THE GFCFSF DIET

- What it is
- Why it works
- Who needs it
- How to do it well

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Licensed Dietitian-Nutritionist
www.danalaake.com

QUESTIONS

WHAT COMES FIRST?
DO FOODS CAUSE PROBLEMS
OR
DO PROBLEMS CAUSE FOOD
REACTIONS?

IS THE PROBLEM THE CAMEL
OR THE LOAD?

Underlying Predispositions
Including Problems With:
Gut flora, Digestion, Absorption, Utilization, Metabolism,
Detoxification, Nutrition, Sulfation, Methylation, Oxidation

The Total Load
Diet, Lifestyle, Environment, Toxins, Medications

REACTIONS TO
Foods, Additives, Dyes, Toxins, Pesticides,
Medications, Vaccines, Environmental Exposures

TRIGGER THE TIPPING POINT ASD DIAGNOSIS

ENVIRONMENTAL MODIFICATION
OF GENE EXPRESSION

GENETICS + ENVIRONMENT

EPICENETICS
GENE EXPRESSION

TREATMENT TRIAD
3 IMPORTANT STRATEGIES

BIOMEDICAL NUTRITIONAL
DIET / NUTRITION / DIGESTION

THERAPIES

MEDICATIONS
WHERE THE DIET PROBLEMS BEGIN

POOR DIGESTION  POOR FLORA  "LEAKY GUT"

What Interferes
Antacids  Inflammation
Antibiotics  Poor gut flora
Pathogens  Toxins

What Helps
Probiotics  Omega-3
Prebiotics  Vitamins A and D
Enzymes  Zinc
Demulscents  Glutamine

DIET NUTRITION DIGESTION

Remove offending foods and substances
Gluten, milk casein, soy, corn, phenols, oxalates, starches & sugars
Artificial additives, chemicals, pesticides, toxins

Replace with
Healthy foods which do not promote reactions

Optimize
Nutritional status
GI flora, function, enzymes, absorption
Sulfation, methylation, detoxification

SPECIAL DIETS

GFCFSF
SCD GAPS
Anti-Yeast BED
Low Oxalate
Low Phenol
Ketogenic
FODMAP

BEFORE WE TALK ABOUT GFCFSF

WE NEED TO TALK ABOUT A HEALTHY DIET

SPECIAL DIETS

GFCFSF
SCD GAPS
Anti-Yeast BED
Low Oxalate
Low Phenol
Ketogenic
FODMAP

HEALTHY DIET AVOIDS!
- Artificial sweeteners, preservatives, colors, flavors
- High fructose corn syrup, agave
- Sodas: diet and regular
- Hydrogenated oils / trans fats / margarine
- Refined grains and processed foods
- Sugar
- Caffeine
- Deep fried foods
- Craved foods
- Food reactions
HEALTHY ORGANIC NATURAL DIET
If it does not grow…do not eat it!

Nutrient -Dense, Eco-Friendly
• Pasture-fed, grass-fed animals
• Eggs, seafood, meat, poultry
• Beans, nuts, seeds
• Homemade bone broths
• Vegetables and fruits
• Fermented foods, beverages
• Whole ancient grains
• Celtic sea salt
• Filtered water
• Raw vegetable juices

Good Fats and Oils
• Extra virgin olive oil
• Butter, animal fats
• Coconut oil
• Expeller pressed oils

Natural Sweeteners (limit)
• Honey, maple syrup
• Stevia

Resources
Nourishing Traditions by Sally Fallon
Weston A. Price Foundation

CLEAN UP THE DIET
FOOD ARTIFICIAL ADDITIVES, PRESERVATIVES

American Academy of Pediatrics Acknowledgement
• Meta analysis of 15 trials concluded that a wide variety of preservatives in the foods commonly consumed by children, can result in neurobehavioral effects, including ADHD, and some children may be more sensitive.
• “A preservative-free, food coloring-free diet is a reasonable intervention.”

McCann et al. Lancet. 2007;370(9658):1560-1567
ADHD and Food Additives Revised Schonwald AAP Grand Rounds:2008;

SO MANY DIETS, SO LITTLE TIME!
WHERE DO WE START?

