

The Effectiveness of Natural Products for Women's Health

8th Annual NHRI Scientific Symposium





Presented by:



Women and **Digestive Issues:** Focus on IBS, **Constipation & Leaky Gut** Liz Lipski, PhD, CCN, CHN

Movement Detoxification Adaptive resilience Meaning and purpose Food/Nutrients icrobes/Fungi **Sleep/Rhythm** Social/spiritual connections

Organs and Tissues

Food as Information This or This?

Total Diet Study

 Over half of all Americans ate less than 80% of the RDA for: Calcium, magnesium, iron, zinc, copper and manganese. 90% marginal in chromium 80% deficient in B6

•20% women iron deficient.

FDA/Total Diet Study, 2005



Fast Food Consumption

- 26.5 percent adults eat at fast food restaurants
- Fast foods contributed >1/3 of total calorie intake
- < levels vitamin A, carotenoids, vitamin C, calcium, magnesium, fruits, vegetables
- > soft drinks



Increase in intranuclear nuclear factor kB and decrease in inhibitor κB in mononuclear cells after a mixed meal: evidence for a proinflammatory effect¹⁻³

Ahmad Aljada, Priya Mohanty, Husam Ghanim, Toufic Abdo, Devjit Tripathy, Ajay Chaudhuri, and Paresh Dandona

ABSTRACT

Background: In view of the stimulatory effect of glucose on reactive oxygen species (ROS) generation, we investigated the possibility that a mixed meal stimulates ROS generation and possibly induces concomitant proinflammatory changes.

(PMNLs) at 2 h, whereas cream (lipid) produces a peak at 1 h. The peak increase in ROS generation is the greatest with glucose, whereas it is the least with casein (protein). On the other hand, cream intake causes a prolonged increase in lipid peroxidation. Consistent with these observations, we also showed that a 48-h

Objective: The obj 900-kcal mixed me leukocytes and an it Design: Nine norma meal, and 8 normal ROS generation by kocytes and the ext

A fasting blood sample was obtained, and the subjects were asked to eat a mixed meal containing 910 kcal (egg-muffin and sausage-muffin sandwiches and 2 hash an overnight fast. B browns, which contained 81 g carbohydrate, 51 g fat, and 32 g protein) over 15 min.

generation by leuko-(3). Thus, we suggest odulator of ROS genthe state of obesity ated with marked oxe in indexes of lipid oxidative damage of

tranuclear nuclear factor KB (NF-KB) binding and the expression of inhibitor $\kappa B \alpha$ (I $\kappa B \alpha$), I κB kinase α (IKK α), and I κB kinase β (IKKβ) were measured. Plasma concentrations of C-reactive protein (CRP) and soluble intercellular adhesion molecule were also measured.

Results: ROS generation by mononuclear cells and polymorphonuclear leukocytes and p47phox expression increased significantly. The expression of IKK α and IKK β and DNA-binding activity of NF- κ B increased significantly, whereas I κ B α expression decreased.

mino acids, which diminishes after ciedary restriction over a relatively short period of time, eg, 4 wk (4).

Because our studies to date have not dealt with real food, but instead with pure macronutrients, we have now undertaken our first study with food items. We chose to study the effect of a mixed meal composed of carbohydrates, protein, and fats. Such a mix was previously shown to impair endothelium-mediated vasodilatation in the brachial artery (5,6). In addition, Ceriello et al (7) showed an increase in oxidative stress and LDL oxidation in diabetes after a meal challenge.

AICN 2004: 79:682-90







1Microvilli

1/7/0 REMF

The Intestine's impact on health



DIGIN Model

- Digestion/Absorption
- Intestinal Permeability
- Gut Microbiota
 - Inflammation/Immune
 Nervous System

Mullin, Hanaway, Lipski, for IFM 2010



IBS: What does it look like?

