

MATRIX BASED THERAPEUTICS An Introduction

October 20, 2017





Bioenergetics

The biology of energy transformation and energy exchanges within and between living things and their environments.

(Merriam Webster Dictionary)



The Human Body Field (HBF)

The body field is a dynamic, structured set of holographic patterns of information. It is required to manifest our living experience and integrate our physical, chemical, emotional, mental, memory, intelligence and consciousness aspects.

The human body-field (HBF) surrounds and entwines the body. It is dynamic in nature, constantly acting and reacting to internal changes and the external environment.



The degree of harmony within the HBF is reflective of the experienced state of wellbeing.

This is similar to a piece of music being played in a harmonious and disharmonious way.





CHAKRA	GLAND	ORGAN
7 TH CROWN	PINEAL	CEREBRAL CORTEX
6 TH THIRD EYE	HYPOTHALAMUS PITUITARY	LIMBIC SYSTEM
5 TH THROAT	THYROID	THROAT AIRWAY



CHAKRA	GLAND	ORGAN
4 TH HEART	THYMUS	HEART LUNGS
3 RD SOLAR PLEXUS	PANCREAS STOMACH LIVER	GI TRACT
2 ND PELVIS	ADRENAL	ADRENAL
1 ST ROOT	GONADS	OVARIES TESTES



Meridian Themes

Stomach/Spleen/Pancreas

Season is late summer (early adulthood)

- Future planning
- Security
- Communication
- Concentration
- Friendship
- Loyalty



Meridian Themes

Lung/Colon

- Grief
- Assimilation and Letting Go
- Judgement
- Anger
- Prejudice

Heart/Small Intestine

- Intuition and Creativity
- Ideals
- Openmindedness
- Loving
- Control
- Superstition
- Stuckness



Meridian Themes

Liver/Gallbladder

- Organization
- Structure
- Life Goals and Plans
- Anger
- Depression

Kidney/Bladder

- Warmth
- Partnership
- Loyalty
- Security
- Clinging
- Grasping



Feeling Wheel



http://www.sleepingtiger.org/feelingwheel.htm



Pattern Recognition

- Begins with the patient story
- Listen without formulating your treatment plan
- Every patient encounter is unique and gives you an opportunity to develop your clinical acumen AND your intuition



Integrative Medicine

- Western medical model falls short
- Physiological basis for health and disease is very useful and precise
- There is a tendency to practice EITHER energetic medicine OR physiological medicine
- Matrix encompasses Body/ Mind/ Spirit
- Don't forget the body





FUNCTIONAL MEDICINE MATRIX

Retelling the Patient's Story

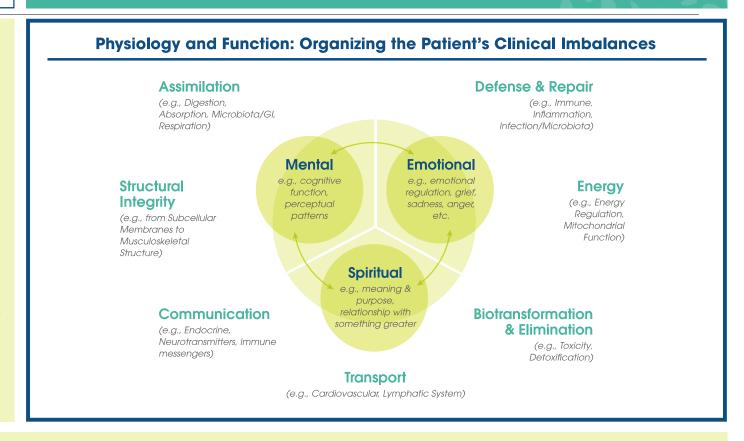
Antecedents

(Predisposing Factors— Genetic/Environmental)

Triggering Events

(Activators)

Mediators/Perpetuators (Contributors)



Modifiable Personal Lifestyle Factors

Sleep & Relaxation	Exercise & Movement	Nutrition	Stress	Relationships



Functional Medicine Matrix

- Is a useful way for you to understand physiological systems medicine
- Is useful to explain this to your patients and to keep you on track
- Credit for this model goes to Institute For Functional Medicine



