



Mentoring the Mentor

Stuart White, DACBN
 Whole Health Associates
 713/522-6336
 stuartwhite@wholehealthassoc.com
www.wholehealthassoc.com
www.doctorofthefuture.org

1

Mentor goals:

- To declare what is possible and establish a commitment to that possibility
- Address personal and professional barriers limiting the ability to serve
- Evolution of vision/mission/ethics that drive success
- Create immediate action steps to apply learning and growth
- Construct the round table of applied trophologists

2

Mentoring the mentor:

- Who are the mentors? – Practitioners
- Who are we mentoring? – Patients and GAP
- What's the purpose? – Optimized life
- How does it work? – Whatever you learn you teach someone else (anyone else)
- Who's is included? – Self selection, you pick yourself

3

Mentoring the mentor:

- Each participant attends monthly teleconferences (1 hour in duration, 4th Wednesday of every 2nd month) creating a round table discussion/exploration of the dynamics and details of a nutrition-based holistic practice
- Each participant chooses how to convey the notes and information to their world and community – no information squandering

4

Review - Distinguish yourself

- It is more apparent why people are choosing alternative health care professionals who specialize in a functional approach
- No matter you specialty or technique you must distinguish yourself as an expert – people are just seeking to understand and they need you to do so
- Typically in the healthcare industry people are receiving shallow answers that leave them puzzled with the mystery of “Why is this happening to me?” and “ What can I do about it?”
- Trends research over 10 years ago identified a number of factors essential to being successful in the nutritional field – one of those was establishing yourself as an expert

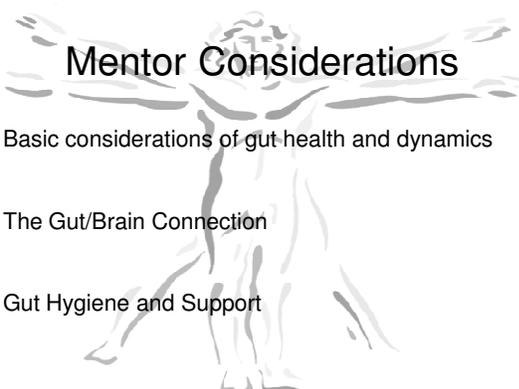
5

Review - Explanation as hope

- The practitioner’s ability to explain health issues and therapeutic outcomes creates an inflation of understanding in the patient which feels like hope
- Today in the professional world there is so much avoidance of ‘giving false hope’ that often we end up offering little hope at all
- I propose another model that bolsters hope and expectation and subsequently practices accountability as to whether the therapeutic endeavors are achieved or not
- As long as the hope that has been instilled is revisited and acknowledged as being accomplished or not the betrayal of false hope can be avoided
- So as an example, if a practitioner was describing the potential for nutritional intervention through supplements and diet modification to improve the lipid profile, then s/he would need to revisit to success or failure of the experiment within a reasonable period of time
- Our community is starving for legitimate hope, as a starting place, as empowerment to begin, as an idea to act upon
- There is genius in hope

6

Mentor Considerations

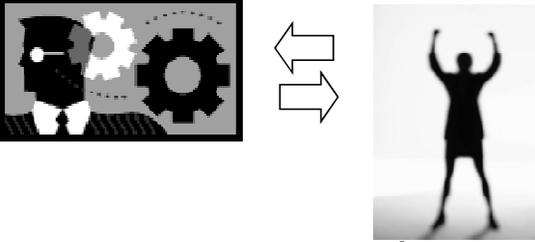


Basic considerations of gut health and dynamics

The Gut/Brain Connection

Gut Hygiene and Support

Body serves the Brain Brain serves the Body



8

Brain Health

- ↪ The body serves the brain
- ↪ The brain serves the body
- ↪ The brain and the body serve something
- ↪ Survival is important (stress responses, neuroplasticity, physiological resilience, survive the crisis) but then what, what for
- ↪ Surviving to thrive – give more, forgive more, think more, imagine more, lead more, embrace more, love more

9

4 Factors Influencing Brain Status

- ↪ Neurotransmitter abundance
- ↪ Brain inflammatory status determining neuroglial proliferation/ excess
- ↪ Brain modulation due to immune cytokine influences
- ↪ Hormone modulation of brain status

↪ Our work is to make the brain make sense and reveal its deeper status to us to liberate the 'tick-tock' hypnosis of macroscopic morbidity

(Many say belief systems including core beliefs influence brain status – but what influences these?)

10

Cytokines – Immune Messages

- ↪ Immune response results in the release of cytokines meant to direct local and distant immune function
- ↪ These cytokine messenger molecules also drive HPA status and thus determine global brain status
- ↪ Cytokines subsequently cause the release of WBC inflammatory mediators to direct the inflammatory process of repair
- ↪ Therefore immune status and activity determine HPA/brain settings
- ↪ Hypervigilant or depressed immune states reflect in brain states

11

The Intelligent Intestine

- The Danone Symposium held in Paris on July 14, 2002 stated the following,

“The intestine is an extremely complex living system that participates in the protection of the host through a strong defense from aggressions from the external environment. This defense task is based on three constituents that are in permanent contact and dialog with each other: the microflora, mucosal barrier, and local immune system.”