- Infrequent stools
- Abdominal distension
- Bloating
- Hard stools
- Pain
- Discomfort
- Frequent Stools
- Loose stools
- QOL issues



Probiotics and IBS

- Reduction of IBS symptoms:
 - < frequency and severity of abdominal pain</p>
 - Improved bowel patterns
 - < abdominal distension and frequency</p>
 - Improved transit time



World J Gastroenterol 2012 May 7; 18(17): 2067-2075

Int J Clin Exp Med 2012;5(3):238-244

Testing in IBS

- Elimination-Provocation Diet (rules out food intolerances, lactose, gluten, etc.)
- SIBO: Breath Testing (methane/hydrogen)
- Lactose intolerance: Lactose breath test
- Celiac Testing (tissue transglutaminase, IgG and IgA anti-gliaden antibodies, DQ2, Dq8 genes)
- Food sensitivity testing
- Organic acid testing
- Stool testing for infection
- HCL adequacy
- Treat empirically



SIBO and IBS

- Pimentel & Chow: 78% of people with IBS tested positive for SIBO. 48% of treated patients no longer meet Rome criteria for IBS.
- Weinstock: SIBO reported in as many as 84% of patients meeting diagnostic criteria for IBS. 69% of pts receiving Rifaxamin report positive clinical response.
- Weinstock: 161/212 pts. High methane producers more likely to have constipation. >50% improvement from baseline by 72% of pts. 67% flatulence, 72% abdominal pain, 62% bloating, 58% constipation, 56% diarrhea, 53% for fullness. At 2 months: global symptoms moderately or greatly improved in 60%.

Pimentel M, Chow EJ, Lin HC: Am J Gastroenterol 95:3503-3506, 2000) Weinstock, LB. http://www.gidoctor.net/client_files/file/Treatment-of-IBS-SIBO.pdf Weinstock, LB. http://www.gidoctor.net/client_files/file/Review-of-IBS-Treatment.pdf

SIBO Predictors in IBS

- Bloating
- Flatulence
- Female
- Older age
- More often in Diarrhea type
- Fibromyalgia (78% abnormal test)
- Intercystitial cystitis (81% abnormal test. 73% > mod to great, 67% sustained)
- Restless leg syndrome (80% improvement)

Scahdeva, S. (2011) J. Gastroenterol Hepatol. Apr, 26 Suppl 3:135-8. Redduymasu (2011) BMC Gastroenterol. Feb 22.. 10:23. Pimentel, M (2004) Ann Rheum Dis. 63:450-452. Weinstock, LB (2008) Dig Dis Sci. May;53(5);1252-6.

Small Intestinal Bacterial Overgrowth

- Diet: Temporarily restrict carbohydrates, especially disaccharides such as lactose: FODMAP, SCD, GAPS
- Probiotics: Lactobacillus acidophilus and/or Lactobacillus casei – 10–100 billion live organisms daily or higher
- Botanicals
 - -Broad-spectrum anti-microbial botanicals
 - –Enteric-coated peppermint oil to reduce symptoms

 Pharmaceuticals: Rifaximin, 600-1200 mg/daily x 7 days, with probiotics to minimize side effects
 Biofilm protocols



Dysbiosis and Depression

- People with major depression have higher amounts of IgM and IgA antibodies to gramnegative enterobacteria.
- Bacteria that were increased: Hafnia Alvei, Pseudomonas aeruginosa, Morganella morganii, Pseudomonas putida, Citrobacter koseri, Klebsiella pneumoniae

Researchers conclude: Should be treated for Leaky Gut

Neuro Endocrinol Lett. 2008 Feb;29(1):117-24.

Psychiatric Comorbity with IBS

- IBS in 10-20% of US adult population
- 70-90% of patients with IBS who seek treatment have psychiatric comorbity: mainly mood and anxiety disorders.
- 19% IBS in schizophrenia
- 29% IBS in major depression
 46% IBS in panic disorder

Migraine, Fibromyalgia, Depression & IBS

- 97,593 IBS, control 27,402
- 40-80% higher odds of IBS cohort having migraine, fibromyalgia, depression

BMC Gastroenterol. 2006 Sep 28;6:26









Pathophysiology



Mullin, G. GI Module, Institute for Functional Medicine, 2012

Conditions Associated with Leaky Gut

- Celiac disease
- Liver injury
- IBS
- Small Intestine Bacterial Overgrowth
- HIV/AIDS
- Post chemotherapy
- Asthma

