# Lectures in Holistic Health

Third in a series Jakob Jaggy h MD

#### Introduction

#### AHMA <u>www.holisticmedicine.org</u>

#### FoCuS www.foothillsustainability.org

#### TableMountain <u>www.tablemountain.com</u>

You are what you eat ... and how much you absorb

> Imbalances in digestive functioning and their manifestations

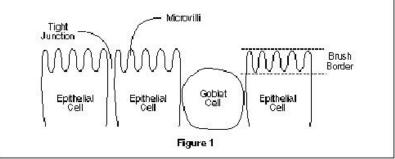
### Progression of an illness

Intestinal dysbiosis (Candidiasis)



Increased intestinal permeability (LGS)

Food allergies / Autoimmune diseases and decreased cellular defense



### **Causes of Candidiasis**

- tetracycline or broadspectrum antibiotics

- steroids
- frequent sweets
- prolonged stress

## Major symptoms of Candidiasis

- anxiety (non-reactive)
- worsening of any symptoms in damp weather and moldy places
- uncontrollable sugar cravings
- constipation (diarrhea)
- chronic hives, itchy ears
- recurrent rectal or vaginal itching
- non-bacterial bladder infection
- coated cracked tongue, lingua geographica

### Candida questionnaire

#### THE SYMPTOMS OF CANDIDAL OVERGROWTH

first fill in the first column on a scale of 0-10, noting the severity of those symptoms you have before treatment, and at intervals during freatment

IL Date 12 Sale A Date **GENERAL/ EMOTIONAL:** Fatigue or lethargy, lack of enthusiasm or stamina イイイシンシー Anxiety/pame attacks Depression/mood swings/ unitability Feeling "spacey"/ can't concentrate Palpitations 0 2 C SKIN

Craying for sweets, breads, alcohol Symptoms worse after eating sweets, breads or alcohol Symptoms worse in muggy damp location or weather, or with mold exposure Spots before eyes or vision changes Ringing or buzzing sound in the cars. (Listen when your environment is quict) NEUROLOGICAL Headache Numbuess, burning, fingling or paralysis Dizziness, loss of balance BONES, MUSCLES AND JOINTS Joint pain of swelling, muscle aches, weakness

#### DIGESTIVE TRACT

Constipation/diarthea/ mucus in stools

Intestinal cramps, gas, bloating

Rectal itching

Thrush (oral yeast infection)

#### UROGENITAL

Symptoms of bladder infection (with no bacteria present in the urine)

Vagmal itching

#### IMMUNE SYSTEM/ RESPIRATORY INVOLVEMENT

Frequent or chronic infectious (such as simisitis, other respiratory adments or prostation)

Itchy rashes, often in moist areas, ears or nails (i.e., "athletes foot" or "jock tich")

#### Causes of LGS

- candidiasis (dysbiosis)
- prolonged use of NSAIDs
- chronic stress
- environmental toxins
- chemotherapy/radiation
- immune deficiency
- inflammatory bowel diseases (crohn's and ulcerative colitis)
- celiac's disease
- Intestinal parasitosis

#### A case of Celiac's

- 2 year old boy sick on and off since age 8 months, chronic dry cough, therapy resistant, at age 10 months treated for reflux, cough and runny nose persist, at 1 year of age quit growing, current meds: Albuterol nebulizer, Pulmicort, Prevacid. Curently foul smelling diarrhea many times a day. Treatment : modified elimination diet, probiotics, cod liver oil, goatsmilk powder and digestive enzyme. Next visit 11 days later : 1 formed non-smelly BM per day, better energy, more talkative, appetite increased, less crying, no more cough!