The Best two books on the subject

- Brain Maker by David Perlmutter, MD
- The Second Brain by Michael Gershon, MD (Father of Neurogastroenterology)

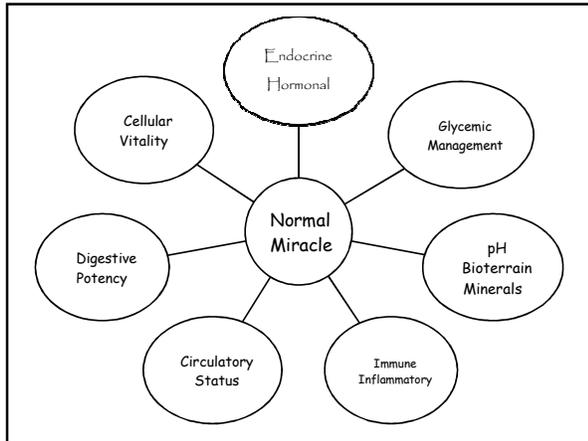
Seven Pillars Unified Mechanisms of Health

Promoting Physiology

7 Pillars of Healing
7 Unified Mechanisms of Health

- ↻ Endocrine/Hormonal
- ↻ Glycemic Management
- ↻ pH Bioterrain
- ↻ Immuno-Inflammatory
- ↻ Circulatory Status
- ↻ Digestive Potency
- ↻ Cellular Vitality



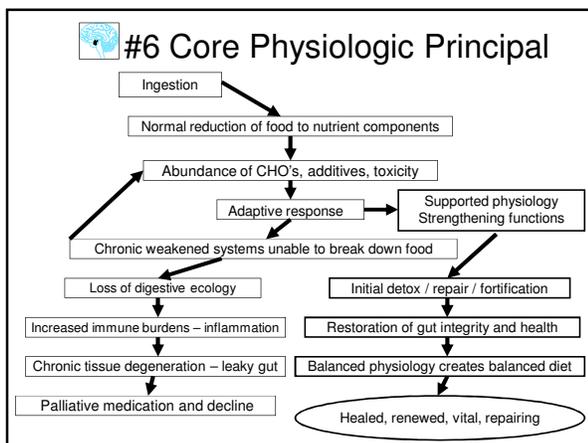


6 – Digestive Potency




- ↪ Digestion must bring in substances that provide energy and sustenance, and remove wastes
- ↪ 80 % of immune system resides in the GI mucosal barrier - GALT
- ↪ Loss of ecology creates cascades of cytokines, immune modulation, inflammation, resorption of toxins, tissue degradation, leaky gut degeneration
- ↪ Famine in the midst of plenty
- ↪ Fasting as repair

17



Ecology -

Human life, particularly in health and disease, is the result of countless independent forces impinging simultaneously on the total organism and setting in motion a multitude of inter-related responses.

Rene' Dubos

Digestion: Stage for Nutrition

- ↪ Every living system (from cell to organ, to body, to community) must have 2 fundamental capabilities – to bring in substances that provide energy and sustenance, and to remove wastes
- ↪ Absorption – the digestive system must be able to identify the substances necessary to maintain health and selectively take those into circulation through health transport and circulatory functions, while keeping out the damaging materials (toxins)
- ↪ Elimination – The same digestive system must be able to identify the wastes and detrimental substances and subsequently process and eliminate those detriments through intact protection and defense systems
- ↪ The healthy digestion must differentiate good from bad in the environment, so the digestive system can begin to be respected as a sentient system, wherein we intake the external world into our gut and evaluate and relate appropriately to that external world
- ↪ Over a lifetime a person will ingest 25 tons of food accompanied by pathogens and external toxins
- ↪ In 1999 1 billion pounds of pesticides were applied in the US, with 5.6 billion pounds applied worldwide – pesticides are now a common component of our environment – even pharmaceuticals have been found in the water primarily from the elimination of un-metabolized drugs through the urine
- ↪ Toxic exposure and environmentally related conditions account for 57-397 Billion dollars annually in the US and Canada
- ↪ The ability to protect from these xenotoxins must be part of the health digestive system

Digestion: Stage for Autonomy

- ↪ Pathogens can also be present and food allergens can create immediate and delayed responses from the immune/inflammatory systems
- ↪ The following diseases have been associated with food intolerances/allergies: cardiovascular, gastrointestinal, genitourinary, immune, mental/emotional, musculoskeletal, respiratory, skin, migraines
- ↪ First select friend from foe – then after recognition, the system must selectively absorb and transport substances, while eliminating detrimental materials at the same time
- ↪ To do this elaborate systems for digestion, absorption, protection, defense, transport, circulation and waste removal must be simultaneously present and operational

Digestion: Absorption

- ⌘ The proper diet is only the beginning of the process – In developed world there is more food diversity available year round than in any other period in human recorded history – foods can be raw, minimally processed, shelf stable, prepackaged, prepared, nutrient dense, nutrient depleted
- ⌘ Minimally processed foods are in general digested more slowly and the release of nutrients occurs at a rate influencing absorption – this rate determines the responses that the body has to food such as insulin, cortisol, insulin-like growth factor, enzyme activity and more
- ⌘ Digestion involves the breakdown of larger molecules into smaller units:

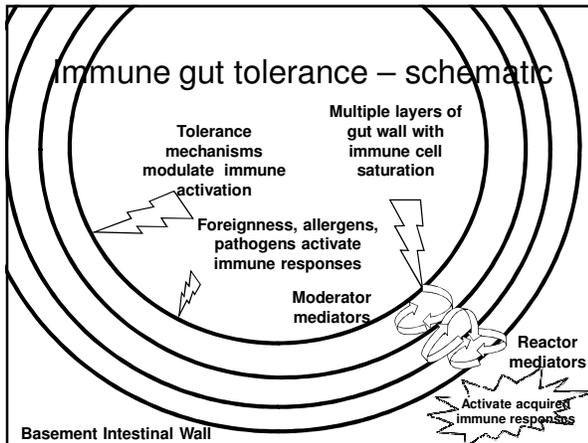
Proteins	-	Amino Acids
Carbohydrates	-	Monosaccharides
Fats	-	Fatty Acids
- ⌘ Water soluble nutrients (CHO, AA, Vitamins) are absorbed in the small intestine across the border brush cells through passive and active transport mechanism
- ⌘ Fat soluble nutrients (Fatty acids, Vitamins) must first undergo emulsification with bile and then be absorbed into the lymphatic system for association with plasma proteins
- ⌘ Defects with either water or fat soluble pathways will result in correlating specific nutrient deficiency and associated symptoms

Digestion: Protection & Defense

- ⌘ GI mucosal membrane is the largest interface between our interior and the exterior world covering more than 400 square meters (200 times more than the skin)
- ⌘ GI epithelium protects the stomach and intestines from acids, toxins, drugs, alcohol, pathogens
- ⌘ Two pathways exist across the epithelium: intracellular – through cells controlled by cell membranes, paracellular – between cells, controlled by the permeability of tight junctions (in unhealthy system these junctions leak and allow molecules to be introduced into circulation undetected avoiding the body's first line protection and defense mechanisms)
- ⌘ GALT (Gut Associated Lymphoid Tissue) contains 60% of the immune system, and more than 80% of the immuno-globulin-producing blasts and plasma cells – primary purpose for this system is first line defense against foreignness

Armor for the world: gut lining

- ⌘ How thick is your gut lining?
- ⌘ Children are resilient and typically not hypersensitive because of this inherent gut lining integrity and thickness
- ⌘ The world invades and overwhelms us though our gut lining, not through our skin
- ⌘ Thickening the gut lining may serve to increase confidence, tolerance, calmness, patience, peace
- ⌘ Thicken gut lining with Cataplex AC (10), GastroFiber (3), Chlorophyll (4), LactEnz (4), removing food allergies, increasing protein consumption SP Complete 2 Tbsp, microflora repletion with 10 strains of flora including the famous casei species, Colostrum/Gamma Globulin supplementation
- ⌘ Lining thickness may be inferred by measuring level of secretory IgA of which 90% is formed in the lining of the gut, hence the less gut lining the lower the sIgA (saliva test)



Secretory IGA

- ↪ GALT produces two lines of defense: the localized secretory IgA is described as 'antiseptic paint' covering the intestinal tract as the predominant immunoglobulin on the surface of the GI mucosa
- ↪ SIgA prevents infections, neutralizes viruses, and removes antigens before they cross the mucosal barrier and reach circulation thus preventing activation of the inflammatory and complement immune responses
- ↪ Adults produce 3-4 grams per day, which can also be found in the saliva and colostrum as well
- ↪ Low level SIgA is associated with altered intestinal permeability and increased uptake of food antigens resulting in increased inflammatory and subsequent immune activation
- ↪ Antigens that escape the SIgA surveillance enter the second layer of GALT wherein the IgE & IgG mechanisms generate the antibodies and cytokines that represent full immune response

26

Th1 & Th2 pathways

- ↪ The systemic immune system consists of circulating lymphocytes as B cells and T cells in search of their target antigens
- ↪ Antigens entering through a mucosal surface activate lymphocytes waiting in the mucosa-associated lymphoid tissues (MALT) that transport the antigens to the Peyer's patches which are the doorway to the lymphatic system (immune responses to blood borne antigens are initiated in the spleen, while response to tissue antigens starts in the local lymph nodes)
- ↪ Current immune concept states that cellular immunity involves the Th1 pathway wherein T cells produce interferon and interleukin 2 activating macrophages and cytotoxic T cells that kill invading organisms
- ↪ Th2 pathway is induced by antigenic stimuli leading to secretion of interleukins 4,5,6 by T helper cells which activate the antibody-producing B cells
- ↪ Th1 and Th2 balance each other – increased Th1 responses are associated with autoimmunity and infective tendencies, whereas Th2 shift a person toward allergic responses
- ↪ The hygiene theory dictates that reduction of childhood infections reduces Th1 response and skews towards the Th2 allergic tendencies
- ↪ Recent data suggest an emerging Th3 pathways which down-regulates the Th2 responses
- ↪ Gut flora variations can selectively suppress Th1 and Th2 pathways and thus induce tolerance

