



# Understanding & Treating Depression

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# Introduction

- Naturopathic Physician
- Specializing in Mental Health & Cancer
  - **Mental Health Treatment:** Anxiety, Depression, PMS, Eating Disorders, Self Harm, OCD, ADHD, Learning Disorders, Autistic Spectrum, Insomnia, PTSD, & Bi Polar
  - **Cancer:** Cancer Support and Treatment
- Anti-aging, Wellness, & Men's Health



# Overview of Talk

- View video case example of Depression
- Review Physiology of Depression
- Understanding Depression
  - Understanding the epidemic and why it persists

# Overview of Talk Continued

- Treating Depression
- Video Case Follow-up
- Q&A



# Participation

- Interaction = Lively presentation.
- Take notes about patient to share.
- Jot down notes if that helps your learning (pdf can be emailed)
- Note down any complex questions for the break @ the end (time permitting)



# Intro Video to Patient

- Thirty Four Year Old Female
- Referred by local Therapist
- Patient is in deep despair
- She is articulate about her state







# Show Video!



# Observations/Comments About this Patient?



# Common Symptoms of Depression

- ↓ Mood
- ↓ Physical Energy
- ↓ Motivation
- ↓ Sleep or ↑ Sleep (Hypsomnia)
- ↓ Pleasure
- ↓ Appetite
- ↑ Emotional Eating
- ↑ Irritability
- ↑ Introversion
- ↑ Ruminating



**Follow-ups of case later**



# What's most effective?

- Antidepressants ~ 20-35% recover
- Cognitive Therapy ~ 30-40% recover
- Behavioral Activation ~ 56% Recover
- TLC ~ 70% recover

# What's most effective?

- Antidepressants ~ 20-35% recover
- Studies show most antidepressants are roughly equal to placebo's
- Antidepressants have adverse effects
- Antidepressants need to be taken indeterminately





# What's most effective?

- Cognitive Therapy ~ 20-35% recover
- No side effects
- Positive effects can last for years
- Rarely used – drugs are cheaper in short term.

# What's most effective?

- Cognitive Therapy – what is it?
- Identify negative thought patterns
- Evaluate neg thoughts to disarm them
- Take actions that re-inforce new patterns



# What's most effective?

- Behavioral Activation ~ 56% Recover
- No adverse effects
- Can last for years or for life



# What's most effective?

- Behavioral Activation What is it?
- Ignores Insight
- meaningful action
- Identifies rumination breaking action(s)
- Awareness of actions that thwart moods



# What's most effective?

Therapeutic Lifestyle Change – TLC ~ 70%

- No adverse effects
- Can last a life time
- Not a passive process, requires pervasive lifestyle changes

# What's most effective?

What is TLC?

- Dietary Omega 3's
- Engaging Activity
- Sunlight
- Social Support
- Sleep
- Exercise







# **Depression: Is it "all in your head?"**



# **Is There a Physiology of Depression?**



# Physiology of Depression

## Movement & Exercise

# Physiology of Depression

Engagement =

~~IDLE~~

~~Ruminate~~



# Physiology of Depression

## Quality Sleep

# Physiology of Depression

- Hormones
  - Cortisol – Rarely considered
  - Thyroid (Often overlooked)
  - Sex Hormones





# Physiology of Depression

- Amino Acids
  - Depression Needs Stimulatory AA's
  - Anxiety Needs Inhibitory AA's



# Physiology of Depression

- Nutrient Deficiency:
  - Vitamin D (Lack of Sun)
  - Magnesium
  - B Vitamins
  - Omega 3 deficiency



# Physiology of Depression

**Lack of Sun (reset Circadian Rythm)**

# Physiology of Depression

**Let there be light!**

- A sunny day is 100 times brighter than indoor lights on full
- Overcast day is 3 times brighter than indoor lights on full



# Physiology of Depression

**Let there be light!**

- Brain require AT LEAST 30 minutes of light to set body clock
- Studies show 10,000 Lux is powerful antidepressant

# Physiology of Depression

Methylenetetrahydrofolate Reductase

MTHFR – (short for the above enzyme)