Eczema MCS

- A variety of auto-immune diseases including:
 - Type 1 Diabetes
 - Celiac Disease
 - Rheumatoid Arthritis
 - Psoriasis
 - Hashimoto's
 Thyroiditis
 - Chronic Fatigue
 Syndrome
 - Crohn's Disease Sjogren's syndrome
 - Ankylosing spondylitis

Lipski, E. (2011) *Digestive Wellness,* Mullin, G. (2012) IFM GI Module

Supplemental Support for Leaky Gut

- Glutamine
- Quercetin
- Gammaoryzanol
- Fish Peptides
 - Vitamin A

root

Marshmallow

- Vitamin C
- Deglycyrrhized Licorice
- Folic Acid
- Enzymes:
 Digestive &
 Protease
- Aloe vera

RESTORE WITH FOOD



Gut Healing Diets



Nutritional Benefits of Bone Broths

- Protein/free amino acids
- Calcium
- Glycine
- Proline
- Phosphorus
- Hyaluronic acid
- Chondroitin sulfate
- Magnesium, potassium, sulfate, fluoride



Gut Soothing Foods and Herbs

- WELL COOKED FOODS
- PUREED FOODS
- BROTHS
- Okra
- Cabbage
- Aloe
 - Flax seeds
 - Chia seeds

Fermented and cultured foods

TEAS:

- Chamomile
- Cardamom
- Cinnamon
- Fennel
- Licorice
- Lemon Balm
- Mallow
- Mint
- Oat straw tea
- Slippery Elm





What is Constipation?

"Constipation is a common GI motility disorder that affects up to 28% of individuals in North America"

JF Johanson, "Review of the Treatment Options for Chronic Constipation" www. Medscape.com/viewarticle550956

What is Constipation?

- Constipation is defined as having a bowel movement fewer than three times per week.
- Stools are usually hard, dry, small in size, and difficult to eliminate.
- Some people experience pain, straining, bloating, and the sensation of a full bowel.

NIDDK,http://digestive.niddk.nih.gov/ddiseases/pubs/constipation/

ROME III Criteria for Constipation

- Presence of 2 or more of the following:
 - Straining in ≥ 25% of defecations
 - Lumpy or hard stool in ≥ 25% defecations
 - Sensation of incomplete evacuation in ≥ 25% of defecations
 - Sensation of anorectal obstruction/blockade in ≥ 25% defecations
 - Manual maneuvers to facilitate ≥ 25% defecations (e.g., digital evacuation, pelvic floor support)

ROME III Criteria for Constipation

- Fewer than 3 defecations/week
- Additional criteria:
 - Stool rarely loose without the use of laxatives
 - Criteria insufficient to indicate irritable bowel syndrome

Longstreth GF, et al. Gastroenterology. 2006;130:1480-1491.



Stool Transit Time

Colon Transit Time

Name:___

_____ Date:_____ Baseline:_____ Follow-up:____

One of the most common health hazards and problems in Western civilization is chronic constipation and disease of the colon, e.g., hemorrhoids, diverticulitis, colitis, cancer of the colon, and auto-toxicity (self-poisoning) from chronic constipation.

Studies of other cultures have consistently shown the correlation between healthy colons, large stools, and normal colon transit time. African and Asian natives from rural communities who eat bulky, high-fiber diets with little or no meat and no refined foods have almost complete freedom from heart disease, atherosclerosis, cancer (especially of the colon and rectum), diabetes, appendicitis, mental disease, and hypoglycemia.

In addition to the consistency and frequency of bowel movements, a measure of colon health is the COLON TRANSIT TIME. This is done simply by eating a moderate serving of corn or beets or taking activated charcoal capsules and observing their appearance in the stool.

DIRECTIONS: PLEASE USE THIS SHEET AS YOUR WORKSHEET, AND SUBMIT IT TO YOUR HEALTH PRACTITIONER WHEN COMPLETE.

A. Consume a moderate serving (1/2 to 3/4 cup) of corn or beets or four charcoal capsules.
Date:_____ Exact Time:_____

B. Visually examine stool (bowel movements), and note when corn or beets or charcoal is <u>first</u> seen. (beets are seen as a redness in stool color, charcoal will turn the stool black and corn is seen as whole corn.)