DIET UNDERLYING PROBLEMS AND SYMPTOMS

GFCF
GFCFSF
DPP IV deficiency >> opioids from gluten, casein (soy proteins). Cravings for gluten, milk/casein, soy. Poor focus, eye contact.

Low Phenol
Salicylate
Feingold
Failsafe
Impaired phenol sulfotransferase (PST) and impaired sulfation. PST metabolizes phenols, participates in brain neuron firing. Artificial additives; apples, berries, citrus, grapes, tomatoes. Red cheeks, ears. Addiction to sources. Silly, aggressive.

SCD
GAPS
Disaccharidase deficiency leads to inability to digest double sugars (lactose, sucrose, maltose, isomaltose). GI symptoms, yeast overgrowth. Grains, beans, starch reactions.

BED
Anti-Yeast
Underlying bowel dysbiosis due to insufficient good flora and the presence of pathogens. Yeast overgrowth. Worse w/ sugars, starches. Fatigue, poor concentration.

LOD
Low Oxalate
Bowel dysbiosis: insufficient flora for binding oxalates in gut. Deficiencies: B6 & magnesium lead to increased oxalates. Pain especially after oxalate foods. Inflammation, sandy stools.

FODMAP
Avoidance
Problems: lactose, fructose, fructans, galactans, sugar alcohols. IBS: maldigestion, gas, bloating, burping, constipation/diarrhea.

Rotation
For multiple food reactions rendering avoidance too difficult.

ASD DIET OPTIONS DESCRIPTION

GFCFSF
No: Gluten, Casein, Soy
No GLUTEN: wheat, rye, barley, spelt, kamut, oats; MILK casein; Soy

PST Low Phenol Diet
Low Salicylate/Feingold/Failsafe
Avoid high salicylate, phenolic foods. No artificial ingredients

SCD
Specific Carbohydrate Diet
GAPS
Gut and Psychology Syndrome
Restricts carbohydrates to fruit, non-starch vegetables and honey. No double sugars: lactose, maltose, sucrose.

BED Body Ecology Diet
Anti-yeast

LOD Low Oxalate Diet
Avoid nuts, beans, greens, some grains and fruits. Worse w/ dysbiosis.

Basic Healthy Diet
Nourishing Traditions (Fallon)
General healthy diet with good protein and nutrient dense foods.

FODMAP Avoidance Diet
Avoid: Fermentable Oligosaccharides, Disaccharides, Monosaccharides, And Polyols (sugar alcohols)

Rotation Diet
Based on food families + 4 day rotation.

WHICH DIET FIRST?
GFCFSF IS USUALLY THE BEST DIET TO TRY FIRST...
BUT NOT ALWAYS
SELECT THE DIET BASED ON SYMPTOMS AND FINDINGS
WHERE DO WE START?

Julie Matthews Dana Laake
SPECIAL DIETS

GFCFSF
SCD
GAPS
Anti-Yeast
BED
Low
Oxalate
Low
Phenol
Ketogenic
FODMAP

WHAT IT IS
No Glutens: wheat, oat, barley, rye, spelt, kamut
No milk products / milk casein (protein)
No soy: edamame, miso, natto, tamari, tempeh, tofu

WHEN TO USE IT
Gluten and milk cravings
Silly, OCD, self-injury
GI: constipation, diarrhea
High pain tolerance
Poor focus and eye contact
Sensory, stims

WHAT IT DOES
Eliminates opioid source foods (gluten, casein, soy)
Improves: focus, attention, eye contact, behavior
Reduces: stims, cravings, picky appetite, GI issues