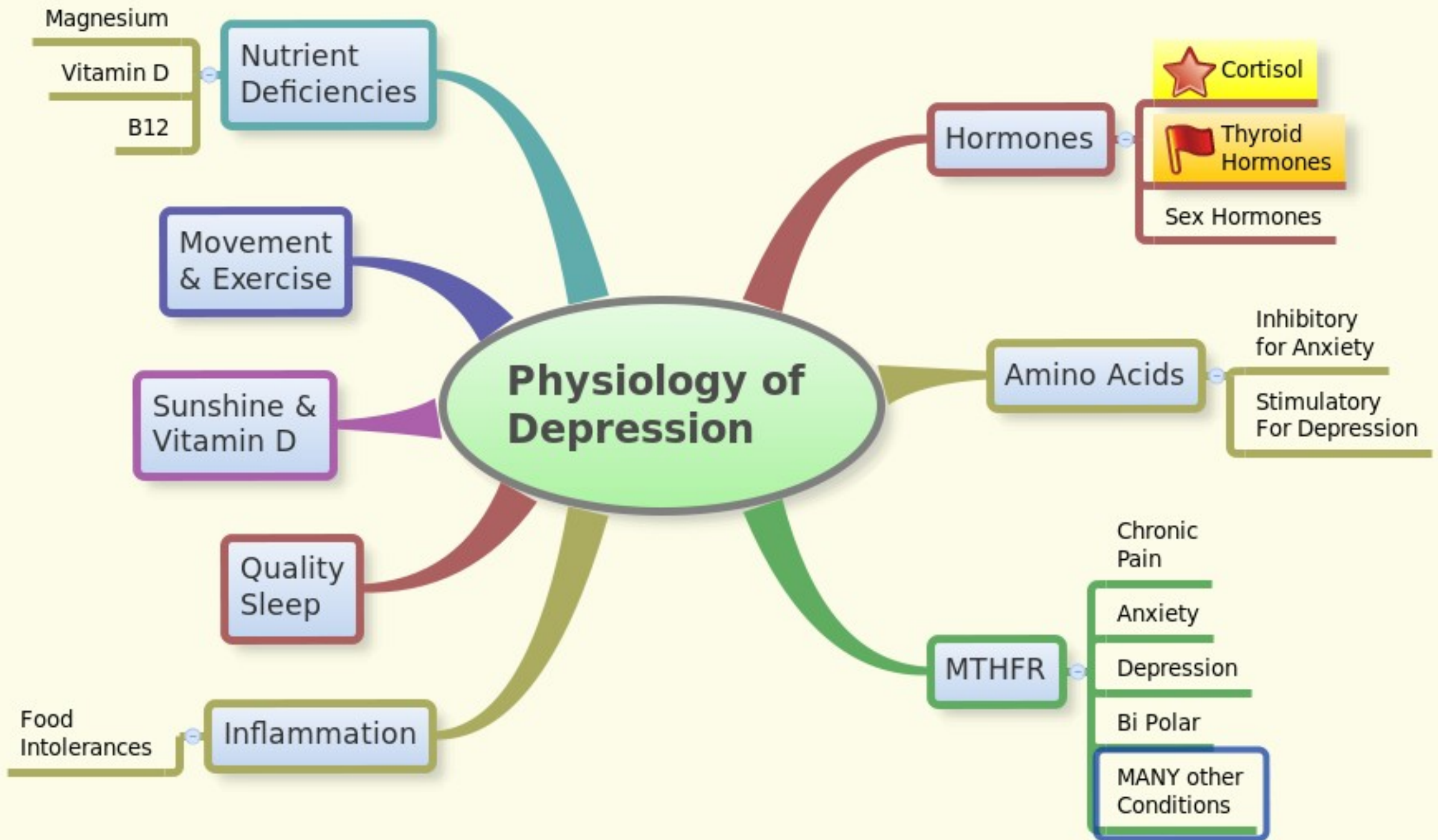
- A Faulty Gene inhibits creation of MTHFR
- Lack of MTHFR can cause or worsen many chronic health problems, including depression.



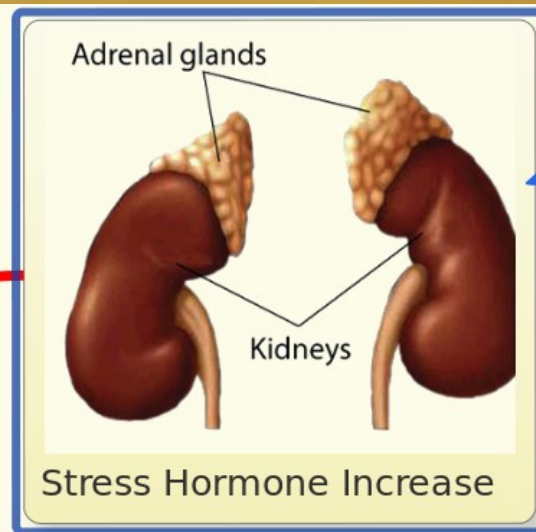
# Physiology of Depression

- Inflammation:
  - Maldigestion ⇒ Systemic Toxins
    - Toxins enter Brain
      - Depression, Anxiety, Cognitive Issues