## Clinical manifestations of Food Allergies

- migraines, recurrent headaches

- runny and stuffy nose, postnasal drip, sinus congestion, recurrent ear infections, excessive mucus formation, frequent throat clearing
- palpitations, asthma, chest congestion
- reflux
- hives, exzema
- joint pains and swelling
- fatigue, hyperactivity, mood swings

## Case in point

- 61 year old woman with history of diffuse body pain since her forties (H/o Giardia persistent for months, also recurrent UTI's and yeast infections during that time), slowly worse over the next decade, fatigue and joint pains followed over the years, finally depression. Diagnosed with FMS at age 52. Meds : Nortriptyline, Clonazepam, Piroxicam, Prometrium, Estradiol. Currently still in pain and very tired. Treatment : elimination diet, candida program, adrenal and thyroid support. 4 months later : good energy throughout the day, no more body pains.

#### The 4 R program

Remove (candida, parasite, worms or/and anaerob bacteria)

- Replace (Hydrochloric acid or/and digestive enzymes)
- Repair the intestinal lining
- Reinoculate (lactic acid producing bacteria = LAB)

#### Remove part 1

Do not feed Candida albicans. Eliminate, fruits, alcohol, yeast bread and anything with sugar. (Depending on the situation a modified or total elimination diet might be required.)

## The total elimination diet

No gluten (wheat, barley and rye), soy, dairy products (cultured may be introduced in 2 weeks), fruits, nitrates, sulphites, peanuts (and possibly other nuts), corn, tomatoes, artificial sweeteners, colors and preservatives, MSG, Splenda.

#### Remove part 2

Candida albicans is very sensitive to most prescription antifungals, the ones I use most are Nystatin and Nizoral, after 2 months one can switch to natural antifungals such as : caprylic acid, garlic, GSE, Oregano, Pao d'Arco...

Watch for possible Herxheimer reaction.

 Important to have at least 1-2 bowel movements per day.

#### Replace

A lack of HCL acid manifests often via bloating immediately after or even during a meal, especially a protein rich meal. (Glutamic acid)

When digestive enzymes are insufficient bloating occurs usually half an hour or longer after the meal.



The inner lining of the intestinal tract repairs itself quite readily if given the right environment and nutrients (licorice, glutamin, aloe vera, byturate..).

#### Reinoculate

Mostly this means putting back LAB through supplementation in powder or capsule form.

In the long run intestinal health is maintained through foods that promote an increase of LAB in the gut (cultured foods).

### What are cultured foods?

Foods that have been transformed through lacto-fermentation, making them more digestible, adding to their nutrient density and increasing the presence of probiotic bacteria (lactobacillus et al).

Recommended book: Nourishing Traditions.

## Hot dog !

Sauerkraut
Sourdough bread
Mustard
Ketchup



# Other fermented foods and their probiotics

- Coffee
- Cocoa powder
- Cheeses / Kefir / Butermilk / Yoghurt
- Miso / Natto / Tempeh
- Beer / Mead / Wine
- Tabasco / Soysauce
- Olives / Sauerkraut

Lactobacillus plantarum, L. brevis, L. helveticus, L. curvatus, L. sake, L. bulgaricus, L. acidophilus, Leuconostoc mesenteroides, Saccharomyces boulardii, S. cerevisiae, Bifidobacterium longum, B. breve, Bacillus natto,

## Saccharomyces cerevisiae : A yeast to the rescue?

A Japanese study in 1986 showed that the acidic fraction of a S. cerevisiae culture exerted a significant protective effect against Candida albicans. These two strains are therefore highly antagonistic.

 Biotin production is increased by S.cerevisiae as opposed to decreased by C.albicans.

# What happens during fermentation ?

 Transformation of lactose into lactic acid and increase in the number of LAB.
 Lactic acid helps break down proteins, assimilate iron, activates the secretions of the pancreas, normalizes acidity in the stomach, kills unhealthy intestinal germs (even cholera).

 Increase in direct anti-cancer activity.
 Fermented soy can decrease mutagen formation by 47%. Fermented yogurt also contains antimutagenic compounds and increases the production of Interferon.

#### What else ?

Increase in immunstimulating compounds that fight cancer.

Mushroom fermentation creates arabinoxylan that has the power to increase NK activity by a factor of 5. Fermented milk has shown a similar effect in research done in Tokyo.

Enhanced anti-oxidant and antiinflammatory activity.