Patient Tells the Story

- We hold residues/traces within ourselves of everything that ever happened to us
- Remember the story of Telltale Heart
- The patient will give tell you everything he/she needs to recover



History/ Herstory

Useful to begin with a written history form

- Include family history of significant illnesses
 - The disease list / diagnosed illness is less important than the effect the illness had on the patient
- GENETIC ILLNESS: to the patient may seem inevitable reassurance that BRM is crucial



Effective Encounter

- Patient needs to prioritize a list of goals
- Your goals and the patient goals may not concur
- Explain in a way the patient can understand
 - The root causes of the illness
 - Include "physical" root causes
 - Mind / spirit / energetic root causes



Retell the Patient Story

- End each intake by retelling the patient story
- Allow time for this
- The success of the treatment begins with the patient being heard and believed
- Learn to create an energetic connection with each patient
- That connection is unique to the patient



Body Mind Spirit

Understanding physiology from the view of the matrix or the internal microenvironment will enhance the effectiveness of any energetic treatment

Simple example: academic performance improves in schools that decrease processed foods and increase whole foods



Clues and Patterns

- General Symptoms: fever, fatigue, sweating, chills, weakness, reduced exertional tolerance
- <u>Digestive</u>: Abdominal pain, bloating, nausea, vomiting, diarrhea
- <u>Lungs</u>: Food induced bronchitis and asthma
- Joints, Muscles, Connective Tissue: Food allergic arthritis, pain, stiffness, swelling
- Skin: Itching, rashes, hives, thickening, redness, swelling, scaling (as in eczema or psoriasis)
- <u>Brain/Cognition</u>: Disorganized or disturbed thinking and feeling, memory disturbances, behavioral problems



Extraintestinal Symptoms

Gluten Sensitivity

- Bone and joint pain
- Osteoporosis
- Leg numbness
- Muscle cramps
- Unexplained anemia
- Glossitis

Celiac Disease

- Bone and joint pain
- Osteoporosis
- Tingling leg numbness
- Muscle cramps
- Behavioral changes
- Missed menstruation
- Infertility
- Recurrent miscarriage
- Delayed growth
- Thyroiditis
- Tooth discoloration
- Unexplained anemia
- Seizures
- Dementia
- Hepatitis



Treatment Plan?

- Heart Disease
- Chronic Pain
- Autoimmune disease
- Arthritis
- Eczema
- Asthma
- Allergies of any kind
- Fibromyalgia

- Insomnia
- Restless legs
- Depression
- Psychosis



Treatment Plan?

- Chronic UTIs
- ADD
- Kidney Stones
- Fatigue
- Insomnia
- Restless legs
- Brain fog

- Andropause
- Menopause
- Infertility
- Endometriosis
- PMMD
- PCOS



Treatment Plan?

- PTSD
- Hypothyroidism
- Heavy metal toxicity
- Depression
- Fibromyalgia
- IBS

- Eczema
- Type 2 DM
- Obesity
- Leukemia
- Lupus



Digestion and Assimilation

- Whole foods do not eat what is not directly grown on earth
- Eat the Rainbow Diet
- The delicate balance of the intestinal flora effects absolutely everything



Biological Systems Medicine

Digestion and Assimilation

Evaluate using a comprehensive stool analysis:

- Catalogues all of the phyla, species, subspecies of bacteria and yeast in your small an large intestine
- Assesses inflammatory markers, assesses digestion ability to absorb, levels of biotoxins at the root cause of mood disorders, pain, autoimmune disease, cancer, cardiovascular disease



Immune Functions of the Healthy Gut Microbiome

Kalliomaki, M, et al, Lancet, 2001, Vol 357: 1076-1079

- Enhanced barrier function: trophic affects on epithelial tissue
- Initial development of gastrointestinal associated lymphoid tissue (GALT)
- C.R.A.P.: Colonized resistance against pathogens



