



The Experience of Movement

Michael Miletic, M. D.

The Miletic Center

MICHAEL MILETIC, M.D.

- Clinical Neuroscience & Metabolic Medicine
- Brain-Body-Mind Approach
- Olympic Athlete
- Specializing in athletes, executives and adolescents seeking to reach their full potential
- Beyond symptoms, we ask WHY?

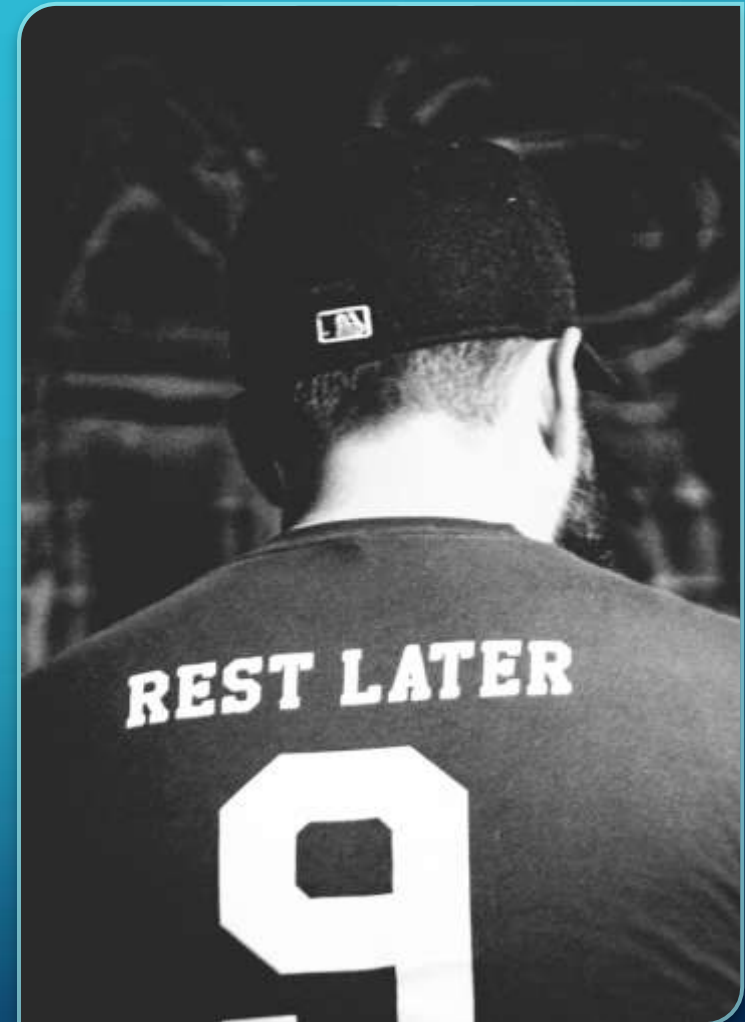


MOVEMENT

- All Exercise is Movement...

