Whole Health for Mental Health
Day 2 Morning

Welcome Back!

Pulse Checks

Keep Calm and Check Pulse
Where We’ve Been
• Defining Whole Mental Health
• Mission, Application, Purpose
• Connections, Self-care, C.H.
• Thinking and Cognition
• Emotions (Part 1)
• Application for Your Own Life

Where We’re Going
Thinking about points of tension
• PRACTICE!
• Emotions II: Tony and Depression
• Behaviors and Choices
• Peace and Ease I: Mel and Stress
• Implementation in Practice
• Lunch
• Peace and Ease II: Trauma and PTSD
• Vitality and Wholeness
• Implementation at Your Facility and Beyond

11. Our Emotions II
Whole Health for Mood Disorders

Whole Health in Your Practice
Tony and Emotions:

- I am irritable with my family.
- I feel sad a lot of the time.
- In 2003, I was told I have depression.
- Things aren’t fun anymore.
- Not a danger to himself.

Whole Health and Depression:

- The PHI can help you get a sense of someone’s emotional well-being.
- ALL of the areas of the circle are relevant.

Depression Facts:

- >1 in 10 US Adults have it.
  - 10% are ages 18-25.
  - 7% of American adults have one episode yearly.
  - 25% prevalence in people with chronic disease.
- Only 60% treated with meds have significant response.
  - Others have adverse effects or residual symptoms.
**Depression Etiology**

- Gut
- Genes
- Neuroplasticity
- Trauma and kindling
- Inflammation
- Neurotransmitter imbalance

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**Neurotransmitter Control Room**

- Poor synthesis
- Increased breakdown
- Increased pump uptake

...and the question becomes,

"Why?"

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**Depression and Inflammation**

About ½ of depressed people have increased inflammatory markers

- Slowed tryptophan metabolism
  - More becomes kynurenine (causes inflammation)
- Dysregulates glutamate, lowers neurotrophic factors
- HPA axis also dysregulated
Comorbidities

- Symptoms for nearly every disease category studied are worse
  - Diabetes, metabolic syndrome, RA, asthma, MS, chronic pain, psoriasis and many more
- Connection to CVD
  - ↓ heart risk factors = ↓ depression
  - Obese people have 55% more depression
  - Depression increases obesity risk 88%
- 1.15x the risk of cancer

“Me”: Depression is Individualized

Depression takes many forms
- Array of DSM diagnoses
- Different onset, symptoms, time course, etiology
- Unique circumstances may trigger
- Therapeutic relationship matters too
- People have strong feelings about different therapies

Food & Drink to Prevent Depression

- 2018 systematic review/meta-analysis
  - Most studies clearly found benefit of a healthy diet for prevention
  - 2 million people, linear dose response
  - Odds of depression for any high-quality diet decreased to 64-78% of what they were

47 people need to eat healthy prevent 1 case of depression
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Day 2 Morning

Depression: Food

Food & Drink: What to Eat

- 2016 review: What dietary elements prevent depression?
  - Fruits and vegetables
  - Olive oil
  - Tree nuts
  - Fish
  - Whole grains

Food & Drink: What to Cut Back

- Good to remove
  - Meats (other than seafood)
  - Commercial baked goods
  - Trans fats
  - Sugar (desserts, beverages)
    • Worth a trial of going off sugar for a week
- Also, fast food
- And alcohol

Bottom Line: The “Western Diet” increases risk; a whole foods diet decreases it.
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Day 2 Morning

Omega 3’s In Summary

- Essential polyunsaturated fatty acids (body can’t make them)
  - Main types are DHA and EPA
  - Sources: cold-water fish, other food sources
- They decrease inflammation
  - Omega-6’s tend to increase it
  - Same pathways as many anti-inflammatory medications
- Also stabilize cell membranes

Omega 6 Pathway

- Linoleic Acid (LA)
  - Delta-6 Desaturase
  - Prostaglandins
  - Leukotrienes

Omega 3 Pathway

- Alpha-Linolenic Acid (ALA)
  - Delta-5 Desaturase
  - Eicosapentaenoic Acid (EPA)
  - Docosahexaenoic Acid (DHA)

Some omega-6’s can tie in to anti-inflammatory pathways.
Both pathways are essential to good health. A healthy ratio is key.

Omega 3’s for Depression

“Emerging...evidence over the past 3 decades suggests that habitud dietary omega-3 PUFA insufficiency, particularly during perinatal development, may represent a modifiable risk factor for mood disorders.”