Role of Intestinal Microflora in Xenobiotic-Induced Toxicity

Mol Nutr Food Res 2013, Vol 57:84-99

- Orally ingested drugs and xenobiotics can be metabolized (biotransformed) by the intestinal microflora, resulting in activation or inactivation
- Reduction & hydrolysis (of glycosides) are common reactions
- Hydrolysis of phase II conjugates (e.g., by β-glucuronidase) can increase enterohepatic circulation & prolong half-life



Microbial endocrinology

Host-microbiota neuroendocrine interactions influencing brain and behavior

Mark Lyte

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The examination of the microbiota from the vantage Point of host-microbiota neuroendocrine interaction cannot only identify new mechanisms by which the microbiota can influence host behaviors, but also lead to the design of interventions in which the composition of the microbiota can be modulated in order to achieve a specific microbial endocrinology-Based profile beneficial to overall host behavior.

of the production and recognition or rediscremicals that are exactly the same in structure to those produced in the vertebrate organisms is known as microbial endocrinology. The examination of the microbiota from the vantage point of host-microbiota neuroendocrine interactions cannot only identify new microbial endocrinology-based mechanisms by which the microbiota can influence host behavior, but also lead to the design of interventions in which the composition of the microbiota may be modulated in order to achieve a specific microbial endocrinology-based profile beneficial to

the microbiota influencing the host. While the host can certainly influence the composition of the microbiota as best exemplified from the ingestion of wide-spectrum antibiotics* or changes in diet, in general most studies are concerned with how the specific composition of the microbiota influences the host and do not examine how the host can influence the microbiota (other than changes in dietary preferences). Further, while it is acknowledged that many studies do examine the host immune response to

Functions of Gut Metagenome

- Digestion/metabolism: energy and nutrient extraction
- Production of metabolites
- Protection against infection
- Maintenance of gut barrier
- Immune modulation
- Influences on mood & behavior



Communication

- Hormones and Neurotransmitters
- Understand the HPATGAG axis is ONE system and completely interdependent
- DO NOT treat Thyroid, Reproductive, hormones, insulin, or GI system without treating the adrenals first or at the same time



HPATGAG

- Hypothalamus is control tower integrating knowledge (past and present) and sensory input (past and present)
- With information from all of the other organ systems on the other side of the BBB
- And initiates hormones, neurotransmitters, immune system messages through blood lymph connective tissue channels



Limbic System



SMELL

Direct condition of



Non thinking Procedural Assigns emotions to sensory input



LOCUS CERELUS

Procedural, Assigns emotions, Conditioned response, Arousal Stress reactions information

HIPPOCAMPUS

Stores memories imprinted from birth



SENSORY SYSTEM

Gathers information from skin, position, vision, hearing, spine, muscles **SENSORY** integration

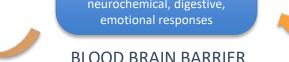


Signals immune, cardiac, pulmonary, hormonal, neurochemical, digestive, emotional responses

Left processes negativity Right processes postivity



BLOOD BRAIN BARRIER PITUITARY





Hormones

- Messaged by pituitary
- Adrenals need to be mapped and repaired
- Several different patterns of adrenal stress
 - cortisol rhythm normally highest in am
 - falls through the day, cued by dawn and dusk
 - at night, cortisol converts to melatonin for sleep



Cortisol Steal

Limbic brain determines

adrenal responses

 If diurnal rhythm is disturbed this impacts thyroid, blood sugar, insulin, cholesterol, cytokines (inflammation), heart, lungs, all digestive symptoms, mood, pain and sense of wellbeing

THIS IS USEFUL TO UNDERSTAND. IT VALIDATES THE PHYSIOLOGIC REASONS TO USE ENERGY MEDICINE



Cortisol Steal

Elevated cortisol:

- Decreases thyroid (VERY common to replace Thyroid without regard to adrenals function)
- Most of us know that regulating thyroid by symptoms, comprehensive hormone measurement can be hard

PEARL: Fix adrenals first or simultaneously



Cortisol Steal

Abnormal adrenal rhythm:

- Increases estrogen, decreases testosterone
- Increases cholesterol, increases
 triglycerides, increases CRP, decreases
 progesterone, increases coronary artery
 disease, hypertension and type 2 diabetes
- IS A MAJOR physiological trigger to obesity



Testing Adrenals

- Adrenal stress test: many companies do this
- It requires 4 samples of saliva taken in one day at specific times
- Add measurement of DHEA and 17 0H progesterone for a complete map



Adrenal Stress Test

An adrenal map will help with:

- Weight loss
- Blood sugar control
- Coronary artery disease
- Autoimmune disease
- PCOS
- Infertility

- Low testosterone
- Alopecia
- Chronic pain
- Insomnia
- Depression
- CFS
- And, and, and



Hormonal Pearls

- Adrenals first or simultaneously
- All energetic treatments will be more effective if you support the physical system
- Neurotransmitter rhythms match cortisol rhythms particularly norepinephrine, dopamine and GABA
- Always give GABA with progesterone replacement; it increases P receptors



PERSPECTIVES

Stressors can increase susceptibility to infectious agents, influence the severity of infectious disease, diminish the strength of immune responses to vaccines, reactivate latent herpesviruses and slow wound healing. Moreover, stressful events and the distress that they evoke can also substantially increase the production of pro-inflammatory cytokines that are associated with a spectrum of age-related diseases. Accordingly, stress-related immune dysregulation might be one core mechanism behind a diverse set of health risks^{1,3}.

SCIENCE AND

Stressmplic

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Detoxification/Transformation

- Needs to be done physically and emotionally
- Since WW2 we have dumped over 80,000 chemicals into the environment
- At best these are rated GRAS
- Chemical residues are present in every living being including plants on earth
- Many of these are toxic at parts per million or billion (ppm, ppb)



Toxins

- Many of these are known endocrine disruptors: meaning that the toxins are very similar in structure to hormones such as thyroid and estrogen
- These chemicals in physiology are called POPs (persistent organic pollutants)
- These chemical are fat soluble



Toxins

- Standard western diets contain POPS and our wise human bodies store these chemicals in fat cells to prevent damage to biological systems
- POPs are a major cause of obesity
- Many people trying to lose weight do so by encouraging metabolizing fat cells



Toxins

- VERY common that people feel ill when losing weight, which is partly because of the sudden release of stored toxins from body fat
- Our bodies have created a whole new KIND of fat (Visceral Fat) as a regulatory response to POPS in our food and environment
- Visceral Fat is deep fat that surrounds our organs; it produces STRESS HORMONES AND INFLAMMATORY CYTOKINES



Detoxification Organs

- Liver detoxifies chemicals in a 2 phase system by conversion to water soluble substances for elimination
- Genetic mapping of SNPS in your specific detox system eliminates the guesswork in prescription medications which are occasionally necessary: can be done once
- AVOID CONSTIPATION AND DEHYDRATION