**Stress Causes  
Adrenal Exhaustion**

Childbirth

Death

Acute Stress:

Divorce

**Adrenals Regulate GI Tract**

**Weakens GI  
Tract**

Acquires  
Pathogens

Gut Flora  
Out of Balance

Causes  
Leaky Gut

Food  
Intolerances

**Toxins Buildup**

**Bodies DeTox  
Overwhelmed**

Headaches

Depression

Mental Fogginess

**Common Process that  
Causes Depression &  
Other Chronic Diseases**

Chronic Stress:

Difficult Job

Bad Marriage

Caretaking Ill  
Family

Overwork



# **Depression, Stress, & Circadian Rhythm**



# What is Stress?



A Psychological & Biological adaption to a  
challenging event or encounter





**Stress is our Reaction to a  
Stressor**



# Examples of Common Stressors:

- LACK of Sun/light
- Relationship Conflicts
- Sedentary Lifestyle
- Death of loved one
- Career Promotion
- Poor Diet/Nutrition
  - Overweight/Obese
- Illness (Acute or Chronic)
- Loss of meaning
- Financial Troubles
- Chemical Exposure
- Addictions
- Working too much

# Mind-Body Reaction to Acute Stress

- Rapid heart beat
- Rapid Breathing
- Mind becomes more focused
- Chemicals released increasing intuitive and spontaneous actions
- Digestion slows down
- Blood shunted to muscles
- Blood sugar liberated for energy



Stress

CRH

Pituitary  
Gland

POMC/ACTH

Adrenal  
gland

Cortisol

Metabolic Effects

↑ Glucose - Liver

↑ FFA - adipose

↑ Amino acids - muscle

Other effects inc.

Anti-inflammatory

Immunosuppressive

Inhibits bone formation

**HPA Axis**

# HPA Axis Associated with:

- Anxiety & Panic Attacks
- Bi Polar Disorder
- Insomnia
- Borderline Personality
- PTSD
- Irritable Bowel
- Headaches
- ADHD & ADD
- Major Depressive Disorder
- Burnout
- Chronic Fatigue
- Fibromyalgia
- Sweet Cravings
- Constant Hunger





**HPA Axis is the FUNDAMENTAL  
balancing/adapting infrastructure of the  
body-mind**

A single yellow flower with multiple petals is in focus on the right side of the image. The background is a soft, out-of-focus field of green foliage and other yellow flowers, bathed in a warm, golden light that suggests a sunrise or sunset. The overall mood is serene and natural.

**Our Modern Civilization has caused us  
to venture far from our genetics, thus  
putting many of us in chronic Adrenal  
fatigue.**



# Our Departure from our nature:

- Separate from the earth's electrical field
- Separate from the sun and it's energy
- Separate from a life of constant motion
- Separate from community/family
- Separate from our own food sources