- Especially as an adjunctive therapy (not alone)
- DHA for structure, EPA for function
Essential Fatty Acids and Mood: Reviews

Cochrane, 2015: 26 studies; 1,478 people
- Small to modest benefit for depression symptoms in general. Is it clinically meaningful?

2016 review: 13 studies; 1,233 people
- “...beneficial overall effect” of supplementation in major depressive disorder patients, especially for:
  - Higher EPA doses
  - People taking anti depressants

“The Potential for Nutrition to Reduce Depression, Suicide, and Impulsive Aggression”

“...a rebalancing of the essential fatty acid composition of U.S. military diets, to achieve tissue compositions of PUFAs consistent with traditional Mediterranean diets, may help reduce military psychiatric distress and simultaneously increase force efficacy substantially.”


What About Specific Nutrients?

- B Vitamins
  - Deficiencies can lead to depression
    - E.g., folate and B12, thiamine, niacin, B6
- Multivitamin Supplements
  - Reduced perceived stress, and improved mood in people without depression
  - Not helpful with depression
- Vitamin D – 8-14% risk if deficiency
  - Study that eliminated flawed research showed benefit
- Tryptophan intake matters in population studies

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Dietary Proteins

- Tryptophan
- 5-HTP
- 5-Hydroxytryptophan
- Serotonin
- Melatonin
- Methionine
- Homocysteine
- SAMe
- S-adenosylmethionine
- Methyl Groups
- B12
- Folate
- B1, B6, Zinc, Stomach Acid
- Fe, C, B12, Folate, Mg, Ca
- Light Level
- Amino Acids, Serotonin, and SAMe

*The exact mechanism for SAMe and depression is unclear; it affects serotonin, dopamine, and norepinephrine levels.

Dietary Proteins

- Phenylalanine
- Tyrosine
- Iron, B3
- L-Dopa
- B6
- Dopamine
- Copper
- Norepinephrine
- Mg
- SAMe
- Epinephrine

Amino Acids, Dopamine, and Norepinephrine

Depression: Moving the Body

- Good research in this area: >1,000 studies
- Cochrane review, 2013 – ≥ to counseling and/or meds
- Small overall effect in the most robust trials
- Aerobic and anaerobic both help
- Intense is better, and total time is key, not number of weekly sessions

Yoga=OK, Tai chi = OK!

Moving the Body

• Why does it help?
  – Adult neurogenesis hypothesis
    • Hippocampus grows 2-6% in elders after 6 mo’s
  – Exercise increases plasma tryptophan
  – May also alter inflammatory markers

Yoga and Depression

• Moderate benefit in short-term studies
  • 2017 review of 7 trials, n=240
  • Comparable to other forms of exercise
  • Positive effects beyond placebo
  ...But methodology an issue

Tai Chi and Depression

• 2014 review
  – 37 RCTs and 5 quasi-experimental trials
  – Beneficial effects
  ...But methodology an issue
**Power of the Mind: Meditation**

2016 summary of 52 trials and reviews:

- Meditation decreases depression symptom severity
- Reduces relapse, rumination, reactivity
- Cultivates self-compassion
- Alters relationship to negative thoughts
- Safe, portable, cost-effective
- Activates areas of brain linked to feelings of enhanced wellbeing


**Mindfulness Based Cognitive Therapy**

- MBCT is most commonly studied mindfulness-based group intervention for depression
- Meta-analysis: 21% reduction in average risk of new episode by 12 months
- Reduced relapse rate more than usual therapy does (66% vs 36%)
- Reduced relapse even more when added to meds (47% vs 60%)
- Comparable to medications in one large trial (2 year follow up) but more studies needed
- Comparable to CBT
- Telehealth approaches show promise


**CIH and Depression**

- 10-30% of people with depression use complementary approaches
  - 20-50% for people with bipolar disorder
  - Dietary supplements are most commonly used
- People who use CIH are more likely to have depression than general population
- Many people take meds and use other approaches at the same time

Solomon et al, J Affect Disord, 2015;181:111.
Psychotherapy

- Always worth consideration (2/3 of people say it is helpful), and...
- 2018 Cochrane review, 6 trials, n=698
  - Moderately good evidence for treatment of resistant depression along with “usual care”
- Which one to use?

"Cognitive therapy teaches you to step in and use your prefrontal cortex instead of letting your emotions run away with you."
- Anthes, Nature, 11/13/14