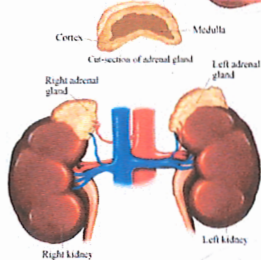
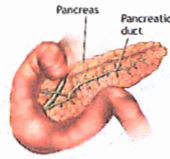


BLOOD SUGAR IS CAREFULLY BALANCED BY:

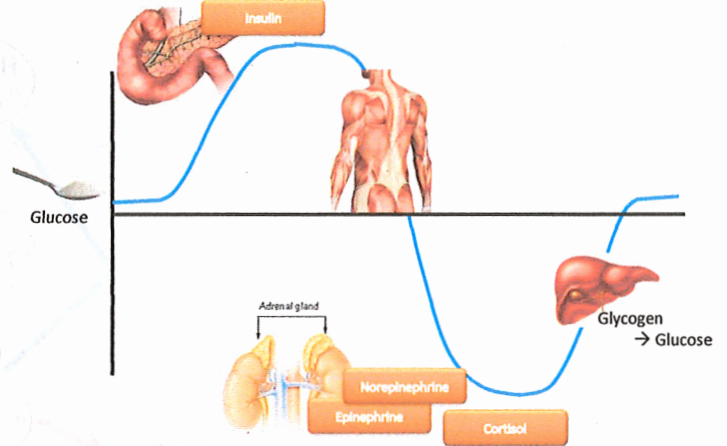
Liver:
stores and releases
glucose (sugar) to blood



Pancreas: produces
1) insulin which
sends glucose into
the muscles for
energy and to the
liver for storage
2) glucagon which
tells the liver to
release glucose

Adrenal glands:
Cortisol counteracts insulin
to stabilize glucose in the
blood, as needed for
adaptation to activities

Blood Sugar Rollercoaster



BLOOD SUGAR

- Low blood sugar is the main cause of waking in the night. Blood sugar drops triggers adrenals.
- In order for the Adrenals to work, we have to be awake. Rising Cortisol wakes you up!
- A happy liver has a good store of glycogen (stored sugar) to allow you to 'fast' through the night.
- Eat a small snack about one-half hour before lying down. Just a bite of 2 or 3 foods.
- It ideally contains Protein - Carb - Fat:
 - Protein: meat, egg, bean
 - Carb: vegetable - key in evening
 - Fat: (often comes with the above animal protein), coconut butter, cheese, avocado
- Save a bit of food from dinner - Protein & Vegetable
- Other ideas: cheese & jicama, a few nuts, yogurt and fruit, avocado and grapefruit, shell-cooked egg

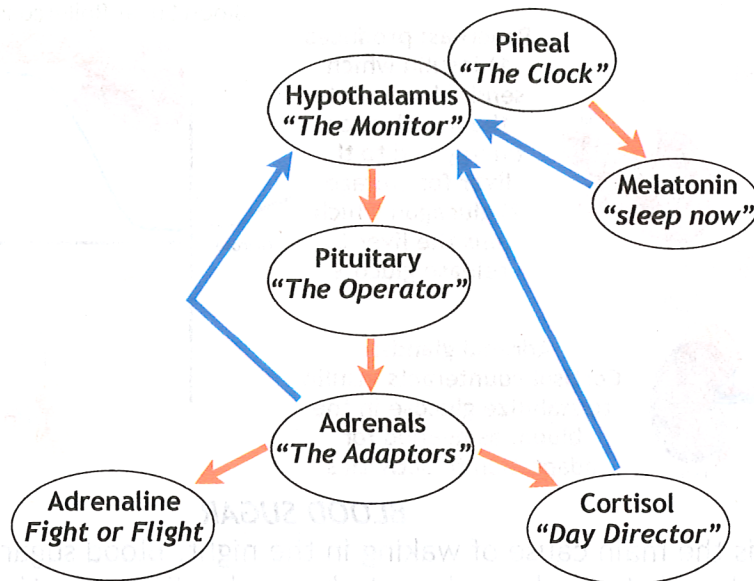
PAIN

- Pain is a sign of inflammation.
- Most pain has a muscle component. Muscles 'ask' to be massaged. Do 'Ten on the Tender' - find the tender spot and give it ten circular rubs.
- Turmeric with lecithin is excellent for inflammation. "Turmeric with Meriva" from Source Naturals
- Anti-inflammatory drugs cause injury to the stomach and intestines, causing more inflammation. They also block the resolution of the inflammation, leading to chronic pain.