GFCFSF ORGANIC AND NUTRIENT DENSE

<table>
<thead>
<tr>
<th>PROTEIN</th>
<th>FAT</th>
<th>CARBOHYDRATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANIMAL SOURCE</td>
<td>SATURATED</td>
<td>Vegetables</td>
</tr>
<tr>
<td></td>
<td>UNSATURATED</td>
<td>Fruits</td>
</tr>
<tr>
<td></td>
<td>Monounsaturated</td>
<td>Grains</td>
</tr>
<tr>
<td></td>
<td>Omega-9</td>
<td>Beans</td>
</tr>
<tr>
<td></td>
<td>olive, avocado, almond</td>
<td>No soy</td>
</tr>
<tr>
<td></td>
<td>Polyunsaturated</td>
<td>Nuts</td>
</tr>
<tr>
<td></td>
<td>Essential Fatty Acids</td>
<td>Seeds</td>
</tr>
<tr>
<td></td>
<td>Omega-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>fish, beans, nuts, seeds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Omega-6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>vegetables + their oils</td>
<td></td>
</tr>
<tr>
<td>PLANT SOURCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No soy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeds</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WHAT IS THE DOPE ON OPIATES?

ENZYME DEFICIENCIES

PROTEINS ARE CHAINS OF AMINO ACIDS

Can be 20,000 amino acids long

DIGESTIVE ENZYMES

separate amino acids
...from each other

Karyn Scoussi

CAN RESULT IN RESIDUES OF AMINO ACID CHAINS CALLED PEPTIDES

If the digestive barrier is healthy, PEPTIDES are
• Too large to be absorbed and
• Will not cross into the blood stream

If the gut barrier is “leaky” - PEPTIDES can
• Be absorbed into the blood
• Stimulate an immune reaction
• Cross into the brain
• Act as false neurotransmitters
When the gut mucosal barrier is too permeable - it allows large molecules to cross into circulation …like holes in a window screen …allow flies in the room

GLUTEN opioid peptides are Gliadorphin
\[ \text{tyr} - \text{pro} - \text{gln} - \text{pro} - \text{gln} - \text{pro} - \text{phe} \]

BOVINE CASEIN opioid peptides are Casomorphin
\[ \text{tyr} - \text{pro} - \text{phe} - \text{pro} - \text{gly} - \text{pro} - \text{ile} \]

There are no problems if any of the following are true:
- No opioid sources (gluten, casein)
- Opioids are well digested
- Gut barrier is healthy – not leaky

There are no problems if any of the following are true:
- Hallucinogenic
- Addicting
- Silly, spacey behavior
- Inattention, mood changes
- Aggression, self-injury
- Stims
- Poor eye contact
- High pain tolerance
- Addictions to glutens and milk products
- Picky appetite
IN ORDER FOR OPIOIDS TO AFFECT THE BRAIN
- Food sources must be consumed (gluten, casein, soy)
- DPP-IV enzymes must be faulty
- The gut must be leaky

BOVINE BETA-CASOMORPHIN-7 BENEFITS
In the GI tract, the BCM7 casomorphin opioids have a positive beneficial effect on …
- GI growth and development
- Motility
- Absorption functions
- Secretions
- Immune function
- Dysbiosis

The problems occur when the opioids are absorbed through a damaged “leaky” gut

FOOD SOURCE OPIATES
HYPOTHESIS OR FACT?
Food source opiate-like endorphins have been:
- Identified in urine, CSF, breast milk, and blood
- Linked to:
  - Autism
  - Postpartum depression
  - Infant SIDS
  - Schizophrenia
  - Behavior and attention problems
  - Changes in brain function

K Reichelt, MD www.gluten-free.org/reichelt.html

GLUTEN SOURCES
WHEAT-FREE IS NOT GLUTEN-FREE

<table>
<thead>
<tr>
<th>GLUTEN GRAINS</th>
<th>HIDDEN SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>Hydrolyzed Plant Proteins</td>
</tr>
<tr>
<td>Rye</td>
<td>Hydrolyzed Vegetable Protein</td>
</tr>
<tr>
<td>Barley</td>
<td>Artificial flavors and coloring</td>
</tr>
<tr>
<td>Triticale</td>
<td>Dextrin</td>
</tr>
<tr>
<td>Spelt</td>
<td>Malt</td>
</tr>
<tr>
<td>Kamut</td>
<td>Citric acid</td>
</tr>
<tr>
<td>Semolina</td>
<td>MSG</td>
</tr>
<tr>
<td>Groats</td>
<td>Soy sauces (most)</td>
</tr>
<tr>
<td>Oats (w/ gluten)</td>
<td>Playdoh</td>
</tr>
</tbody>
</table>