Probiotics -

- ↪ The term probiotics is defined as live microbial supplementation that affects the host by improving the microbial balance
- ↪ The two most important groups of probiotic bacteria are Lactobacilli and Bifidobacteria of which there are ten beneficial strains
- ↪ Ten Beneficial strains:
 - ↪ B. Bifidum UABB-10 (formerly R0071) – most common found in infants and adolescents, resistant to gastric acidity and boosts immune system by up-regulating proliferation of immune cells
 - ↪ B. Breve UABB-11 (formerly R0070) – most common in infants, resident throughout life, produces lactic acid, metabolizes over 20 carbohydrates, readily adheres to epithelial cells and blocks adherence of pathogens like E. Coli
 - ↪ B. Longum UABL-14 (formerly R0715) – of human origin, promotes regularity, antagonizes pathogens

28

Probiotics -

- ↪ Ten Beneficial strains:
 - ↪ L. Acidophilus DDS-1 (formerly R0052) – Unique endogenous human strain, harder thermostable with only 7% loss of potency per year, combats pathogens such as H.Pylori, E. Coli, and salmonella, also produces B vitamins and reduces cholesterol
 - ↪ L. Casei UALC-03 (formerly R0215) – Strengthens digestion and detoxifies environmental chemicals, also boosts GI immune activity and inhibits pathogens
 - ↪ L. Paracasei UALPC-04 – Beneficial to the immune system increasing the number of IgA producing cells in the gut, antimicrobial specifically to onset of urogenital infections caused by Staph. Aureus, metabolizes efficiently prebiotic sugar FOS
 - ↪ L. Plantarum UALP-05 (formerly R1012) – Remarkable species able to survive aerobic & anaerobic conditions, metabolizes 25 carbs, survives high salt solutions, stomach pH and bile acids, has some antioxidant capability, digests grains, grasses, vegetables, synthesizes L-Lysine and is antiviral therefore, eradicates pathogens such as staph. From fermented foods
 - ↪ L. Rhamnosus UALP-06 (formerly R0011) – Primarily found in the small intestine, vagina, prevents urogenital and vaginal infections, tolerant to bile salts, reduces intestinal inflammation, inhibits early intestinal infection in infants, implants quickly, inhibits growth of streptococci & clostridia
 - ↪ L. Lactis ssp. Lactis UALL-08 (formerly R1058) – Isolated from kefir culture, antimicrobial in vitro against several intestinal pathogens
 - ↪ S. Thermophilus UAST-09 (formerly R0083) – One of two bacteria required to make yogurt, only reaches the upper intestine and produces some lactase which can aid lactose-deficient people, creates favorable conditions for lactic acid bacteria

29

Dash SK, Review of Efficacy of L.Acidophilus DDS-1, Agro Food Industry Hi-Tech 2004; Sep/Oct; 23-6.

Elimination Diets – Forgotten Technology

- ↪ Elimination diets are the most powerful and under-utilized tools available to the clinician for addressing chronicity
- ↪ A variety of ways: SP Purification is in fact an elimination diet 21 days long, food allergy elimination
- ↪ Using IgG food antibody testing and elimination/provocation diets triggers can be identified not obvious in IgE testing
- ↪ Systemic inflammation can be eliminated when Th1 (autoimmune) and Th2 (allergic) responses are balanced with probiotics
- ↪ Conditions responsive to elimination diets include headaches, IBS, fatigue, AIDS, sinusitis, arthritis, skin disorders, fibromyalgia, CFIDS

Fasting as Repair -

- ⌘ There are multiple fasting methods that can result in detoxification, purification, and repair
- ⌘ One day fasts – one day a week eat no solid food until breaking the fast at supper with a salad only (since the salad has little blood sugar modulation it represents a 36 hour fast)
- ⌘ Three day fasts – three days eat no solid food for the first day, second and third days drink only 1 gallon water with 6 Tbsp. lemon juice, 3 Tbsp. Maple Syrup, and 2 tsp. Cayenne Pepper, breaking the fast with salad only on the evening of the third day and non-solids and salads the following day
- ⌘ Five to Twelve day fasts – Same as three day fast but requiring one day for every five days fasting to break (a ten day fast requires two full days on non-solid food)
- ⌘ All fasts should deliver the individual into a sound Phase II carbohydrate limiting diet

Bowel Transit Time -

- ⌘ Defined as the time required for ingested food to travel from the mouth to the anus
- ⌘ Diet affects transit time – foods high in fiber result in more rapid transit time and heavier, bulkier stools
- ⌘ Daily roughage should include 25 grams of fiber per day (twice what average diet includes)
- ⌘ Two types of fiber:
 - ⌘ Soluble – dissolves in water, commonly found in fruits, legumes, barley, oats, generally slowing transit time, increasing satiety, increasing absorption, binding with bile acids and this reducing cholesterol, promote epithelial repair
 - ⌘ Insoluble – does not dissolve in water, found in vegetables, whole grains, increase the bulk of the stool, reduce transit time
- ⌘ Charcoal or carmine red dye capsules may be employed, or use a more natural method with ingesting 2 whole beets
- ⌘ Normal transit time will appear as color in stool 12 – 14 hours after ingestions, with the last of the color within 36-48 hours
- ⌘ Increasing water intake reduces rectal cancer by 92% by reducing transit time according to Taiwanese study (International Journal Of Cancer 1999; 82: 484-489)
- ⌘ Fresh grinding 2 Tbsp of flax seeds daily is most effective way to ensure fiber abundance in diet

