomes carry the genetic information. Telomeres are buffers. They are like the tips of shoelaces. If you lose the tips, the ends start fraying.

Telomerase is an enzyme. In cells, it restores the length of the telomeres when they get worn. As the ends of the chromosomes wear down, the telomerase comes in and builds them back up.

.....psychological stress actually ages cells, which can be seen when you measure the wearing down of the tips of the chromosomes, those telomeres. (Dr. Elizabeth Blackburn, Univ. of California)

Dr. Elissa Epel, a psychologist who studies chronic stress, did a study with Dr. Blackburn, where she looked at two groups of mothers. One had normal, healthy children. The other group had a child with a chronic illness. Physiological and psychological measurements were done on everyone. With the stressed group, we found that the longer the mothers had been caring for their chronically ill child, the less their telomerase and the shorter their telomeres.

This was the first time you could clearly see cause and effect from a nongenetic influence. Genes play a role in telomerase levels, but this was not genes. This was something impacting the body that came from the outside and affecting its ability to repair itself.

She found similar effects in women who were primary caregivers for partners with dementia.

Researchers have found that the brain definitely sends nerves directly to organs of the immune system and not just to the heart and the lower gut. In that way, too, the brain is influencing the body.

A link between low telomerase and stress-related diseases was discovered.

Dr. Blackburn's team looked at the measures for cardiovascular disease — bad lipid profiles, obesity, etc. The women with those had low telomerase.

They also looked at low telomeres and cancer, exploring the possibility that a cell with worn down chromosome tips might divide in some abnormal way. That research continues.

YOU are NOT your STRESS

Let's talk about how to treat YOU, not your stress

Key Points of Discussion:

- Physical Nutrition (Notice I didn't use the "D" word)
- Physical Activity (No "E" word here!)
- Rest / Sleep
- Play: Time with friends & loved ones
- Healthy Boundaries
- Mental Activity/Stimulation
- Spiritual Nutrition (Not to be confused with Religion!)



Let Your Food Be Your Medicine

.....and Your Medicine Be Your Food



Physical Nutrition: High Test Fuel for a Fast Paced Life!

- It's true.....we are what we eat. The fuel we put into our tank determines the health, performance and longevity of our engine.
- A whole body is designed to run on whole foods.
It's easy! Consider your food choices – if you can identify its ingredients on sight – it's likely a whole food!
- Helpful hint: Shop the outside walls at the grocery store. That's where you're likely to find the REAL FOOD.

Examples: Fresh whole fruits & vegetables, Organic meats & fish



➤ **Choose Whole Grains:**

Quinoa

Short Grain Brown Rice

Faro

Barley

Bulgar

Buckwheat

- Experiment to see what you enjoy.
- Try baking your own bread!
- Find great recipes online
- Dis-Cover the joy of eating
 - ~ REAL food ~ Delicious Food
 - ~ Healthy Food!



Herbs: Food For Your Body, Mind & Spirit

- ❖ Enjoy herbs in ways you never imagined!
- ❖ Learn to find the joy in cooking food that is both delicious and good for you!
- ❖ Discover how great you can feel just by choosing good fuel
- ❖ Nourish your adrenals and watch your stress level drop!
- ❖ FEED your body and watch your body's functions normalize:
 - Healthy Blood Pressure - Lower Cholesterol
 - Better Bowel Health - Better Skin
 - More Smiling!

Herbs To Nourish Adrenal Function

These recipes can be prepared as tea or tincture/extract.



Adrenal/Respiratory Blend

- 2 Horehound Leaf
- 2 Hyssop Leaf/Flower
- 2 Licorice Root
- 2 Marshmallow Root

Adaptogenic Tea for Men

- 1 American Ginseng Root
- 4 Nettle Leaf
- 1 Marshmallow Root
- 1 Saw Palmetto Berry
- 3 Oat Straw
- 1 Passionflower Leaf

Adaptogenic Tea Blend #1

- 2 Astragalus Root
- 1 Eleuthero Root
- 1 Schizandra Berry
- 4 Nettle Leaf
- 4 Milky Oats
- 1 Marshmallow Root

Adaptogenic Tea Blend #2

- 2 Licorice Root
- 2 Shatavari Root
- 4 Nettle Leaf
- 4 Milky Oats
- 1 Marshmallow Root
- 1 Passionflower Leaf

Infuse Your Meals With Tasty Healing Herbs!