WHEAT-FREE IS NOT GLUTEN-FREE

<table>
<thead>
<tr>
<th>Differences</th>
<th>A1 “Bad”</th>
<th>A2 “Good”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position 67</td>
<td>Histidine</td>
<td>Proline</td>
</tr>
<tr>
<td>BCM7 Opioids</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Cow (Bovine)</td>
<td>Holstein</td>
<td>Brown Swiss Jersey, Guernsey, Asian, African</td>
</tr>
<tr>
<td>Milk Sources</td>
<td>Goat</td>
<td>Sheep</td>
</tr>
<tr>
<td>Other Sources</td>
<td>Buffalo</td>
<td>Human</td>
</tr>
</tbody>
</table>

* Gene mutation changed A2 to A1 milk.
  Position 67 changed from proline in A2 to histidine in A1.
  Human milk is best - if the nursing mother avoids animal milk.
  Avoid animal milk initially, later introducing safer A2 milks.
  If milk is tolerated, use milk only from pasture-fed animals.


CLINICAL PEARLS ON GFCFSF
Negative tests for gluten and casein are NOT proof that gluten and milk are tolerated
Trial avoidance is the best test.
For Celiac: testing includes blood panel, small intestine biopsy, and the gene test.
  “Absolute avoidance is the solution right now. The future is optimistic.”

* Alessio Fasano. Surprises from Celiac Disease
### GLUTEN SUBSTITUTES

<table>
<thead>
<tr>
<th>Rice</th>
<th>Millet</th>
<th>Quinoa</th>
<th>Amaranth</th>
<th>Buckwheat</th>
<th>Wild rice</th>
<th>Corn</th>
<th>Teff</th>
<th>Montina</th>
<th>Sorghum</th>
<th>Tapioca</th>
<th>Taro</th>
<th>Yarn</th>
<th>Sago</th>
<th>Malanga</th>
<th>Lotus</th>
<th>Water chestnut</th>
<th>Jerus. artichoke</th>
<th>Nut flours</th>
<th>Bean flours</th>
<th>Seed flours</th>
<th>Coconut flour</th>
<th>Yucca/cassava</th>
<th>Lara’s GF Oats</th>
</tr>
</thead>
</table>

**THICKENERS**

- Agar
- Arrowroot
- Cornstarch
- Gelatin
- Guar gum
- Kudzu powder
- Potato
- Tapioca
- Sweet rice flour
- Xanthan gum

### WHEAT FLOUR SUBSTITUTES

<table>
<thead>
<tr>
<th>FOR 1 C OF WHEAT</th>
<th>AMOUNT</th>
<th>QUALITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buckwheat flour</td>
<td>7/8 C</td>
<td>Strong flavor, light is best</td>
</tr>
<tr>
<td>Corn flour</td>
<td>1 C</td>
<td>Light, corn taste</td>
</tr>
<tr>
<td>Commeal/starch</td>
<td>3/4 C</td>
<td>Sweet flavor, crunchy</td>
</tr>
<tr>
<td>Chickpea flour</td>
<td>3/4 C</td>
<td>For baking, distinct taste</td>
</tr>
<tr>
<td>Nut flours (fine)</td>
<td>1/2 C</td>
<td>For baking, strong flavor</td>
</tr>
<tr>
<td>Potato flour</td>
<td>1 C</td>
<td>Heavy, use small amounts</td>
</tr>
<tr>
<td>Potato starch</td>
<td>3/4 C</td>
<td>Light, refined, low fiber</td>
</tr>
<tr>
<td>Rice flour</td>
<td>7/8 C</td>
<td>Can be gritty, bland</td>
</tr>
<tr>
<td>Sorghum</td>
<td>7/8 C</td>
<td>Combine w/ other flours</td>
</tr>
<tr>
<td>Tapioca flour</td>
<td>1 C</td>
<td>Light, white flour, chewy</td>
</tr>
</tbody>
</table>