The Gut-Brain Connection

- A good book on our subject by Michael Gershon, MD is called "The Second Brain: Your Gut Has A Mind Of It's Own" is a groundbreaking new understanding of nervous disorders of the stomach and intestine.
- He writes, "Consider the lowly gut and its nervous system. The bowel is just not the kind of organ that makes the pulse race. No poet would ever write an ode to the intestine. To be frank, the popular consensus is the colon is a repulsive piece of anatomy. Its shape is nauseating, its contents disgusting and it smells bad. The bowel is a primitive, slimy snakelike thing. Its body lies coiled within the belly and it slithers when it moves. In brief the gut is despicable and reptilian, not unlike the brain, from which wise thoughts emerge. Clearly the gut is an organ only a scientist would love!"

The Intelligent Intestine

- The Danome Symposium held in Paris on July 14, 2002 stated the following,

“The intestine is an extremely complex living system that participates in the protection of the host through a strong defense from aggressions from the external environment. This defense task is based on three constituents that are in permanent contact and dialog with each other: the microflora, mucosal barrier, and local immune system.”

34

What is Gut Flora?

- A large, diverse and dynamic population of micro-organisms
- Native bacteria are acquired during birth and during the first and second years of life
- Transient bacteria are continuously being ingested from the environment via:
 - Food
 - Water
 - Probiotics

Guarner F. Digestion 2006; 73(Suppl 1): 5-12

35

Distribution of Gut Flora

- The stomach and duodenum have very low numbers around 10^3 cfu per g of contents
- There is a progressive increase along the jejunum and ileum from $10^4 \rightarrow 10^7$ cfu/g
- The large intestine contains around 10^{12} cfu/g

$$10^{12} = 1,000,000,000,000$$

Guarner F. Digestion 2006; 73(Suppl 1): 5-12

36

Diversity

- Nature, Volume 453, Issue 7195, may 29, 2008 – Article “ Who Are We”

“The we refers to the wild profusion of bacteria, fungi and viruses that colonize the human body. These unseen passengers number in the trillions. According to one common estimate, the human gut contains at least a kilogram of bacteria alone. They contribute so much to the human biology that it is difficult to say where the body ends and the microbes begin...

The NIH’s five year human microbiome project will spend much of its money identifying which bacteria are lodged where in the body and compiling a reference set of their genetic sequences. Metagenomics of the human intestinal tract (MetaHIT) will focus on the microbial inhabitants of the gut, the main repository of the microbiota, and how they contribute to obesity and inflammatory bowel disease.”

37

Gut Stats

- Gut flora comprises between 4-8 lbs of total body weight – microflora varies from person to person and can represent a signature
- 99% of the bacteria come from 30-40 species
- Intense metabolic activity, especially in the colon
- Equilibrium (qualitative and quantitative) is critically important
- There is quorum sensing – communication between the bacteria and other cells of the gut through cytokine messengers
- Gut balance is vital and subtle

38

The Gut as a Sentient System

- Every living system must have 2 fundamental capabilities – to bring in substances that provide energy and sustenance, and to remove wastes
 - Absorption
 - Elimination
- The healthy digestion must differentiate good from bad in the environment, so the digestive system can begin to be respected as a sentient system, wherein we intake the external world into our gut and evaluate and relate appropriately to that external world

39

Immuno-Sparing

- Since 90% of the immune systems cells dwell in the lining of the digestive tract it follows that to reduce the burden of dysbiosis, toxicity and infection/infestation there is a sparing of the immune system and its ongoing burden
- A depressed immune system is reflected by white blood cell counts under 4 (optimally it is 6-8)



40

What is Dysbiosis?

- Metchnikoff (1907) was the first proponent of probiotics. Described dysbiosis as altered pathogenic bacteria in the gut¹
- The state of disordered microbial ecology that causes disease²
- A breakdown in the balance between protective versus harmful intestinal bacteria³

1 Hawrelak JA, Myers SP. *Alt Med Review* 2004; **9**(2): 180-197
 2 Pizzomo JE, Murray MT (eds). *A Textbook of Natural Medicine*, 2nd Edn, Vol 1. Churchill Livingstone, Edinburgh, 1999, pp.110-111
 3 Tamboli CP, Neut C, Desreumaux P et al. *Gut* 2004; **53**: 1-4

41

Types of Dysbiosis

According to Location

- *Helicobacter pylori* presence in the stomach
- Small intestinal bacterial overgrowth
- Colonic flora imbalance –including abnormal presence of parasites (protozoa) or yeasts (candida)