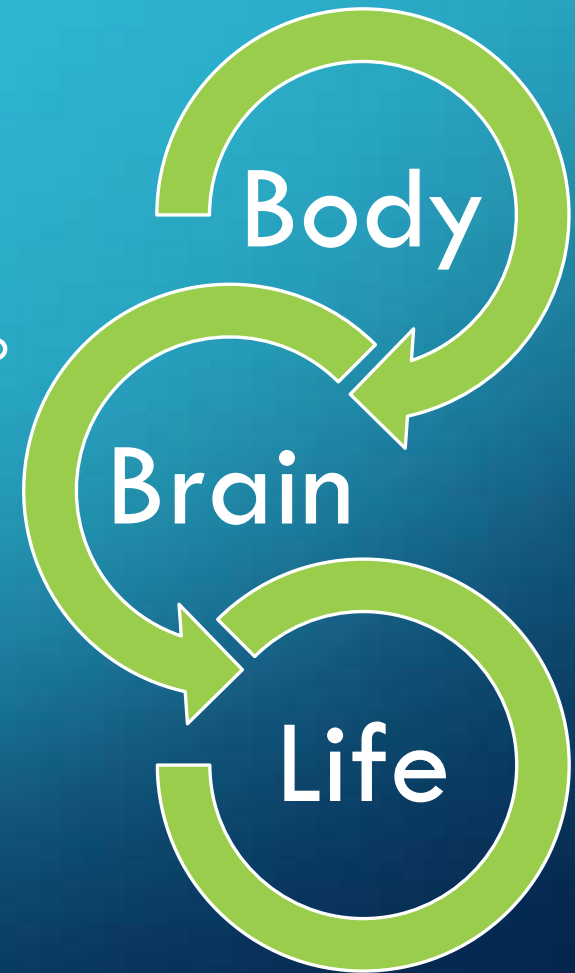
but NOT ALL Movement is Exercise

- Exercise is: planned, structured and repetitive for the purpose of conditioning.
- Purpose: to improve health, maintain fitness, a means of physical rehab, support longevity and healthspan.
- Exercise effects BRAIN & BODY.
- Focused exercise helps you live your life Healthier - Happier - Longer - More fulfilled - Higher performing



EXERCISE:

- Changes your Body
 - Treatment & Prevention of Chronic Illness
 - Exercise is powerfully anti-inflammatory - from Alzheimer's to cardiovascular disease to diabetes
- Changes your Mental States
- Grows Healthy Brains
- Protects Brains from Injury, Insult & Aging
- Has to be Variable for Best Effect





YOUR BODY

- 130 minutes/week reduces ALL CAUSE mortality by 50%
- Exercise is the most powerful ‘drug’ in the treatment of **TYPE II DIABETES**
 - Study of same diet / different treatment over 20 weeks
 - Group A Metformin w/o exercise -reduced by 15%
 - prediabetic reduced 35%
 - Group B Metformin with exercise – reduced by 50%
 - prediabetic reduced 65%



YOUR BODY

- 130 minutes/week reduces ALL CAUSE mortality by 50%
- Exercise is the most powerful 'drug' in the treatment of **CARDIOVASCULAR DISEASE**— heart attacks, strokes
 - Atherogenesis from plaque formation
 - Reduced incidence of heart attacks caused by clotting by 60%
 - Reduced incidence of strokes by 60%



YOUR BODY

- 130 minutes/week reduces ALL CAUSE mortality by 50%
- Exercise is the most powerful 'drug' in the treatment of **DEPRESSION**
 - Robust response to exercise vs traditional medication

HOW EXERCISE WORKS

Injury

- RICE: Rest Ice Compression Elevation... 100% Wrong!
- Musculoskeletal Injury – Movement is essential

Surgery

- Pre-Op: Increase muscle mass, wellbeing, positive mental & physical health
- Post-Op: Psychological and physical benefits speed recovery

Infection

- Activates Immune System
- Reduces Inflammatory Proteins
- Changes Gene Expression

Inflammation

- Ex: Chronic Fatigue Syndrome, Chronic Viruses
- Boosts Immune System by increasing and activating T-Cells

Autoimmune

- Improving Stress Response
- H-P-A Cortisol Response

Pregnancy / Delivery

- Pre: Enhances Muscle Mass, Mood Regulation
- Post: Wards off PPD, Maintains Muscle Tone, Reshapes the Body, Supports Autonomy

HOW EXERCISE WORKS: THE SCIENCE

- Decreases inflammatory proteins
- Increases Insulin Sensitivity
- Epigenetic
- Increases BDNF
- Reduces Mitochondrial Aging
- Enhances Autophagy
- Releases Myokines – to the brain / from the muscles
- Lactic Acid as Brain Fuel



HEALTHSPAN & LONGEVITY



Cellular Health & Longevity is where 'Anti-Aging' Lives



Exercise is a way to stress your body... when it becomes easy you have to change it.