# Back to Cortisol, HPA & STRESS!:



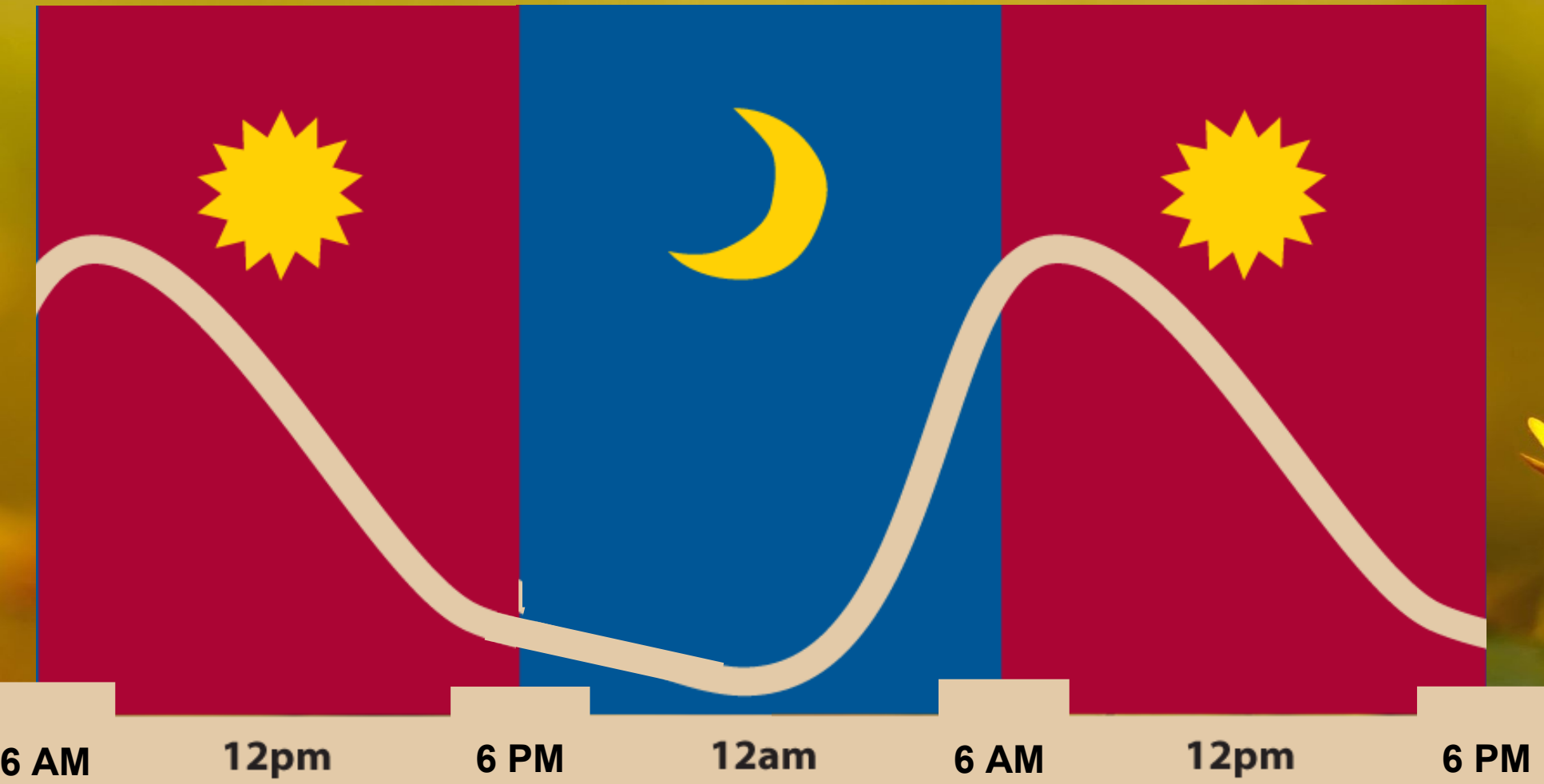


# Cortisol's Role (liberate energy for fight or flight)

- Encourages a steady supply of glucose (energy)
- Calm inflammation/swelling
- Suppresses Immune system during stress
- Releases amino acids to muscles or liver
- Releases Free Fatty acids (for long term stress – endurance, etc)