42

Types of Dysbiosis

According to Pattern

1. Putrefaction
2. Fermentation excess
3. Deficiency
4. Sensitisation

(More than one pattern can co-exist in an individual)

43

Common Causes of Dysbiosis

- Antibiotics
- Stress
- Diet including excessive protein, excess refined carbohydrates, lack of fibre, excess fat, sulphur
- Decreased immune status (especially low secretory IgA)
- Decreased gut motility and poor digestive function
- Low hydrochloric acid production
- Intestinal infection and infestation
- Altered intestinal pH

Hawrelak JA, Myers SP. *Alt Med Review* 2004; 9(2): 180-197
Pizzomo JE, Murray MT (eds). *A Textbook of Natural Medicine*, 2nd Edn, Vol 1. Churchill Livingstone, Edinburgh, 1999, pp 111.

44

The Gut as Brain of the Immune Response

- The body's primary exposure to immune challenge is in the digestive tract
- There are many immunological surface antigens that are devoted to screening ingested material
IgA IgE IgG IgM
- 17 of the known 21 strains of interferon are produced in the gut – the immune system arises from the gut – and so the ecology of the gut determines immune status

45

Diseases Linked to Dysbiosis

Autoimmune Diseases

- Crohn's disease
- Ulcerative colitis
- Rheumatoid arthritis
- Ankylosing spondylitis
- Graves disease
- Chronic active hepatitis

Gut Disorders

- Irritable bowel syndrome (IBS)
- Flatulent dyspepsia
- Certain types of food sensitivities
- Chronic diarrhoea and constipation
- Diverticular disease
- Gastrointestinal infections and intestinal overgrowth eg candida

46

GI Flora Balance Program

The Products

- Gut Flora Complex
- PreBiotic Inulin
- ProsynBiotic
- Vitanox

47

The Essence of GI Flora Balance Program

- Cleanse
- Feed
- Restore
- Balance

48

GI Flora Balance Program

1. Cleanse the gastrointestinal tract
 - Gut Flora Complex
 - Vitanox
2. Support growth of native intestinal flora
 - Prebiotic Inulin
3. Promote and maintain a healthy gastrointestinal environment
 - ProSynbiotic

49

GI Flora Balance Protocol

Every day for 6 weeks

- Gut Flora Complex, 1 capsule twice per day
- Prebiotic Inulin, 1 teaspoon twice per day
- Both taken at the same time

As required include,

- Vitanox, 2 to 3 tablets per day
- ProSynbiotic, 3 capsules per day (At a different time to the Gut Flora Complex. Separate by at least 2 hours)

50

Gut Flora Complex

Anise (*Pimpinella anisum*) fruit essential oil 125 mg
 Andrographis herb 10:1 extract 100 mg
 from *Andrographis paniculata* herb 1.0 g
 Containing andrographolide 10 mg
 Phellodendron stem bark 20:1 extract 80 mg
 from *Phellodendron amurense* stem bark 1.6 g
 Containing berberine 36 mg
 Oregano (*Origanum vulgare*) leaf essential oil 75 mg

Suggested Dosage: 3-6 enteric capsules per day

51

GI Flora Balance Protocol

- On completion of the 6 week protocol assess patients health
- If patient requires further support it is safe and effective to continue the GI Flora Balance protocol with reassessment every 6 weeks

52

GI Flora Balance Program

- It is in fact a sort of elimination diet
- The combined cleansing and feeding effect this program produces a similar effect
- This obviously reduces immune challenges – which can be the trick to turning off a range of long term issues and allow balance to return
- As well the gastrointestinal cleansing activity of this product it also supports the sinuses and respiratory tract

53

New Product Alert – Read All About It!

☐ Gut Flora Complex released April, 2008 is brilliant for reducing candidal overgrowth (one of the main contributing factors to dysbiosis and gut flora anomalies) and as a systemic fungal and immune modulator. Most physicians are not sensitive to the subtleties of nutrient devices and so have not opened the door in the long term reduction of candidiasis that this product makes possible. Cravings disappear, immune function liberated!

☐ This product immediately began to work and has ever since. It is enteric coated and delivers its agents to the small intestine and large intestine where the fungal overgrowth obliterates the real estate for normal flora ecology and immune proliferation.

- ☐ Gut Flora Complex:
 - ☐ Anise 125 mg
 - ☐ Andrographis herb 100 mg
 - ☐ Pau D'Arco stem 100 mg
 - ☐ Oregano Leaf Essential Oil 75 mg

54

New Product Alert – Read All About It!