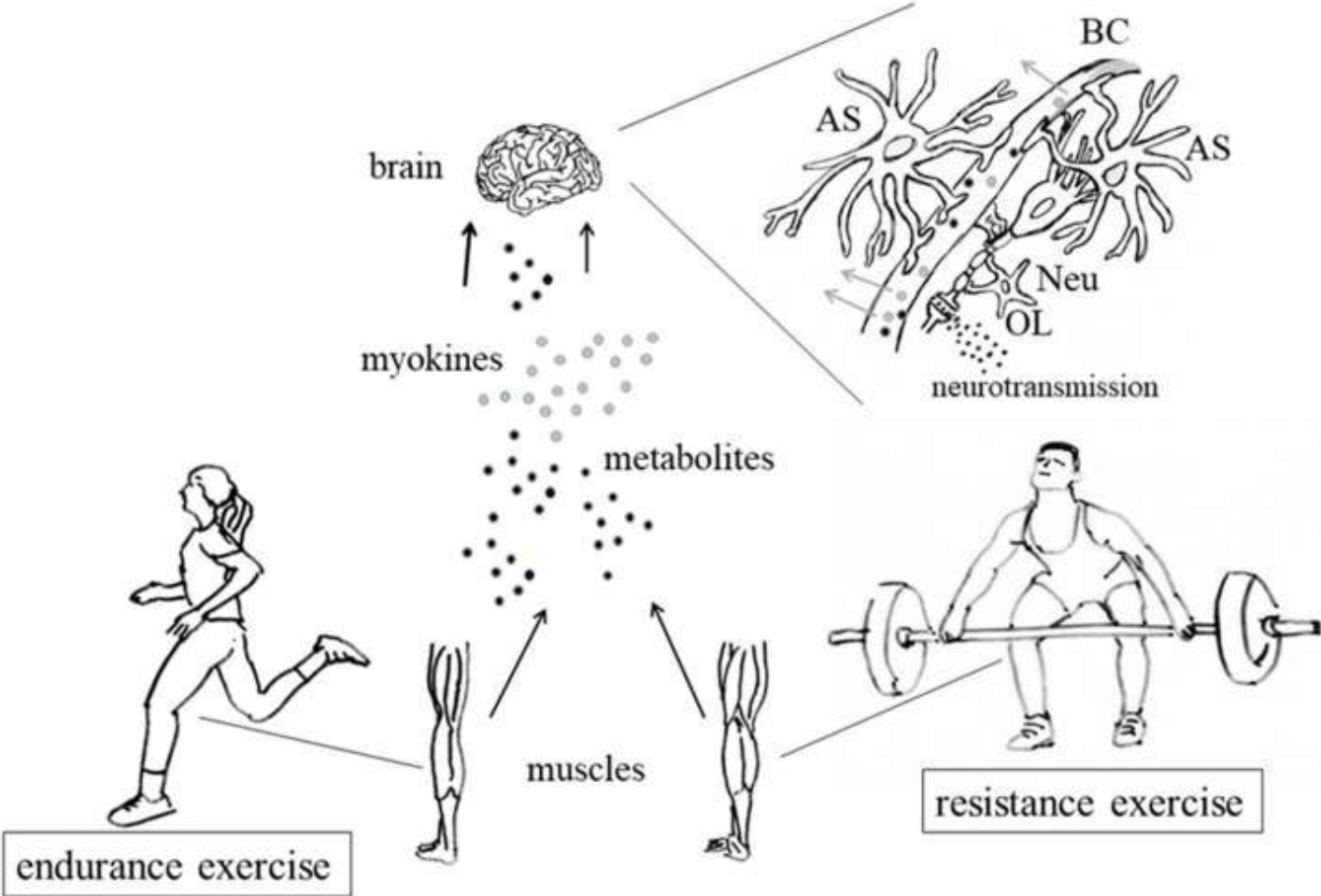


Stress => NAD, which activates the survival network. It extends Telomeres in the chromosomes which lengthens their lives.