Fish

Tarragon
Parsley
Thyme
Rosemary
Dill
Chervil
Capers

Poultry

Sage
Parsley
Sage
Garlic
Rosemary
Hawthorne Berries
Turmeric

Beef

Savory
Garlic
Rosemary
Nutmeg

Pork/Lamb

Juniper
Rosemary
Garlic
Mint



Delicious Summer Drinks

- ❖ Iced Lemonade w/ Lavender & Hibiscus flowers
- ❖ Iced Tea of roses, chamomile, lemon balm & apple mint.
- ❖ Iced black tea with jasmine flowers & peppermint
- ❖ Vanilla yogurt smoothie with fresh berries & pineapple!

Drink Water!

Water keeps your muscles, organs, tendons, ligaments, skin.....all of you.....hydrated!

**Your body needs you to give it 50% of your body weight
in ounces of water**

EVERY DAY!

If you weigh 200 lbs. ~ your body needs 100 ounces!

8 oz. = 1 Cup

4 cups = 32 oz. = 1 quart

8 cups = 64 oz. = 1/2 gallon

16 cups = 128 oz. = 1 gallon

Better get started!

Herbal Contra-Indications

When Should Certain Herbs NOT Be Used?

- ❑ Always remember that nature is powerful and it's medicine is powerful.
- ❑ Many of today's pharmaceuticals started out as plants, although the processes used to create prescription drugs leave the art and magic of plant medicine far behind.
- ❑ Care should always be used in choosing plant medicines. Just because plants are natural, does NOT mean they are always safe for you to use.
- ❑ Please always consult a skilled herbal practitioner when using plant medicines during pregnancy, and when you are taking prescription drugs, particularly those taken for blood pressure, blood thinning, depression, anxiety, insomnia, cardiovascular disease,



Get A Move On!

People who get regular physical exercise are generally healthier

Exercise

- improves your breathing
- Expands your lungs and oxygenates every tissue of your body!
- Tones muscles – even the ones you don't see – like your heart!
- Works off stress and improves your attitude!
- Gets you out of the house / off the couch / out of your own way!
- Relieves the boredom that leads to unhealthy eating

Rest ~ Sleep ~ Rest ~ Sleep

Essential To Good Health

The body does its best healing during sleep

Chronic Insomnia leads to health problems

Naps Rock!



Sleep is improved by

- ~ Good eating habits
- ~ Regular Exercise

***Don't eat or exercise before bed!**

Make Time For Playing!



Healthy Boundaries

Take Out The Guesswork in Relationships

- It's ok to say 'NO'
- Don't stand too close!
- Truth is Always Best
- You can't be a doormat if you don't lie down!



- Don't Bully or BE Bullied!



- Be kind & generous within reason
- Putting yourself first doesn't make you selfish!

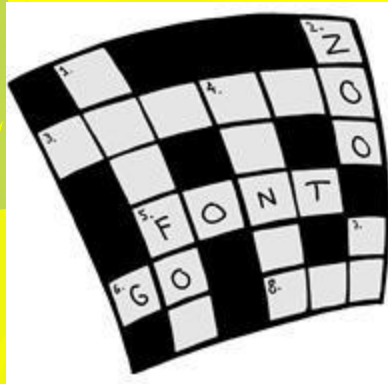


- Do your honest share
- Ask for what you want





Nourish Your Brain ~ Like You Nourish Your Body!



Nourish Your Spirit
as
You Nourish
Your Body & Mind





Choose Joy!

.....It Just Takes Practice

When we're joyful

People Notice!

References

Sapolsky, Robert *Why Zebras Don't Get Ulcers:
Stress, Disease and Coping*
<http://killerstress.stanford.edu/>

Winston, David Adaptogens

Hoffman, David Stress

Page, Linda Healthy Healing

<http://www.womentowomen.com>



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