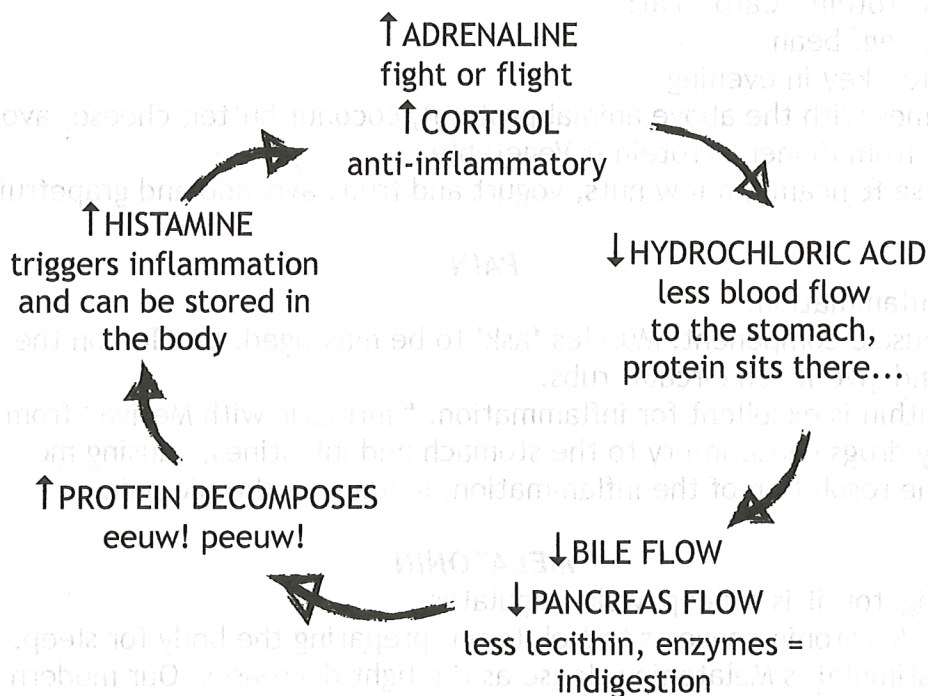
MELATONIN

- Is not a sleep instigator, it is a sleep/wake regulator.
- As the light fades, Serotonin converts to Melatonin, preparing the body for sleep.
- The Pineal gland stimulates Melatonin release as the light decreases. Our modern use of light has greatly affected our ability to make Melatonin.
- The Pineal gland can be suppressed by high Cortisol.
- In the morning, when light increases, Melatonin production recedes.
- 95% of serotonin and 80% of melatonin are made in your **intestines**:
 - Avoid processed food - colors, preservatives, gluten & sugar, especially High Fructose Corn Syrup
 - Plant diverse microbes with 'probiotics' - sauerkraut, kefir,
 - Feed microbes with 'pre-biotics'
- Foods that promote Melatonin production: Montmorency cherries, ginger, tomatoes, spirulina, seaweed, pumpkin seeds, dairy products, turkey, chicken and its liver, almonds, peanuts, brewer's yeast, bananas, pineapple and other tropical fruits.
- Hormones feed back in a way that they shut down if you take them too long.

(About) Eight Hours of Deep Restful Sleep



The Merry Go Round of Stress



- This is the main cause of difficulty with falling asleep or waking at a repeated time of the night.
- Cortisol works in the day, rebuilds at night. When Cortisol is high, Melatonin is low.
- The Adrenal glands heal best when the routine is regular and predictable - meals, sleep, exercise.
- Cortisol can also be low after prolonged high stress, or with aging. Adrenal Repair Tonic: Rehmannia, ashwaganda, echinacea, licorice. Can add Eleuthero
- Phosphorylated Serine (Seriphos) will lower Cortisol. Take it if you waken in the night. If it doesn't help, your Cortisol may be low.
- To balance high Cortisol:
 - Extend the Exhale
 - Massage, Music, Dance, Laughter
 - Omega-3, Vitamin C, Magnesium, Ashwaganda

MORE PRE-BIOTIC FOODS

These are foods with a fiber that we don't use directly but are nutrition for the 39 trillion microbes in and on our body. If eating these foods causes discomfort, it is a sign that the microbe diversity is lacking. Introduce them gradually.

