

Dysfunctional Foods
=
Dysfunctional Core

History of core training

- Nothing new
- Look at the work of Kendall
- Richardson: Hollowing
- McGill: Bracing

Core is important for:

- Rehabilitation
- Sports performance
- Injury prevention
- Trunk is 60% of body mass is in trunk

Local and Global muscles

Local Stabilising System

- Intertransversarii
- Interspinales
- Multifidus
- Longissimus thoracis pars lumborum
- Iliocostalis lumborum pars lumborum
- Quadratus lumborum, medial fibres
- Transversus abdominis
- Obliquus internus abdominis

Bergmark A. 1989 Stability of the lumbar spine. A study in mechanical engineering.
Acta Orthopaedica Scandinavica 230(suppl)20:24.

Global Stabilising System

- Longissimus thoracis pars thoracis
- Iliocostalis lumborum pars thoracis
- Quadratus lumborum lateral fibres
- Rectus abdominis
- Obliquus internus abdominis
- Obliquus externus abdominis

Bergmark A. 1989 Stability of the lumbar spine. A study in mechanical engineering.
Acta Orthopaedica Scandinavica 230(suppl)20:24.

Think of local muscles as corset

Six pack abs

Muscles
=
Somatic Structure

They have to be on the job

The Importance of the Nervous System



It's all about timing



Richardson et al.

Potential causes of timing issues

- Asymmetrical muscle activity
- Abnormal levels of paraspinal muscles
- Reflux inhibition due to injury, pain, ligament stretch, and capsular compression
- Fatigue
- Dysfunctional posture
- Unstable joint
- Dysfunctional training [i.e overrecruitment]
- Visceral organs

Visceral Organs

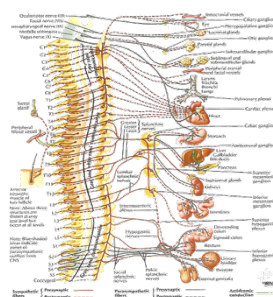
- Stomach
- Small intestine
- Large intestine
- Appendix
- Liver
- Gall Bladder
- Sex organs

Gastro-Intestinal (GI) tract

- More nerve cells than the spinal cord
- Controlled by it's own nervous system
- Can influence many systems of body
- Made up of mouth, esophagus, stomach, intestine and colon
- Considered a visceral organ

What's the connection?

Neurophysiological Connection



The Atlas of Human Anatomy
Frank Netter

Viscera = GI Tract

Somatic = Muscles

Viscero-somatic reflex
inhibition

Heart attack is a classic example

Viscerosomatic Reflex Inhibition

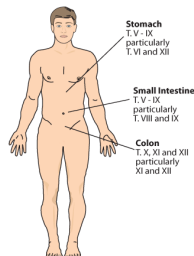
"visceral afferent neurons and the cell bodies of the skeletal sensory neurons in the central nervous system permit and facilitate the transfer of irritation from the less sensitive viscera to the more sensitive skeletal system. Thus the highly sensitive somatic system expresses pain which belongs to the visceral structures."

Pottenger, M. Francis,
Symptoms of Visceral Disease 6th Edition, 1944

Areas of Inflammation and Pain in Skeletal Zones

The stomach, VIth and VIIth thoracic zones; small intestine, VIIIth and IXth thoracic zones; colon, XIth and XIIth thoracic zones.

Symptoms of Visceral Disease, Francis Marion Pottenger, M.D



Viscerosomatic Reflex Inhibition

" visceral disease can profoundly influence somatic sensory perception and can activate trigger points in somatic structures that may perpetuate pain and other symptoms long after the patient has recovered from the initiating visceral disease"

Myofascial Pain and Dysfunction: The Trigger Point Manual, Volume 1.
David G. Simons, MD, Janet G. Travell, MD, and Lois S. Simons, PT

Visceral Disease

- Crohn's disease
- Irritable bowel syndrome (IBS)
- Ulcerative colitis
- GERD
- Appendicitis
- Non-alcoholic steatohepatitis

A hyperirritable spot in skeletal muscle that is associated with a hypersensitive palpable nodule in a taut band. The spot is painful on compression and can give rise to characteristic referred pain, referred tenderness, **motor dysfunction**, and autonomic phenomena.

Myofascial Pain and Dysfunction: The Trigger Point Manual, Volume 1.
David G. Simons, MD, Janet G. Travell, MD, and Lois S. Simons, PT

Current Research

Impaired viscerosomatic reflexes and abdominal-wall dystony associated with bloating.

- Gastroenterology. 2006 Apr;130(4): 1062-8.

Current Research

•Abdominal wall dystonia: also known as "belly-dancers dyskinesia"

- Dyskinesia = Greek words meaning: dys: difficult and kinesia: movement
- Writhing movements of the abdominal wall

What does this look like?

Viscerosomatic Reflex Inhibition

Inflammation to the small intestine or colon can manifest as pain in core muscles.

- Bloating or distention
- Gas
- Indigestion
- Constipation
- Diarrhea





What causes inflammation
in the GI tract?

Causes of inflammation in the GI Tract

- Stress
- Medical drugs
- Dehydration
- Sugar
- Food additives
- Food intolerance
- Irradiated & GM Foods
- Dysbiosis
- Parasite/Fungal Infections

Reference: CHEK Holistic Lifestyle Coach 1 Certification
Module 2003



Be aware of “Health Foods”

Whole Grains

- Wheat
- Barley
- Rye
- Corn
- Oats

Dairy

- Milk
- Cheese
- Yogurt
- Ice cream
- Whey protein
- Type of dairy???

Oh Boy Soy!

Soy Issues

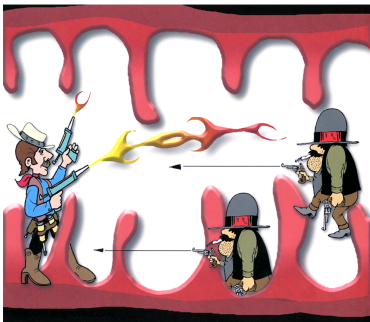
- Volume
- Type
- Mimicry
- Anti-nutrients

Wine

- Research???
- CVD
- Resveratrol
- Sleep
- Leads to cravings

Raw Vegetables

War in the Intestines



Biohealth 2003

What to do?

Priorities

Take out the irritant

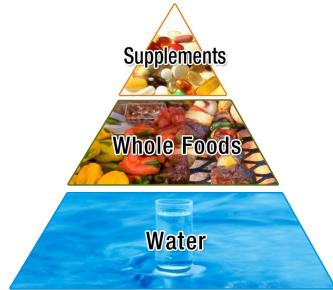
Top 5 Food Allergens

- Gluten
- Dairy
- Soy
- Corn
- Eggs



Decrease
inflammation

THE YANG FOOD PYRAMID



Drink 1 litre per 30
kilograms

Decrease
inflammation with
whole foods

Whole Food Healing

- Fermented veggies
- Kombucha
- Fiber
- Bone broth
- Coconut oil

Whole Foods

- Eat grass fed beef
- Wild fish
- Organic vegetables and fruit
- Coconut oil

Healing Supplements

- Probiotics
- Amino acids
- Aloe
- Fish oils
- Boswellia
- Turmeric