# Cortisol Rythm





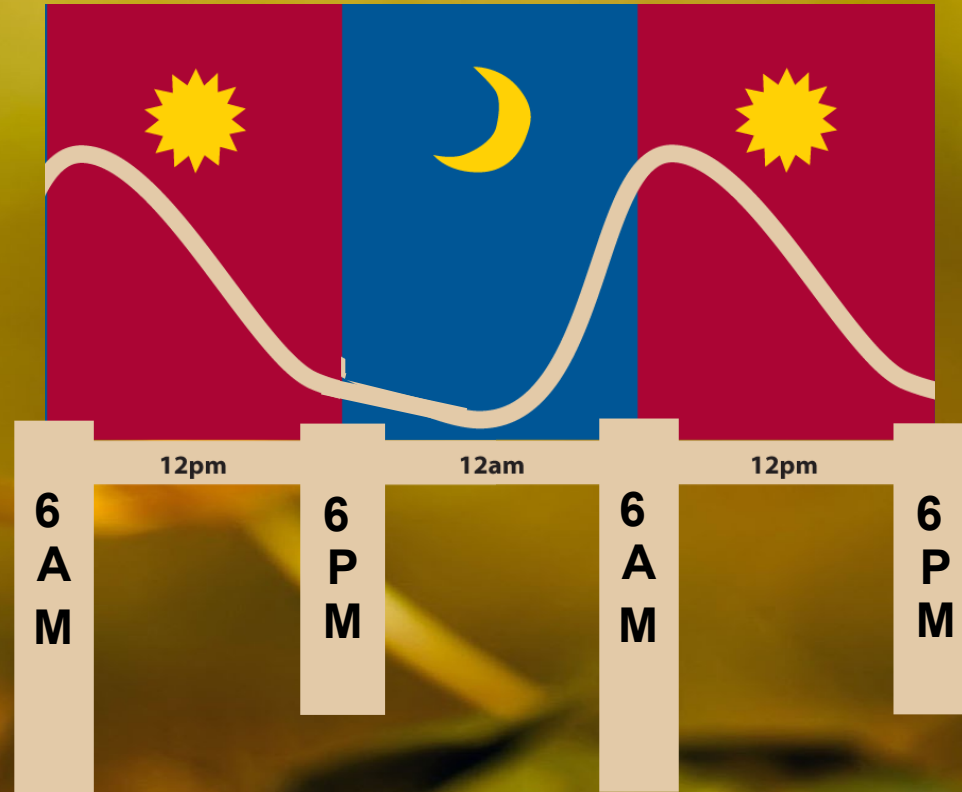
# Cortisol (Sun energy) Stimulant

Cortisol is activity or  
'male' hormone

Normal Cortisol  $\uparrow$  in AM  
– Morn Energy!

Gradually winds  $\downarrow$   
throughout the day

Evening cortisol  $\downarrow$  –  
allows for rest/sleep



# Melatonin (moon energy)

- Melatonin = Female or rest, repair hormone
- Melatonin inverse of cortisol (cortisol ↑, Melatonin ↓)
- Cortisol ↓ evening while Melatonin ↑
- Melatonin is hormone of Deep Cycle Repair, restoration



# Circadian Rhythm = Dance of Melatonin & Cortisol

- Light tends to activate Cortisol
- Cortisol tends to suppress Melatonin
- Melatonin may suppress Cortisol
- Body-mind follows natural rhythm = DEEP restorative sleep @ night = energy, alertness, steady mood during day

# Cortisol the Energy driver

- Stress = elevated cortisol
- ↑ Stress = elevated cortisol = adrenal exhaustion
- Adrenal exhaustion = cortisol flip
  - (AM Cortisol ↓ & PM Cortisol ↑)
- Exhausted AM and disturbed sleep in PM







