Optimizing **Mental Health** Through Physical **Activity &** Nutrition

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Nutrition & Psychological Health





Implementation



1. Exercise

Physical Activity and Affect

Benefits

Reduced state anxiety Increased energy Reduced \square tension Improved self-esteem Improved self-reported mood

Specifics

- Aerobic and anaerobic
- Moderate intensity
- Frequency over duration
- Outdoors

Physical Activity and Cognition

Improved cognition and attention
 Improves neural plasticity
 Reduced cognitive decline with age
 Improves memory
 Reduces risk of Alzheimer's and dementia

Physical Activity and Cognition

How?

 Increases brain-derived neurotrophic factor
 Telomeres
 Prefrontal cortex and hippocampus



Physical Activity and Psychological Disorders

Those who don't exercise have higher levels of anxiety and depression **Exercise** interventions consistently improve clinical anxiety and depression Alleviation of treatment resistant depression, postpartum depression, & chronic illness Reduced psychological distress in patients with schizophrenia



How do physical activity interventions compare to psychotherapy or medication in the treatment of mood disorders?

Exercise vs. Therapy Study 1: Aerobic exercise vs. therapy

A) Aerobic Exercise B) Time-Limited Psychotherapy C) Time-Unlimited Psychotherapy

Greist, et al. 1979

Exercise vs. Therapy

- Study 1: Aerobic exercise vs. therapy
- No difference between groups A&B
- Both group A&B had superior outcomes to group C

A) Aerobic Exercise B) Time-Limited Psychotherapy C) Time-Unlimited Psychotherapy





Exercise vs. General Health Education
 Study 2: Exercise for treatment resistant depression in older adults
 86, older-adults with treatment-resistant depression

A) Exercise Group

B) Health Education Group

Mather, et al., 2002

Exercise vs. General Health Eduation
 Study 2: Exercise for treatment resistant depression in older adults
 Group A had significant improvements (23% greater) compared to group B

A) Exercise Group

B) Health Education Group

55% saw reductions in depression

32% saw reductions in depression

Mather, et al., 2002

Exercise for Anxiety

- 2018 meta-analysis assessed 15 different trials with 675 participants
- Improvements in exercise groups
 Moderate effect size of -0.41
- High-intensity yielded better outcomes, but greater dropout
- Improvements seen for many months after study completion

Exercise vs. Medication

- 16-week study comparing four intervention groups:
 - Guided exercise
 - Home-based exercise
 - Sertraline (SSRI)
 - Placebo pill
- 41% of patients achieved remission by end of study
- No statistical difference between groups

Exercise vs. Medication

- Four RCTs have compared exercise to SSRI medication
 - All studies reported equal efficacy
- Eleven RCTs have compared exercise + SSRIs to SSRIs alone
 - 10 report improved outcomes with both exercise + SSRIs



Based on the review, it can be stated that exercise is an evidence-based medicine for depression, at the least as an add on to antidepressants.

- Yael Netz, Frontiers in Pharmacology



Why does exercise work?



Why Does it Work?

Monoamine hypothesis Mindfulness ❑ Self-esteem & self-efficacy Social interaction BDNF and hippocampal growth Decreases inflammation Circadian rhythm



Want to be happier? Stay in the moment.

- Matt Killingsworth, PhD





Turn to a neighbor

2. Nutrition

Nutrition and Psychological Health

What?

What we eat can have How dramatic effects on our an e psychological health.

How & Why?

How and why we eat has an equally large impact.





Key PlayersInflammationThe gut microbiome



What we Eat



Source: Dr. Andrew Weil

What we Eat

specific Nutrients

- Omega-3 Fatty Acids
- \Box Zinc
- □ B-Vitamins
- □ Creatine
- \Box <u>Pre</u>biotics





Eat food, not too much, mostly plants. - Michael Pollan

How we Eat

Restrained eating linked with poorer psychological health outcomes, eating disorders, weight gain

 Intuitive eating linked with improved self-esteem, increased interoceptive awareness, reduced anxiety and depression, improved blood biomarkers

How we Eat

Intuitive Eating

- Dynamic integration between body and mind
- Cultivates or removes obstacles to interoceptive awareness



Breathing Break







Turn to a neighbor

3. Implementation



So what?

How can you use this information to help your patients?

Implementation

Connect with resources Use *your* skills! Stages of change Self-determination theory



Small Steps



KAIZEN

Ask small questions.

Think small thoughts.

Take small actions.

Solve small problems.

Bestow small rewards.

Identify small moments.

thanks! Any questions?

You can find me at www.kbgwellness.com or kelsey@kbgwellness.com



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