### THICKENER SUBSTITUTES

<table>
<thead>
<tr>
<th>SUBSTITUTES</th>
<th>EQUAL TO 1 TBS WHEAT FLOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrowroot</td>
<td>1 1/2 tsp.</td>
</tr>
<tr>
<td>Bean flours</td>
<td>1 tsp.</td>
</tr>
<tr>
<td>Cornstarch</td>
<td>1 tsp.</td>
</tr>
<tr>
<td>Gelatin powder (unflavored)</td>
<td>1 1/2 tsp. dissolved in water</td>
</tr>
<tr>
<td>Guar gum</td>
<td>1 1/2 tsp. mixed in liquid</td>
</tr>
<tr>
<td>Potato starch</td>
<td>1/2 tsp.</td>
</tr>
<tr>
<td>Tapioca flour</td>
<td>1 1/2 tsp.</td>
</tr>
</tbody>
</table>

### XANTHAN GUM

**SUBSTITUTE FOR GLUTEN**

**PROVIDES STRETCH BINDING AND TEXTURE**

<table>
<thead>
<tr>
<th>TYPE OF BAKED GOODS</th>
<th>AMOUNT PER 1 CUP FLOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breads</td>
<td>1 tsp.</td>
</tr>
<tr>
<td>Cakes</td>
<td>1/4 tsp.</td>
</tr>
<tr>
<td>Cookies</td>
<td>1/4 tsp.</td>
</tr>
<tr>
<td>Muffins, Quick breads</td>
<td>3/4 tsp.</td>
</tr>
<tr>
<td>Pizza crusts</td>
<td>2 tsp.</td>
</tr>
</tbody>
</table>

### BETTE HAGMAN’S ALL PURPOSE FLOUR SUBSTITUTE

From the GLUTEN-FREE GOURMET books

- 6 parts white rice flour
- 2 part potato starch flour
- 1 part tapioca flour

Combine all ingredients. Blend with a whisk and store, ready for use.

### CAROL FENSTER’S ALL PURPOSE FLOUR SUBSTITUTE

From the book: **COOKING FREE**

- 1 1/2 cups sorghum flour
- 1 1/2 cups potato starch, cornstarch, or amaranth starch
- 1 cup tapioca flour
- 1/2 cup flour: almond, corn, bean or chestnut

Combine all ingredients. Blend with a whisk and store, ready for use.
**COMMERCIAL GFCFSF BREADS AND PASTAS**

<table>
<thead>
<tr>
<th>FLOUR BLENDS</th>
<th>BREADS</th>
<th>PASTAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrowhead Mills</td>
<td>Ener-G Foods</td>
<td>DeBoles</td>
</tr>
<tr>
<td>Arrowheadmills.com</td>
<td>ener-g.com</td>
<td>deboles.com</td>
</tr>
<tr>
<td>Authentic Foods</td>
<td>Glutino</td>
<td>Ener-G Foods</td>
</tr>
<tr>
<td>Authenticfoods.com</td>
<td>glutino.com</td>
<td>ener-g.com</td>
</tr>
<tr>
<td>Glutino</td>
<td>Kinnikinnick</td>
<td>Glutino</td>
</tr>
<tr>
<td><a href="http://www.glutino.com">www.glutino.com</a></td>
<td>Kinnikinnick.com</td>
<td>glutino.com</td>
</tr>
<tr>
<td>Kinnikinnick</td>
<td>Lara’s GF Oats</td>
<td>Lundberg</td>
</tr>
<tr>
<td>Kinnikinnick.com</td>
<td>Creamhillestates.com</td>
<td>Lundberg.com</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PIZZA CRUSTS</th>
<th>Dad’s GF Pizza Crust</th>
<th>Foods By George</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Glutenfreepizza.com</td>
<td>Foodsbygeorge.com</td>
</tr>
</tbody>
</table>

**CASEIN SOURCES**

"LITTLE MISS MUFFIT WAS WRONG"