**Cortisol issues often readily correctable**

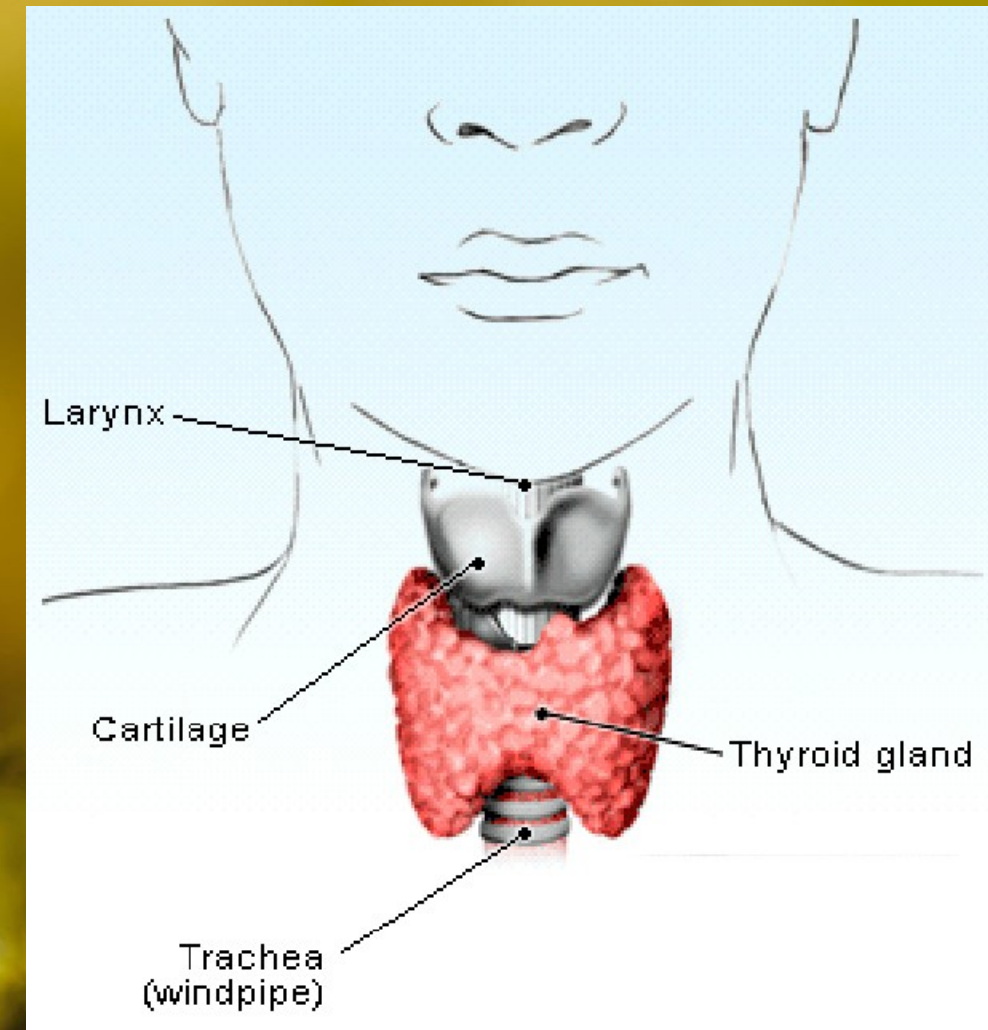


# Hypothyroidism & Depression



# Thyroid Gland:

- Located at front of throat
- T3 is the active hormone
- Enables metabolism in every cell
- Supports adrenal gland output



# Thyroid Deficiency (Hypothyroid)

- Often Hypothyroid goes undiagnosed
- Must run T3 to determine ACTIVE hormone
  - Typically TSH is only lab run
- Hypothyroid can be major cause of low physical energy which often = ↓ Mood





# Depression, Blood Sugar, & Obesity

# Depression, Blood Sugar, & Obesity

- **Diabetes, obesity, overweight can ↑ Blood Sugar**
- **↑ Blood Sugar → irreversible hippocampus damage**
- **Hippocampus – center of anxiety & depression**





# Summary of Physiology:

# Summary of Physiology & Depression:

- Physiology plays a MAJOR part in Depression
- Sleep, Nutrition, Stress, Exercise, Sunshine, Hormones, Amino Acids, MTHFR can all play a part



# Summary of Physiology & Depression:

Hormones of note: Cortisol (Adrenals), & T3 (Thyroid)  
Sex Hormones not discussed – Important though!

Separating from from natural rhythms = Stress = Suffering  
(on many levels including depression)

# About Homeopathy

- Like Cure's Like
- Dilution of Rx acts as a catalyst
- Precise Homeopathic Rx can stimulate deep healing
- Can be difficult to find precise Rx however.





Back to Video &  
Rx Given:

# Baseline Benchmarks:


- 1) Anger in head (constant - almost daily - background)
- 2) Depression - 3 to 5 days cycles - 4-5 per month
- 3) Isolating
- 4) Nervous habits - twitching fingers stomping toes
- 5) Allergies - daily
- 6) Asthma - Roughly once a week
- 7) Worthlessness - 4 times per week
- 8) Frequent waking - 4 or 5 nights a week



# Rx Given: Croton Tiglium







**Any Final Questions/Comments about  
Patient?**



# Depression Assessment:

- Before Depression can be addressed – diagnosis MUST come first
- There are many many possible root causes.
- A Salivary Cortisol is often an important starting point

# Depression Assessment:

- Blood work can often help to focus accurate treatment.
  - Looking for Thyroid, anemia, Vitamin D status and several other important factors.
- A complete History can also help in determining most effective treatments.





# Simple Treatments for Depression

- Good quality Magnesium supplements – 200mg once or twice a day
- Take Fish Oil 1,000 mg a day minimum
- Try Methylated B12 and folate



# Simple Treatments for Depression

- Getting good exercise – aerobic is important, though many types of exercise can help
- Get Vitamin D status up to 60 and 100 range
- Light box – particularly in AM

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# Transitioning from Antidepressants to Natural Treatments:

- **Baseline:**

- Importance of a Baseline
- Left over symptoms *while* on antidepressants
- Left over symptoms resolved, then...
- Coordinate with Antidepressant prescriber ( when possible)
- Gradually taper one drug at a time





# Questions?





- Fin -