Culturing with Saccharomyces cerevisiae produces SOD, a powerful "free radical scavenger".

#### Effects on blood pressure

- Production of large quantities of choline.
   Lowers blood pressure, aids in the metabolism of fat (otherwise it accumulates in the liver).
  - Transformation of Casein into tripeptide byproducts.

Act as ACE-inhibitors. The potential for an allergic reaction is decreased.

Production of acetylcholine.
 Parasympathetic activator, increases peristalsis of intestines.

# Fermented food and cholesterol

Fermented dairy products lower cholesterol. Short chain fatty acid produced by probiotics inhibit hepatic cholesterol synthesis and enhance bile acid deconjugation.

#### - Chinese Red Yeast Rice.

UCLA medical school researchers reported in 2001 that Chinese RYR with appropriate levels of monacolins lowers cholesterol significantly.

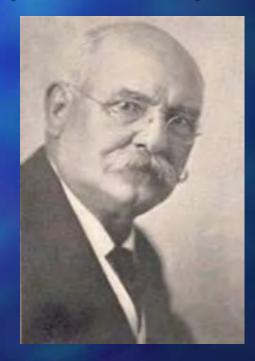
#### Do not eat

Processed cheeses Combination of emulsifiers, extenders and hydrogenated oils. Pasteurized milk products Lactic acid producing bacteria are inactivated. Amino acids are altered (Lysine, Tyrosine...). Vitamins are destroyed (B12...). Unsaturated fatty acids are turned rancid. Minerals become less available. Enzymes are all destroyed. After pasteurization synthetic vitamin D2 is added.

### The French again

#### Louis Pasteur (1822-1895)

#### Antoine Bechamp (1816-1908)



#### Do not eat cont.

#### Homogenized milk Homogenization is all about looks and not about health.

#### Low fat milks

Powdered milk is added to make 1% or 2% milks. The temperature used for dehydration oxidize cholesterol, creates nitrates and crosslinks proteins.

### The low fat fad



Food technologist and Flavorist (plastification and chemicalization of food)



CONCENTRATES; CITRIC ACID (FOR TARTNESS) NATURAL FLAVOR, PIZZA CRUSTS - WHEAT FLOUR, WATER, CANOLA OIL, CONTAINS LESS THAN 2% OF CALCIUM CARBONATE, HIGH FRUCTOSE CORN SYRUP, SUGAR, YEAST, CALCIUM PROPIONATE (PRESERVATIVE), SALT, PEAR JUICE CONCENTRATE, SOY LECITHIN POTASSIUM CHLORIDE, ARTIFICIAL BUTTER FLAVOR. PIZZA SAUCE - WATER, TOMATO PASTE HIGH FRUCTOSE CORN SYRUP, MODIFIED CORN STARCH, CONTAINS LESS THAN 2% OF POTASSIUM CHLORIDE, SALT, ONION POWDER, SPICE, CITRIC ACID, POTASSIUM SORBATE PRESERVATIVE), XANTHAN GUM, NATURAL

# Beneficial compounds created by probiotics

ACE inhibitors, **Antimicrobial** peptides, ATP, Beta Glucans, Bacteriocins, Biotin, CLA, Cysteine, Folic acid, Genistein and Daidzein, Glucuronic acid, Gluthatione, GTF chromium,

H202, Hyaluronic acid, Lactic acid, Lipoic acid, NAD, Panthotenic acid, Phosphatidylcholine, Phosphatidylserine, Pyridoxamine, Butyric acid, Vitamin B1, B2, B3, B12, D,

## An example : Byturic acid

Short chain fatty acid created during the fermentation of fiber induces growth arrest, differentiation and apoptosis of colonic epithelial cells... therefore may reduce the risk for colon cancer.

*Cell Growth Differ 1997, Albert Einstein Cancer Center NY* 

It also inhibits the formation of betaglucuronidase in the gut. Let your (cultured) food be your medicine, and your medicine be your (cultured) food. *Hippocrates* 

## THANK YOU !