- ❑ Prebiotic Inulin released September, 2009
- ❑ This product is a non-digestible soluble fiber found in many plants and in this formulation is derived from Chicory root. It is a complex CHO that can be digested by many microflora providing them with energy thus enlivening the gut flora. It also increases the absorption of calcium and magnesium from the gut. It has also been determined to increase intestinal gene expression and cell differentiation allowing for more specialized intestinal function and activity.
- ❑ Gut Flora Complex:
 - ❑ Inulin from Chicory Root 4.5 gm
 - ❑ Calcium Lactate 200 mg
 - ❑ Magnesium Lactate 400 mg

55

Clinical Center Stage

- Although gut flora is influenced by many factors the clinician will eventually need to profoundly reduce the dysbiotic burden and candida overgrowth
- Oregano Oil and its active constituent of Carvacrol come center stage in the modulation of gut evolution
- Candida overgrowth and dysbiosis are effected by the following dominant factors:
 - Bile production and delivery
 - Gastric acid formation
 - Upper digestive enzyme production
 - Probiotic support
 - Prebiotic support

56

Oregano Oil research shows promise

- Carvacrol Induces Heat Shock Protein 60 and Inhibits Synthesis of Flagellin in Escherichia Coli: Sara A. Burt et al; Applied and Environmental Microbiology, July 2007, p. 4484-4490
- Antimicrobial Action of Carvacrol at Different Stages of Dual-Species Biofilm Development by Staphylococcus Aureus and Salmonella Enterica Serovar Typhimurium; J. R. Knowles et al; Applied and Environmental Microbiology, February, 2005, p> 797-803

57

Clinical Application

- 4-6 weeks of Gut Flora Complex (2 gel caps bid) following correction of upper digestive function
- This allows the gut to be renewed to a relatively balanced state and then mood and diet modulation can be successful
- Often bowel movements will change and become clean (no slime)
- Food cravings will disappear
- Diets can be improved without the background noise of candidal overgrowth
- Many allergic symptoms will abate due to gut irritation and permeability improvement
- This is a homerun product

58

The Rationale

- The GI Flora Balance program is a holistic approach which cleanses at the same time as promoting balance between native bacterial colonies
- Microbial ecology moves toward a healthy balance
- Prebiotics are essential to this process
- Consider Prebiotic Inulin as a "Colonic Nutrient"
- GI flora need specific colonic nutrients (soluble fibre) which may be deficient in the diet
- Appropriate and individualized dietary advice is important for successful outcomes

59

Brain chemistry – Neurotransmitters (Neurohormonal)

- ❖ Serotonin – Tryptophan dependent feeds Melatonin formation
 - Well-stocked: Positive, confident, flexible, easy-going
 - Poorly stocked: Negative, obsessive, irritable, low confidence, sleepless
- ❖ Catecholamines – Tyrosine dependent forms Dopamine, Norepinephrine, Adrenaline
 - Well stocked: Energized, upbeat, alert, focused
 - Poorly stocked: Lethargic, flat, 'blahs'
- ❖ GABA – GABA dependent
 - Well stocked: Relaxed, Stress-free
 - Poorly stocked: Uptight, overwhelmed, stressed
- ❖ Endorphins – Phenylalanine dependent
 - Well stocked: Comfort, pleasure, euphoria
 - Poorly stocked: Overly sensitive, crying easily
- ❖ General protein increase will downstream more amino acid fuel for neurotransmitter formation and greater reserve stores for supply through stressful demands (Minchex 2-6, Protefood 2-6)

60

Protocol – Digestive Pillar

- ☞ General support:
 - ☞ Cataplex AC (10) – epithelial repair
- ☞ Dysbiosis:
 - ☞ Lact Enz (4) – probiotic
 - ☞ Prosynbiotic (2) - probiotic
 - ☞ Zymex (6) – antifungal
 - ☞ Zymex II (6) – anti parasitic
 - ☞ Multizyme (4) – anti parasitic
 - ☞ Wormwood (4) – anti parasitic
 - ☞ Lactic Acid Yeast (4) – anti candida
 - ☞ Golden Seal (4) – anti microbial
 - ☞ Garlic Forte (2-4) – anti microbial and candida
 - ☞ Vitanox (4) – anti parasitic and Phase II cleansing
- ☞ Gut Flora Reboot:
 - ☞ Gut Flora complex (4)
 - ☞ Vitanox (4)
 - ☞ Prebiotic Inulin
 - ☞ Prosynbiotic (2)
- ☞ Leaky Gut (thinning gut lining):
 - ☞ Chlorophyll (4)
 - ☞ Enzycore (4)
 - ☞ Gastro Fiber (6)
 - ☞ Okra Pepsin (6)
 - ☞ Prebiotic Inulin (1 scoop)
 - ☞ Food sourced Immuno Gamma Globulins (IgG)

61

Comprehension:

- ☞ True or False – The final pillar that you will work on for the rest of life with yourself and every patient.
- ☞ Multiple choice – Best way to promote epithelial repair is with a) Cataplex AC(10), b) Chorophyll(4), c) Gastro Fiber(3), d) Okra Pepsin(6), e) All
- ☞ True or false – Bowel transit time is slowed with soluble fiber and quickened with insoluble fiber or which 25 Grams should be consumed daily.
- ☞ True or false – Gut Flora Reboot will assist in balancing the diversity of gut flora and should be considered annually.