Marine algae - spirulina, chlorella; shiitake, maitake and reishi mushrooms; jicama, jerusalem artichokes/sunchokes, burdock, onion, garlic, leeks, dandelion greens and root, chicory root, yacon - sources of inulin; asparagus, banana, plantain, artichoke, legumes, steamed or baked potato - try the purple ones, rice and other whole grains, honey, unpasteurized apple cider vinegar.

SETTING THE SLEEP ENVIRONMENT

Light - Reduce all light, especially blue light after Sunset, Black-out curtains to keep light out at night, Wear a mask

Noise - wear ear plugs.

Temperature - take a hot bath, then sleep in cool room.

The Bed - firm yet conforming: latex foam rubber or air

Bed Partners - snoring can be a sign of sleep apnea, pets can be disturbing.

EMF - electro-magnetic frequencies of devices - turn them off!

HOW TO DETERMINE YOUR BED TIME

from Michael Brues, PhD

- Our wake-up time is often socially determined.
- Count back 7½ hours from the time you need to waken. Most have five 90-minute cycles of sleep.
- Set your alarm for the wake-up time.
- Now, ideally, you woke up about the time the alarm went off. You have found a good Bed Time.
 - If you were sound asleep when the alarm went off - add ½ to 1 hour to your Bed Time. Repeat the process.
 - If you woke up well before the alarm - subtract that amount of time from your Bed Time. Try it again.

SLEEP TIPS

- Slow Down.
- The adrenals work best with regularity & predictability - meals, sleep, exercise.
- Keep to a regular bedtime and allow an hour or more to quietly prepare for bed.
- Support a healthy Microbiome and Digestion.
- Stop all work, exposure to light (blue light) about 2 hours before bed.
- Herbs: Valerian, Chamomile, California poppy, Passionflower, Hops, Kava - quality matters; Lemon balm, Milky Oats. See herbs2000.com for more and for homeopathic remedies.
- High Cortisol? Drink Tulsi Tea in the evening.
- Low Cortisol? Adrenal Tonic is your best helper.
- Magnesium is the calming mineral. Choose Magnesium Glycinate or Threonate. Mag Malate if pain is the issue.
- GABA is an inhibitory nerve transmitter and very calming.
- If you are traveling or work night shifts, take .5 mg quality Melatonin, 90 minutes before bed. Use as rarely as possible.

SOME MEDICATIONS WITH INSOMNIA AS AN UNINTENDED EFFECT

*Antidepressants (Especially the SSRIs and the SNRIs)

*Albuterol (These are inhalers by many brand names)

*Decongestants (Pseudoephedrine)

*Steroids (Prednisone, Prednisolone, Hydrocortisone, etc)

*Metoclopramide (Metoclopramide)

*Fluoroquinolones (Ciprofloxacin, Levofloxacin, etc)

from Suzy Cohen, 4-25-17

DO NOT QUIT ANY MEDICINE WITHOUT HELP FROM YOUR DOCTOR. IT MUST BE DONE SLOWLY WITH NUTRITIONAL SUPPORT.

IN THE MORNING

- Take a moment or more to reflect on Dreams.
- Sunlight or a Full Spectrum light.
- Drink Water, Green Tea.
- Eat Breakfast with Protein, at least a bite.
- Stretch & Wiggle. Even 10 minutes can help.
- Forest Bathing - walk in the woods!
- SHELL-COOKED EGGS: Ideally the eggs are cooked to a point where the whites are just

congealed and the yolk is still golden. Use a small pan on low for about 12 - 20 minutes. Ideally, the water would just be coming to a boil at the time limit. Test the eggs for doneness. Adjust the time and temperature to achieve the firmness you prefer. Plunge the eggs in cold water to stop the cooking. Pop the shell of the egg with a spoon and it will pull apart easily. Scoop out the egg. Add veggies.

BANANA TEA

Bananas are a good source of Magnesium and there is triple the amount of Magnesium in the peel! They also support Melatonin production.

To prepare: wash an organic banana, cut off the ends & cut in half, put in 2-4 cups of boiling water, boil for 3 minutes, take off heat, steep for 5 more minutes, strain off and drink the water

RESOURCES

Source Naturals brand, "Turmeric with Meriva" has lecithin. Available online for close to wholesale. 'Seriphos' phosphorylated serine lowers cortisol. Will not help if cortisol is low but is diagnostic. GE Align **PM Lighting Bulb** 93842 LED 7-watt 350-Lumen Dimmable A19 with Medium Base Lighting Science FG-02263 **Good Night LED Household Light Bulbs**, also has a **Good Morning Bulb** Full farm-a-seed at Abundant Health - Western & Chinese herb formulas that are very effective. Diane Smalley, L.Ac., 750 Central, Willits, 707.456.9514, dancemolley@willitsonline.com