5 Days x 30 minutes moderate intensity with breathing holding at 75% of maximum heart rate

THIS IS YOUR BRAIN ON... EXERCISE



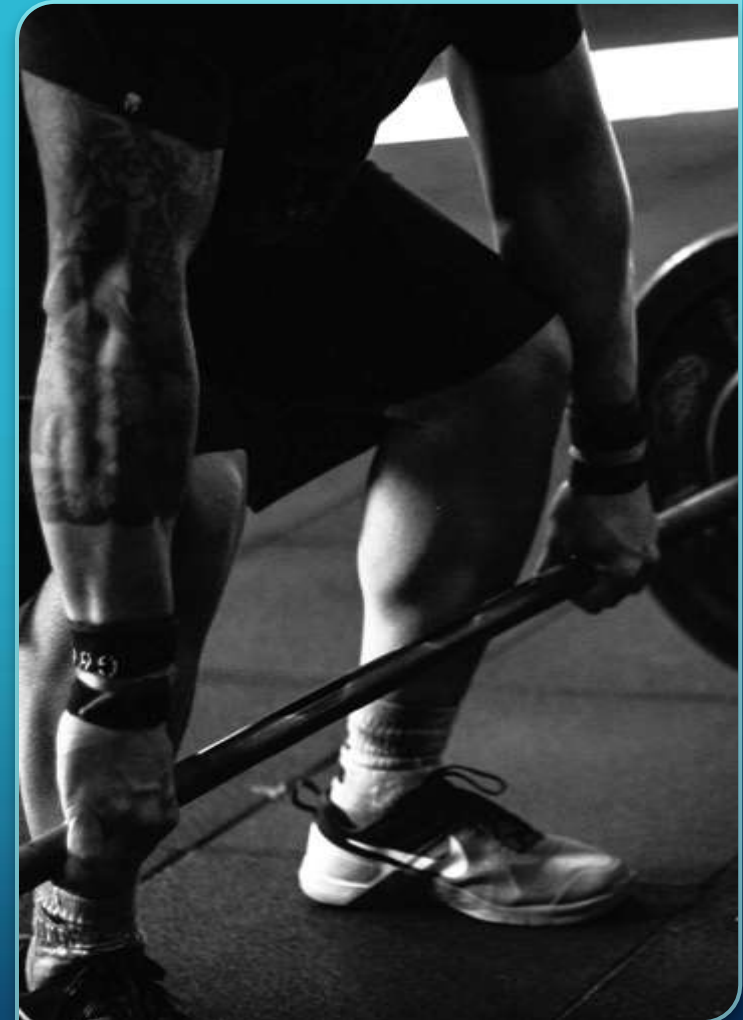


YOUR BRAIN

- Wellbeing
- Antidepressant
- Anxiety States & Trauma
- Neuroscience – Flow States
- Neuroplasticity – Memory, Longevity, ADHD, more...
 - Nerves that fire together, wire together

TRAUMA & MOVEMENT

- 6 kinds of trauma
- What Movement Does:
 - Brain & Body (e.g. Pilates) → confidence, control
 - Vulnerability → Strength training
 - Redirect Pain → Energy → Movement
 - Perseverance → Craft Mastery
 - Mastery of Shame



TYPES OF EXERCISE



REPETITIVE – BODY
BUILDING, JOGGING,
SWIMMING



HIIT



STRENGTH TRAINING



LOW INTENSITY/ LONG
DURATION VS. HIGH
INTENSITY / SHORT
DURATION



TYPES OF MOVEMENT
PATTERNS



YOUR LIFE

- Connection
 - Physiological arousal + adversity = deepened connection
- Transformation of Self
 - Confidence
 - Powerful presence in the world
- Hope
 - The experience of mastering challenges

EQUINOX & THE MILETIC CENTER

- Shared passion for helping our clients optimize their lives
- Mind – Body – Brain Health
- Download this presentation:
TheMileticCenter.com/Equinox

The Miletic Center
36800 N. Woodward Ave
Bloomfield Hills

