Are We Doing Enough to Support Our Veterans? Thinking Through Mindfulness, Exercise and Nutrition

James H. Rimmer, Ph.D, Professor Lakeshore Foundation Endowed Chair in Health Promotion and Rehabilitation Sciences University of Alabama at Birmingham

State of the Science Symposia Uniformed Services University of the Health Sciences Fitness and Health March 30, 2016
Outline

- Keeping score
- Exercise
- Nutrition
- Mindfulness-Based Rehabilitation
Lakeshore Institute for Global Health Transformation

Have YOU seen the LIGHT?
Lakeshore Foundation: A Transformative Campus for Recovery, Improvement and Prevention
Lakeshore Foundation’s Three Points of LIGHT

**Policy**
- Metabolic Health
  - food quality, diet, behavior

**NUTRITION**
- obesity

**MINDFULNESS**
- mental health
  - mind/body, spirituality, the now

**PROGRAMS**
- deconditioning

**EXERCISE**
- fitness, aquatics, recreation

**RESEARCH**
- physical health

UAB Lakeshore Research Collaborative
promoting the health and wellness of people with disabilities
MY [Post-Discharge] SCORECARD

Mindfulness
Your Spirit
Self-Compassion
Community engagement
Outdoor activity
Relationship building
Exercise
Core values
Activity quality
Relaxation & rest
Diet
Exercise
WHERE AND WHY DOES POST-REHAB DECLINE START?
Avoiding the Black Hole: Importance of Exercise

Sequencing Health Post-Rehabilitation

ICF Domain
- Activity limitations
- Participation restrictions
- Impairments in body structures and function
- Activity limitations

Nutrition • Mindfulness • Transformative Exercise

Predisability
(diabetes, hypertension, etc.)

Disability

Rehabilitation

Reduced Health & Function

Unconsciousness

Inactivity

UAB Lakeshore Research Collaborative
promoting the health and wellness of people with disabilities
Perspectives in Rehabilitation

Framing new pathways in transformative exercise for individuals with existing and newly acquired disability

James Rimmer and Byron Lai
Transformative Exercise Continuum

**Lakeshore Sequencing Model From Recovery to Health**

- **Domain**
  - Restore
  - Improve
  - Prevent

- **Focus Area**
  - Recovery
  - Condition-Specific
  - Fitness
  - Physical Activity

- **Health & Function**
  - Suboptimal Health & Function
  - Health & Function

- **Time**
  - Weeks
  - Months
  - Years

- **Conditioning**
  - Optimal Health & Function
Transformative Exercise Framework

A Continuum of Health Services That Targets Underperforming Systems to Improve Health & Function

Rimmer & Lai, 2015
Nutrition
High Fructose Corn Syrup (HFCS)

Enters in mid-1970s
38 lbs HFCS
47 lbs sucrose

“Sugar is addictive and toxic.”
-Robert Lustig – UCSF Pediatric Endocrinologist

White, Am J Clin Nutr 2008; 88 (suppl) 1716-1721
“You can’t run from a bad diet*.”
A scientific approach to weight loss and improved performance

Barbara A. Gower, PhD
UAB Department of Nutrition Sciences

*http://fanaticcook.com/2014/05/08/study-inactivity-does-not-lead-to-fatness-its-the-other-way-around/
Traditional view of weight loss

- Burn more calories than you eat
- You need to keep track of food intake and exercise

- Cheeseburger: 300 Kcal
- 3 cookies: 200 Kcal
- Run 30 mins.
- Cycle 24 mins.
Problems with this approach

- It doesn’t work
- Body senses calorie deficit
  - Metabolic rate drops (lethargy; cold intolerance)
  - Muscle is lost as well as fat
  - Weight loss stalls
- Does not address the root cause of fat deposition!
It’s the insulin!

- Fat is regulated by the hormone insulin
- To lose fat, insulin must be lowered
- You want to lose FAT (not “weight”)

Pancreas Insulin
Insulin is secreted in response to carbohydrate foods: sugar, starch, grain
How insulin causes fat storage

- Insulin

  - Block fat burning
  - Manufacture fat from sugar
  - Promote fat uptake
  - Prevent fat release
Insulin regulates energy partitioning (where the food you eat ends up)

(inactivity does NOT lead to obesity)

High insulin

Low insulin

ATP

ATP
MY SCORECARD

Perspective
Mindfulness
Your Spirit
Self-compassion
Core values

Performance
Outdoor activity
Relationships
Exercise
Relaxation & rest
Diet

Productivity
Community engagement
Activity quality
Mindfulness-Based Rehabilitation
MY SCORECARD

Perspective
Mindfulness
Your Spirit
Self-compassion
Core values
The Origin of Fear

- Comes in many forms:
  - Unease, worry, anxiety, nervousness, tension, dread, etc.
- Fear is always of something that might happen, not of something that is happening now.
- You are ‘hear’ and the mind is in the future.

Result: Anxiety gap
Consciousness

- Our ‘normal state’ of mind is fundamentally defective.

- Common thought processes:
  - guilt, pride, resentment, anger, regret or self-pity
Avoiding The Now

- Tobacco
- Alcohol
- Drugs
- Food
- Negativity
- Living in the past or worrying about the future
- Reality TV
Accessing the Power of Now

- The more attention you give to the past, the more you energize it and give it an identity.

- The power of now is none other than the power of your presence, your consciousness liberated from thought forms (fears, emotions, thoughts, etc.).
It takes a Community
T^3: Getting Beyond the Plateau: From Therapist to Telecoach to Trainer

- Therapist
- Telecoach
- Trainer

Rehabilitation → Home → Community

Discharge

- Full Management
- Mid-Management
- Self-Management

UAB Lakeshore Research Collaborative
promoting the health and wellness of people with disabilities
EMPOWERMENT HEALTH:
The National Center on Health, Physical Activity and Disability

Do you get enough?

www.NCHPAD.org
Physical Activity Guidelines for Adults with Disabilities

May 06, 2014

This article covers the 2008 Physical Activity Guidelines for Americans which provides science-based guidance to help Americans aged 6 and older improve their health through appropriate physical activity.
NCHPAD Knowledge Adaptation, Translation and Scale up (N-KATS) Framework
MY [Post-Discharge] SCORECARD

Mindfulness
Your Spirit

Self-Compassion
Community engagement
Outdoor activity
Relationship building
Exercise
Core values
Activity quality
Relaxation & rest
Diet
Thank You

James H. Rimmer

jrimmer@uab.edu