GOOD BOOKS

Good Night, The Power of When by Michael Brues, see thesleepdoctor.com - free ebooks
Sleep Smarter by Shawn Stevenson
The Wahls Protocol by Terry Wahls, very in-depth on nutrition for auto-immune conditions
Drug Muggers by Suzy Cohen, Which medications are robbing your body of essential of nutrients...
The Trigger Point Therapy Workbook by Clair Davies

ATTENTION TO YOURSELF

- How is my breathing?
- How is my energy level? Sleepy? Awake? Wired & Tired?
- Scan through body: sensations? pain?
- What is the state of my Food Tube? How was my nutrition today?
- What am I telling myself? What am I holding onto?

TOUCHSTONES E-N-T-E-R the realm of sleep

- Breathing? Extend the Exhale.
- Energy? Build and visit your Nest - an image of a safe comfortable place to go in your mind.
- Pain? Massage it - Ten on the Tender.
- Belly? Eat a few Bites of vegetable & protein.
- Chatter? Release the Day. Relax into the bed.
 - Make a list for tomorrow. Name your Gratitudes.
 - Ride the boat to your island, explore and get familiar.

RESTLESS LEGS, HAND NUMBNESS

These conditions have their origin in high blood sugar. Insulin resistance happens when the cells have stored all the sugar that they can and now the sugar is not able to be removed from the blood enough to keep it from injuring the sensitive tissues of the body, like nerves.

Eating other healthy foods than sugar is the first most important way to heal. The herb, **Gymnema**, is an excellent support for this. Take one or two capsules with any meal after which you feel you must have dessert. You can take it any time you are compelled to overeat sugars. It quells the sugar craving and then goes even further to help restore the pancreas. If you have diabetes, you need this herb.

Next, make certain the nerves have the nutrients they need:

B vitamins, with folate and B12 in the methyl form = **methyl-folate** and **methyl-cobalamin**.

Omega-3 fatty acids - **Calamari oil** or **Tuna-Omega3** are best.

Magnesium lactate, malate, glycinate or threonate are the best forms.

Calcium lactate, citrate and malate are good forms.

Trace Minerals

All of these nutrients are best from food and a Mediterranean or paleo type of diet with lots of vegetables will give you the best likelihood of receiving them.

The inhibitory nerve transmitter, **GABA**, is also easy to supplement directly.

N-acetylcysteine and **Alpha-lipoic acid** help the body to make GABA. This is especially helpful if the restless legs and numbness keep you from falling asleep.

Standard Process makes a product called **Neuroplex** which has all of the nutrients for the nerves. Take 2 per meal. Also recommended is their **Cataplex B**, **RNA** and **St. John's Wort** or **Horsechestnut complex**. All of these supplements are available at a discount at Abundant Health.

MINERALS

Minerals are involved in every process of the body as we transform food, water and air into energy.

Eating a variety of vegetables, fruits, nuts and seeds give us all of the organic (= organized) minerals we need. We can't eat dirt, we eat plants that have taken the minerals and organize them into their structure. Daily intake of these will ensure that you have the minerals you need:

seaweeds - dulse, nori, kelp, sea palm, etc.

2 - 3 cups of leafy greens, steamed or in a soup or salad

1 - 2 cups of brassicas (cabbage family), steamed or in a soup (broccoli, cauliflower, bok choy, etc.)

1 - 2 cups of root vegetables or squashes, roasted or steamed or in a soup or grated in a salad

garlic, onion, avocado, cooked mushrooms - shiitake, maitake, crimini

Enjoy 1 or 2 of these: apple, banana, grapefruit, lemon, lime, blueberry, strawberry, cherry, kiwi, grapes, persimmon, pomegranate, papaya, melons, peach and pear. Eat fruit alone or with yogurt.

A few Brazil nuts, pumpkin seeds; soaked almonds, walnuts, pecans or filberts.

Sleep Touchstones

“I relax, release, I make time for sleep”

Setting the Environment

Long Exhales Hot Bath, Cool Room
Amber light after Sundown, Morning Sun

give

Easing Stress

Slow Down
Drink Water
Reflect

thank

Building a Nest

Diversity of Culture
Sing, Dance,
Laugh!

love

Resolving Inflammation

Ten on the Tender
Turmeric with Meriva

trust

Regular bedtime and
relaxed meals of
protein-vegetable-fat

receive

Balancing Blood Sugar