Date:_____ Exact Time:_____

C. Note time when corn or beets or charcoal is <u>last</u> seen in stool.
Date:_____ Exact Time:_____

D. On a typical day, how often do you move your bowels and are they formed or loose or somewhere in between? Please describe.

The time between when you ingested the corn, beets or charcoal to the time it first appears in your stool and stops appearing in your stool is your bowel transit time range. People living in rural African and Asian societies have a colon transit time of between 12 to 24 hours. In our culture, the average colon transit time is much longer. If a long transit time is found, it indicates suboptimal colon health. If a very rapid transit time is found, it may indicate poor absorption and assimilation of nutrients. Both conditions need treatment and correction.



Baseline Approaches to Constipation

- Poor diet
- Lack of fiber
- Lack of movement
- Inadequate hydration
- Effect of medication
- Serious disease
- Differentiate from IBS
- Poor bowel habits



Functional Viewpoint

Baseline approach

+

- Lactose intolerance
- Gluten intolerance/Celiac disease
 - Dysbiosis

Hormone changes

- Overuse of laxatives
- Enzyme deficiency
- Magnesium deficiencies
- Neurotransmitter imbalances:
 - Serotonin, Acetylcholine

• Stress

Magnesium Deficiency

- Constipation
- Irritable or cries easily, overly emotional
- Startle reflex pronounced
- Noise sensitive
- Eyelids twitch
- Menstrual cramps
- Muscle cramps
- Pings

Angeline

- 28 years old
- IBS with constipation since age 11
- Getting married. Wants to enjoy the wedding.







Physiology and Function: Organizing the Patient's Clinical Imbalances



Personalized Lifestyle Factors

Sleep & Relaxation Not enough relaxation Sleeps fine 7	Exercise & Movement YOGA	Nutrition & Hydration Eats out, varied, likes sweets, hydrated	Stress & Resilience Long days, no break, wedding, school	Relationships & Networks Healthy Getting married, sings in choir
Name:	Date:	CC:	© Copyr	ight 2011 Institute for Functional



Sleep & Relaxation	Exercise & Movement	Nutrition & Hydration	Stress & Resilience	Relationships & Networks
Name:	Date:	CC:	© Copyr	ight 2011 Institute for Functional

nitiate

Initiate diet change: SCD/GAPS Probiotic supplement and foods Ask physician for: Celiac testing SIBO testing Vitamin D testing

Possible stool testing

rack

3 Week Follow-Up

SIBO text negative. Physician treated impirically with Rifaxamin. No IBS, No anxiety, Allergies gone. No issues with menses. Best felt in life.

rack 8 Week Follow-Up

Feels great on SCD/GAPS diet Digestive issues "so good lately". Ate rice, got horrible gas, felt like stomach twisted. Reminded me of the old days.

Began herbal protocol for SIBO with > probiotics.

Added proteolytic enzymes on empty stomach 2 BID

rack

• <u>**12 Week Follow-Up</u></u> "I haven't felt this good since birth. Even when I'm sleepy I'm still more clear headed than ever."</u>**

rack

6 Month Follow-Up

Exposed to mold from air conditioner. Allergies kicked in Digestive system, pretty good. On GAPS diet with gaps! Can have bits of pasta or ice cream and okay. Beans give gas Wedding in 2 weeks.

Movement Detoxification Adaptive resilience Meaning and purpose Food/Nutrients icrobes/Fungi **Sleep/Rhythm** Social/spiritual connections

Organs and Tissues



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Digestive Wellness

4TH EDITION Strengthen the Immune System and Prevent Disease Through Healthy Digestion



IBS, colitis, and acid reflux EASY-TO-FOLLOW The latest research on healing properties of PROGRAM FOR A probiotics, healthy fats, and anti-inflammatory foods HEALTHY DIGESTIVE New information on nutrition for autoimmun diseases and diabeter

Elizabeth Lipski, Ph.D., CCN, CHN

SYSTEM



Natural remedies for attention deficit diso

chronic ear infections, recurrent abdominal pain, irritable bowel syndrome, asthma, food sensitivities, and more. ELIZABETH LIPSKI, PH.D.

