The Effectiveness of Natural Products for Women’s Health

8th Annual NHRI Scientific Symposium

Presented by: UIC College of Pharmacy
Women and Digestive Issues: Focus on IBS, Constipation & Leaky Gut

Liz Lipski, PhD, CCN, CHN
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
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 browns, which contained 81 g carbohydrate, 51 g fat, and 32 g protein) over 15 min.
Change in NF-κB binding activity (%) vs. Time (h)

- Meal
- Water

Time (h):
- 0
- 1
- 2
- 3
The Intestine’s impact on health

GI MICROBIOTA

GI BARRIER

INTESTINE

Nutrient and fluid uptake

Immune tolerance

Defense against infections

Signalling to the brain (Serotonin etc.)

LIVER

FOOD ALLERGENS

INFECTIOUS AGENTS

BRAIN

Prevention of malnutrition

Prevention of allergy

Prevention of infections

Energy homeostasis Mood regulation?

Bischoff *BMC Medicine* 2011 9:24
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
  – Improved bowel patterns
  – < abdominal distension and frequency
  – Improved transit time

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

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)

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 gram-negative 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

Psychiatric Comorbidity with IBS

- IBS in 10-20% of US adult population
- 70-90% of patients with IBS who seek treatment have psychiatric comorbidity: 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
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

Supplemental Support for Leaky Gut

- Glutamine
- Quercetin
- Gamma-oryzanol
- Fish Peptides
- Vitamin A
- Marshmallow root
- Vitamin C
- Deglycyrrhized Licorice
- Folic Acid
- Enzymes: Digestive & Protease
- Aloe vera
RESTORE WITH FOOD

Liz Lipski, PhD, CCN
Gut Healing Diets

- Gluten Free &/or Dairy Free Diet
- Specific Carbohydrate Diet
- FODMAP Diet
- GAPS Diet
- Body Ecology/ Candida Diet
- Medical Foods
- Restorative Diet
- Elimination Diet
- Rotation Diet

Whole Foods Diet
Nutritional Benefits of Bone Broths

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

Sieb
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”

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

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 first 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 last 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.
Triggers or Triggering Events

- Oct 1995: "Began that day"
- Baby died SIDS, while baby sitting, stomach pain daily
- Needs stress, lifestyle change
- 2 days prior had been sick

Preconception

1981
- Constipation
- Breast-fed

Prenatal

- 1995
- Constipation
- Breast-fed

Birth

- 2003
- IBS dx
- Saw GI Dx IBS
- Colonoscopy & polyp normal

2008
- Constipation
- Type of diarrhea
- In college, eliminated diet, no soy, no lactose helped
- Anemia

Current Concerns

- 36 wks' prema
- Nausea w/mucus
- Diarrhea/BRAT diet
- MD: Dx gastritis
- Gave acid blocker
- Sharp pains in stomach all month
- Losing wt, few vaginal yeast 2 times
- Gas severe all the time

Signs, Symptoms or Diseases Reported

- Anxiety
- Irreg. menses entire life except last 3 months
- Allergic to year long neltie pot daily
The Patient’s Story Retold

Antecedents

Triggering Events

Mediators/Perpetuators

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: ___________________________________
The Patient’s Story Retold

Physiology and Function: Organizing the Patient’s Clinical Imbalances

Antecedents
- Lifelong anxiety
- Constipation
- Stress

Triggering Events
- Baby died of SIDS while babysitting at age 14

Mediators/Perpetuators
- Stress, food

Personalized Lifestyle Factors
- Sleep & Relaxation
- Exercise & Movement
- Nutrition & Hydration
- Stress & Resilience
- Relationships & Networks

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Initiate

Initiate diet change: SCD/GAPS
Probiotic supplement and foods
Ask physician for:
  Celiac testing
  SIBO testing
  Vitamin D testing
  • Possible stool testing
3 Week Follow-Up
SIBO test negative.
Physician treated empirically with Rifaxamin.
No IBS,
No anxiety,
Allergies gone.
No issues with menses.
Best felt in life.
Track

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
Track

12 Week Follow-Up
“I haven’t felt this good since birth. Even when I’m sleepy I’m still more clear headed than ever.”
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.
Digestive Wellness
4th Edition
Strengthen the Immune System and Prevent Disease Through Healthy Digestion

Elizabeth Lipski, Ph.D., CCN, CHN
Foreword by Mark Hyman, MD

Digestive Wellness For Children
How to Strengthen the Immune System & Prevent Disease Through Healthy Digestion

Natural remedies for attention deficit disorder, constipation, chronic ear infections, recurrent abdominal pain, irritable bowel syndrome, asthma, food sensitivities, and more.

Elizabeth Lipski, Ph.D.