- Animal milk and cream
- Butter
- Butter flavor
- Buttermilk
- Casein
- Caseinate
- Cheese (all)
- Cool whip
- Condensed milk
- Cottage cheese
- Cream cheese
- Evaporated milk
- Galactose
- Half-and-half
- Ice cream, ice-milk
- Kefir, Yogurt
- Lactose
- Lactalbumin
- Sherbet
- Sour cream
- Whey

**CASEIN SUBSTITUTES**

MILK-FREE IS NOT CASEIN FREE

<table>
<thead>
<tr>
<th>Milk and Yogurt</th>
<th>Oil / Butter</th>
<th>Ice Cream</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice milk</td>
<td>Coconut oil/butter</td>
<td>Fruit popsicles</td>
</tr>
<tr>
<td>Coconut milk</td>
<td>Ghee (clarified)</td>
<td>Sorbets w/o milk</td>
</tr>
<tr>
<td>Coconut yogurt</td>
<td>Lard (best in baking)</td>
<td>Italian ice</td>
</tr>
<tr>
<td>Hemp milk</td>
<td>Earth Balance</td>
<td>Non-dairy ice cream</td>
</tr>
<tr>
<td>Soy milk</td>
<td>Kosher</td>
<td>Chocolate</td>
</tr>
<tr>
<td>Tofu milk</td>
<td>Pareve only</td>
<td>GFCFSF chocolate</td>
</tr>
<tr>
<td>Potato milk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nut milks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vance’s DariFree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COCONUT - THE WONDER FOOD**

**THE NEW FUNCTIONAL FOOD**

Coconut is a healthy, nutritious seed that is good for digestion, immunity and cardiovascular health

Coconut water (liquid in the coconut) is a natural electrolyte solution – far superior to any sports drink

Jelly-like kernel has enzymes, nutrients, and fiber

Coconut milk is made by squeezing the grated flesh. Coconut Milk can be fermented into kefir or yogurt - both contain an abundance of flora

**HEMP MILK**

Perfectly legal!
Contains no THC
Produced from seeds of hemp plant
Healthy alternative for milk
Not SCD compliant

CONTAINS THE FOLLOWING

- Protein and Amino Acids
- Vitamins: A, D, E, B12, B2, folic acid
- Minerals: calcium, magnesium, potassium, phosphorus, iron, zinc
MILK PRODUCT SUBSTITUTES

<table>
<thead>
<tr>
<th>MILK PROD</th>
<th>SUBSTITUTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1C milk</td>
<td>1C rice, nut, soy, hemp, coconut milk</td>
</tr>
<tr>
<td>1C yogurt</td>
<td>1C coconut or soy yogurt</td>
</tr>
<tr>
<td>3/4C milk</td>
<td>1C cream</td>
</tr>
<tr>
<td>3/4C milk</td>
<td>1C light cream</td>
</tr>
<tr>
<td>1/3C cream</td>
<td>1C heavy cream</td>
</tr>
<tr>
<td>1C cottage cheese</td>
<td>1 C crumbled tofu (add dressing to flavor)</td>
</tr>
<tr>
<td>1C buttermilk</td>
<td>2 tbs. lemon juice in 1 C milk substitute</td>
</tr>
</tbody>
</table>

SOUNDS LIKE DAIRY …BUT IT’S NOT
Calcium lactate  Lactic acid
Calcium stearoyl lactylate  Oleoresin
Cocoa butter  Sodium lactate
cream of tartar  Sodium steryl lactylate

SOY SOURCES
“SOY SORRY”

Primary
- Soy oil
- Edamame
- Miso
- Natto
- Sprouts (soy)
- Tamari
- Tempeh
- Tempura
- Tofu
- Yuba

Other
- Lecithin
- HVP
- Mono- and Diglycerides
- MSG
- Vitamin E

Found in.
- Baked goods
- Meat products
- Baby foods and formulas
- Deli meats
- Cheese substitutes
- Butter substitutes
- Oil, margarine
- Beverages
- Coffee substitutes
- Dressings, soy sauce
- Candy, caramel