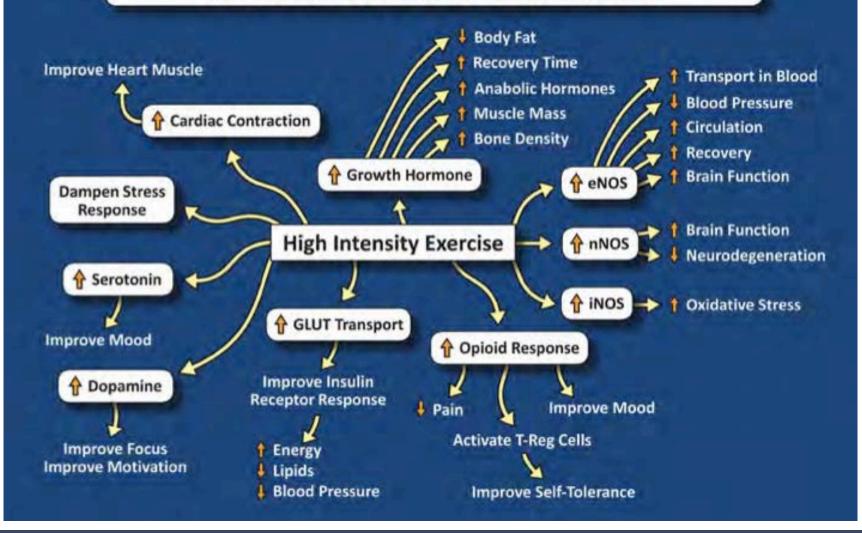


Detoxification

- Supply all of the micronutrients needed for detoxification enzyme pathways
- Eating or supplementing micronutrients does not guarantee these are available; DEPENDS on absorption system
- Learn to limit exposure to toxins
- Test for heavy metal load: heavy metal blood levels are of limited value



NEUROENDOCRINE-IMMUNE RESPONSE TO HIGH INTENSITY EXERCISE





TOXICOLOGICAL HIGHLIGHT

Endocrine Disruptors and the Obesity Epidemic

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The highlighted article brings together research on the site and mechanism of endocrine-disrupting chemicals that have the potential to have a significant impact on human health and research on obesity, which is known to seriously affect human health. The effect of exposure to endocrine-disrupting chemicals on the initiation or exacerbation of obesity, which may significantly alter the perception of the etiology of obesity and impact intervention and prevention efforts, is an important emerging area needing even further research emphasis.

Obesity is a growing concern worldwide. The prevalence of obesity has risen dramatically in developed countries over the past 2 to 3 decades (Oken and Gillman, 2003). Obesity has reached epidemic proportions in the United States with more than 20% of adults defined as clinically obese and an additional 30% defined as overweight. In 1999, 13% of children aged 6–11 years and 14% of adolescents aged 12–19 years in the United States were overweight. This prevalence has nearly tripled for adolescents in the past two decades (U.S. Department of Health and Human Services, 2001). Since overweight adolescents have a 70% chance of becoming overweight or obese adults (80% if even one parent is obese or overweight)

difficult to treat; thus, prevention is critical. In this regard, a new paradigm for prevention has emerged in recent years that evolved from the idea that environmental factors in early life and in utero can have profound influences on lifelong health (e.g., the fetal basis of adult disease [Oken and Gillman, 2003]). While the focus of this research area has been on the relationship between fetal experiences and later risk for adult chronic diseases, there is recent information regarding the fetal origins of obesity. Initial work in this area focused on the role of in utero nutrition and its effects on birth weight. A large number of epidemiological studies have demonstrated a direct relationship between birth weight and body mass index (BMI) attained later in life. Lower birth weight seems to be associated with later risk for central obesity, especially when it is associated with catch-up growth in the first few years of life. In addition, higher birth weight is associated with higher attained BMI. "We are faced with the seeming paradox of increased adiposity at both ends of the birth weight spectrum-higher BMI with higher birth weight and increased central obesity with lower birth weight" (Oken and Gillman, 2003). Thus prevention of childhood and adult obesity must start in utero.

Toxicological Sciences 76, 247-249 (2003)





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Detoxification Organs

Skin

- Organ with the largest surface area; most toxins are readily absorbed through the skin
- AVOID ALL CHEMICALS in all skin care products and teach your children to do the same
- Skin detoxifies through sweating
- Skin brushing



Detoxification Organs

Lungs

- Detoxify many airborne pollutants
- Breathing techniques and aerobic exercise detox the lungs
- Consider nebulizing remedies
- Nasal therapy is a technique that cleanses and detoxifies the sinuses directly



Lymph Detoxifies

- Always recommend lymph drainage techniques for ongoing health maintenance
- Many techniques include rebounder and many techniques for manual lymph drainage
- Get familiar with lymph drainage remedies



Functional Medicine Matrix

- Is a useful model to help strategize about the complex and individual interactions and interdependencies in the human milieu or internal environment
- Treatment plans should evolve over time
- Collaboration among BRM practitioners is essential
- There are as many paths to wellness as there are people on earth