6 – Digestive Potency Pillar

- ☞ Digestion must bring in substances that provide energy and sustenance, and remove wastes
- ☞ 80 % of immune system resides in the GI mucosal barrier - GALT
- ☞ Loss of ecology creates cascades of cytokines, immune modulation, inflammation, resorption of toxins, tissue degradation, leaky gut degeneration
- ☞ Famine in the midst of plenty
- ☞ Fasting as repair
- ☞ Bowel transit time (12 hrs)
- ☞ Gut lining equals armor for the world

Tests & Analysis

- ☞ Secretory IgA as an indication of gut lining thickness and therefore integrity of function
- ☞ Stool analysis for dysbiosis, infection, and infestation
- ☞ Fasting as repair
- ☞ Test for transit time



- ☞ Epithelial Support – Cataplex AC (10), Gastro Fiber (3), Chlorophyll (4), Okra Pepsin (6), Food sourced IgG
- ☞ Dysbiosis –
 - ☞ Infestation – Zymex II (6), Multizyme (4), Wormwood (4)
 - ☞ Candida – Zymex (6), Spanish Black Radish (6)
 - ☞ Probiotics – Lact Enz (4), Lactic Acid Yeast (4), Prosynbiotic (4)
- ☞ Fasting – one or more days
- ☞ Gut Flora Reboot – Gut Flora Complex (4), Vitanox (4), Prosynbiotic (2), Prebiotic Inulin
- ☞ Food allergen removal

63

Pro-Inflammatory

64

New Product Alert – Read All About It!

□ HerbaVital released April, 2010 is a unique combination of factors to reduce the physiologic decline known as aging, but also acts as a hormetic influence to up-regulate stress responsibility and therefore survival status. This is cocktail of daily herbal constituents that can universally support the declining stress response that is so essential to wellness and vitality. It is a strategy in a formula for daily minimizing of the underlying process of aging. This product takes the assessment out of the picture for the clinician and addresses the common background issues at work universally in the patient

□ HerbaVital:

- Japanese Knot Weed root extract 100:1 80 mg providing 36 mg of natural resveretrol
- Milk Thistle seed 5:1 50 mg providing 48 mg of silybin
- Korean Ginseng root 5:1 50 mg
- Masson Pine bark 100:1 50 mg providing 37.5 mg proanthocyanidins
- Ginkgo Leaf 50:1 30 mg

65

Product Alert – Read All About It!

□ Vitanox is a unique combination of herbs to provide strong antioxidant protection, and now we discover also acts to up-regulate Nrf2 gene activity and subsequent survival compound status increase, including glutathione synthesis. This is cocktail of daily herbal constituents that can universally support the overloaded detoxification and inflammatory mechanisms. It is a strategy in a formula for daily minimizing of the underlying process of aging and degeneration. This product was introduced by Kerry Bone based on widespread agreement about the merits of these herbs, before and correctly predicting the emerging research around Nrf2 gene activation.

□ Vitanox tablet:

- Rosemary leaf extract 5:1 200 mg providing carnosol and rosmarinic acid
- Green Tea leaf extract 25:1 166.7 mg providing 83.35 mg of catechins
- Turmeric rhizome extract 25:1 80 mg providing 70.4 mg curcuminoids
- Grape Seed extract 120:1 50 mg providing 42.5 mg procyanidins

66

Product Alert – Read All About It!

❑ Cruciferous Complete is a combination of kale and brussel sprouts to protect against free radicals and now also is shown to up-regulate Nrf2 gene activity and subsequent survival compound status increase, including glutathione synthesis. This nutrient supports Phase I & II detoxification pathways promoting reduction of toxic load in the body and well as supports repair mechanisms involving the eye. It contains a myriad of nutrients including vitamins B6, C, K, calcium, copper, potassium, and dietary fiber. It also contains carotenoids, which include beta carotene and lutein which help quench free radical ROS effects and retinal repair activity

- ❑ Cruciferous Complete capsule:
 - ❑ Vitamin K 4 mcg
 - ❑ Potassium 10 mg
 - ❑ Kale 300 mg
 - ❑ Brussel Sprouts 300 mg

67

Principles at work

- Sufficient clinical observation allows mechanisms to be revealed that will remove the idiopathic mystery of hypertension and return it to a simple physiological modulation and resultant augmentation in function, balance, tissue fortification and promotes healthy genetic expression
- This allows the symptom resolution to occur as a result of system 'mosaic' change, and then of course the downstream events occur
- The longing in the public is for this sort of detective work to find the cause and make the correction – increasingly food is seen as medicine and people are asking more and more for what foods will change their health patterns

68

Sequential Intervention

- ↪ By giving hope through discussion of therapeutic rationale and then accountably determine if the therapy had efficacy it is possible to initiate activity that may assist a person to make the changes that result in healing
- ↪ Sequential intervention and accountable follow-up can show what has worked and what may still need to be employed
- ↪ Promote an understanding of intervention that creates evolutions in individual physiology and show the effect of that intervention
- ↪ See the concept of micro circulation dynamics as a unified mechanism of disease and a source to health
- ↪ Allow every condition to become a strategic consideration of possible etiology and therapeutic rationale – people are in search of experts – reveal yourself
- ↪ The comprehensive nature of nutritional therapy means there is always more physiology to optimize and support leaving an individual constantly refining as long as they wish to further improve their status
- ↪ If the practitioner is accountable s/he will be allowed to experiment with reasonable ideas