SOY PROBLEMS
“SOY SORRY”
- Legume, common allergen, difficult to digest
- Genetically modified (GM) since 1996
  - Altered protein substances
  - Increased allergens
- Processing requires high heat and chemicals
- Can also form opiate-like peptides (peptiduria)
- Inflammatory and immune effects
- Endocrine disrupter: infancy to adults
- Goitrogen (blocker to thyroid hormone synthesis)
- Phytate and oxalate content leads to nutrient malabsorption: Ca, Mg, Iron, Copper, Zinc

MANY PROBLEMS WITH GLUTEN, MILK, AND SOY

<table>
<thead>
<tr>
<th>Glutens</th>
<th>Cow Milk Products</th>
<th>Soy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opioid source</td>
<td>Opioid source</td>
<td>Opioid source</td>
</tr>
<tr>
<td>Gluten intolerances</td>
<td>BCM-7 from A1 milk</td>
<td>Common allergen</td>
</tr>
<tr>
<td>Celiac disease</td>
<td>Lactose intolerance</td>
<td>Difficult to digest</td>
</tr>
<tr>
<td>Lectins</td>
<td>Lectins</td>
<td>Genetically modified</td>
</tr>
<tr>
<td>Pro-inflammatory</td>
<td>Pro-inflammatory</td>
<td>Pro-inflammatory</td>
</tr>
<tr>
<td>Allergy potential</td>
<td>Mucus increase</td>
<td>Endocrine disrupter</td>
</tr>
<tr>
<td>IgE, IgG</td>
<td>Propionic acid</td>
<td>Goitrogenic</td>
</tr>
<tr>
<td></td>
<td>Oxalates</td>
<td>Oxalates / phytates</td>
</tr>
<tr>
<td></td>
<td>Allergy potential</td>
<td>lead to malabsorption: Ca, Mg, Fe, Cu, Zn</td>
</tr>
<tr>
<td></td>
<td>IgE, IgG</td>
<td>Allergy potential</td>
</tr>
</tbody>
</table>

GFCFSF ARE GLUTENS, MILK AND SOY ESSENTIAL OR NOT?
Grains and milk products are not essential food groups.
- They have been part of the human diet for only .005% of 2 million years of total human history
- .05% of 200,000 years of modern human history
- They are not required for human life
- They are choices within the 3 food groups:
  - Glutens are grains - a Carbohydrate choice
  - Milk products are a Protein choice
  - Soy is a Protein and Carbohydrate choice
- The following must be maintained:
  - Calories ■ Protein ■ Nutrients
    (including calcium, magnesium and D)

PROTEIN

<table>
<thead>
<tr>
<th>AGE</th>
<th>PROTEIN gr/D</th>
<th>CASEIN-FREE SOURCE 8 grams of protein in...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant to 1</td>
<td>9 – 15</td>
<td>1 oz fish, poultry, meat</td>
</tr>
<tr>
<td>2 to 3</td>
<td>20 – 25</td>
<td>1 egg</td>
</tr>
<tr>
<td>4 to 6</td>
<td>25 – 35</td>
<td>1/2 cup beans / hummus</td>
</tr>
<tr>
<td>7 to 11</td>
<td>35 – 45</td>
<td>1/4 cup nuts / seeds</td>
</tr>
<tr>
<td>12 to 17</td>
<td>45 – 60</td>
<td>2 Tbsp. nut butters</td>
</tr>
<tr>
<td>Adult</td>
<td>60 – 90</td>
<td>ASD: usually higher needs due to malabsorption, poor absorption and poor utilization of amino acids</td>
</tr>
</tbody>
</table>

FIBER

<table>
<thead>
<tr>
<th>AGE</th>
<th>FIBER gr/D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 1 to 8</td>
<td>12 gr/D – 20 gr/D</td>
</tr>
<tr>
<td>Age 10 - Adult</td>
<td>25 – 38 gr/D</td>
</tr>
</tbody>
</table>
REPLACING CALCIUM 
...WHEN MILK IS ELIMINATED

