

Medical Disclaimer: The information in this presentation is not intended to replace a one-on-one relationship with a qualified health care professional and is not intended as medical advice. It is intended as a sharing of knowledge and information from the research and experience of Dr. Ritamarie Loscalzo, drritamarie.com, and the experts who have contributed. We encourage you to make your own health care decisions based upon your research and in partnership with a qualified health care professional.

Stress and Insulin Resistance

- \checkmark What stress is and how it affects health and weight
- ✓ Using goals and visions to make health supporting daily choices
- √ Stress transformation breaks in 1-2 minute intervals
- √ Noticing and celebrating positive attributes
- ✓ Emotional eating strategies: food choices based on nourishment -- not emotional needs and entertainment
- ✓ The importance of FUN as a regular part
 of daily health regime
- The power of appreciation to transform health challenges, achieve ideal weight, and energize and revitalize cells



What is Stress?

"Stress is a term used to describe the wear and tear the body experiences in reaction to everyday tensions and pressures."

-- Institute of HeartMath



Head, Heart Habits

- ✓ Experience + Beliefs = Thoughts
- √ Thoughts trigger emotions
- ✓ Emotions and thoughts are energy
- ✓ Emotions benefit or harm your physiology via a series of molecular changes
- ✓ When your head and heart are aligned, new beneficial habits can replace old destructive ones





Effects of Stress

- √ A little occasional stress
 - → Energy boost
 - → Helps you achieve your goals
- ✓ Chronic stress
 - →Short and long-term health consequences
 - →Permanently compromise your health
 - →Accelerates aging





The Body's Reaction When Stressed

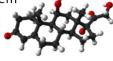
- ✓ Tension, strain, or frustration
- ✓ Muscles tighten
- ✓ Heart rate increases
- ✓ Perspiration increases
- ✓ Logical thought process replaced by irrational and unreasonable thoughts

Physiological and psychological equilibrium are disrupted. If this happens on a regular basis, or continues over a long period of time, the effects can be disabling.



The Effects of Cortisol

- ✓ Increase blood sugar
- ✓ Main path is gluconeogenesis: Cortisol reduces the basal rate of lipolysis
- ✓ Converts protein in muscles and connective tissue into glucose and glycogen
- √ Suppress the immune system
- ✓ Decreases bone formation





How Stress Affects the Body

- √ Fat metabolism: belly fat
- ✓ Mental clarity: brain fog
- √ Loss of energy: burnout fatigue
- ✓ Insulin resistance:
- blood sugar fluctuations
- ✓ Sex drive:

goes away to conserve life force

✓ Digestive problems:

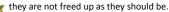
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Cortisol Inhibits Hormones

- ✓ Stress triggers cortisol release.
- ✓ Cortisol uses the same building blocks as DHEA and all the sex hormones.
- ✓ Within 30 minutes, the body is supposed to break down cortisol which frees up the building blocks so they can be re-assembled into DHEA and other hormones.
- ✓ If you keep thinking stressful thoughts, these thoughts trigger the stress response and
- persistent stress because cortisol "steals" the building blocks for





Effects of Stress on Insulin Resistance

- ✓ Stress increases cortisol and adrenaline.
- ✓ The preferred stress fuel is glucose.
- ✓ Stress eats muscles!!! Easy source of glucose is protein through gluconeogenesis.
- ✓ By raising blood sugar, stress hormones stimulate excess insulin.
- ✓ Chronic stress leads to insulin resistance.



Cortisol and Insulin at War

- √ Insulin's job is to decrease blood sugar.
- ✓ Cortisol's job is to provide fuel for fight/flight by increasing glucose.
- ✓ Insulin blocks release of fuel from cells.
- ✓ Cortisol demands more fuel.
- ✓ Result is gnawing craving for carbohydrates, especially two hours after meals.



DHEA significantly decreases visceral and subcutaneous abdominal fat and significantly increases insulin sensitivity Six-month, randomized, double-blind, placebocontrolled preliminary trial -JAMA. 2004;292:2243-2248

Stress and Belly Fat

- ✓ Chronic stress increases cortisol and decreases DHFA
- ✓ Cortisol triggers muscle breakdown into blood sugar and increased insulin.
- ✓ Insulin inhibits fat burning and accelerates fat storage.
- ✓ DHEA significantly decreases visceral and subcutaneous abdominal fat and significantly increases insulin sensitivity (demonstrated by a six-month, randomized, double-blind, placebocontrolled preliminary trial).

- JAMA. 2004;292:2243-2248

3 Steps to Emotional Regeneration

- 1. Building emotional energy reserves
- 2. Plugging the emotional drains
- 3. Clearing old emotional habits



Resourceful Antidotes to Stress Appreciation "Mini-vacations" Fun High self-esteem Relaxing activities Yoga Meditation Tapping (EFT)

Stress Resources ✓ Goal Setting ✓ Stress Transformation: HeartMath Tools ✓ Portable Anchors System ✓ Positive Aspects Journal ✓ Emotional Eating Strategies ✓ The Healing Power of Fun and Appreciation ✓ Emotional Landscape

Emotional Landscape			
High Energy	High Energy		
Negative Emotions	Positive Emotions		
Low Energy	Low Energy		
Negative Emotions	Positive Emotions		
	MS, DC, CCN, DACBN, Institute of Nutritional Endocrinology (INE)		