<table>
<thead>
<tr>
<th>AGE</th>
<th>RDA / TX mg</th>
<th>UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 1</td>
<td>210 – 250</td>
<td>-</td>
</tr>
<tr>
<td>1 – 3</td>
<td>700</td>
<td>2500</td>
</tr>
<tr>
<td>4 – 8</td>
<td>800</td>
<td>2500</td>
</tr>
<tr>
<td>9 – 18</td>
<td>800 – 1300</td>
<td>2500</td>
</tr>
<tr>
<td>Adult</td>
<td>800 – 1200</td>
<td>2500</td>
</tr>
<tr>
<td>Preg</td>
<td>1300</td>
<td>2500</td>
</tr>
</tbody>
</table>

SUBSTITUTES For 300 mg Ca in 1 Cup Milk

- 1 C Rice or coconut milk fortified
- 1 C Hemp or almond milk fortified
- 1.3 C Tofu (if tolerated)
- 5 oz Salmon canned w/ bones
- 2 ½ oz Sardines canned w/ bones
- 2 ½ - 3 C Green leafies, broccoli

Magnesium is critical for calcium utilization.

MAGNESIUM RECOMMENDATIONS

<table>
<thead>
<tr>
<th>DRI / RDA / AI</th>
<th>THERAPY RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 12 months</td>
<td>30 - 75 mg (Al) 50 – 150 mg</td>
</tr>
<tr>
<td>1 – 3 years</td>
<td>80 mg   100 - 350 mg</td>
</tr>
<tr>
<td>4 – 8 years</td>
<td>130 mg  100 - 600 mg</td>
</tr>
<tr>
<td>9 – 13 years</td>
<td>240 mg  300 – 750 mg</td>
</tr>
<tr>
<td>14 – &gt;30 years</td>
<td>M 410 mg  F 320 mg 300 - 800 mg</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>350 – 400 mg 400 – 800 mg</td>
</tr>
</tbody>
</table>

Food sources: dark greens, vegetables, beans, nuts, seeds

Supplements:
- Low toxicity. Excess causes diarrhea which depletes Mg.
- Least stool effect: glycinate, chelate, aspartate, gluconate.
- Most stool effect: citrate, chloride (good for constipation).

WHAT IS LEFT TO EAT?

LAB TESTS

25 OH D3: 40 -100 ng/ml
Deficiency: H. Alk Phos, Low PTH

TOXICITY

More than 20,000 for months.
Not from sun exposure.
Self-limiting.
Avoid in Sarcoidosis.

SOURCES AND GUIDELINES

VIT D INTAKE IU UL(IU)

0 to 1 400 or more 1,500
Child 600 – 2,000 3,000
Adult 1,000 – 8,000 >10,000
Preg 1,000 – 4,000 >5,000

SOURCES OF D IU’S

1 tbsp. Cod liver oil 1,360
3.5 oz fish 360
1 can sardines 250
1 egg (yolk) 20
Milk/ milk substitutes 100
Sun exposure 20 min 10,000

GFCFSF ORGANIC AND NUTRIENT DENSE

PROTEIN   SATURATED UNSATURATED

ANIMAL SOURCE
Seafood
Meats
Poultry
Eggs
No milk sources

PLANT SOURCE
Beans No soy
Nuts
Seeds

FAT

Vegetables
Fruits
Grains No gluten
Beans No soy
Nuts
Seeds

CARBOHYDRATE

WHAT IS LEFT TO EAT?

High Fiber Vegetation
Eat with other foods or on empty stomach
1 – 3 servings or more
Eat blue green, orange, red, purple

AVOID
Artificial additives
Artificial sweeteners
Preservatives, coloring
Soda, fat and sugar
Wheat – corn syrup
High Fructose
Deli meats
Cold Cereals
Sugars

Drink: Water, Green vegetable, Rice, Seaweed w/ juice
Sweets: Acerola, Maple syrup, Honey, Stevia
Oils: Flaxseed/ground, olive, coconut, almond

PROTEIN at Every Meal
Chose a wide variety of colors, textures and flavors

Med: Water, Green vegetables, Rice, Seaweed w/ juice
Sweets: Acerola, Maple syrup, Honey, Stevia
Oils: Flaxseed/ground, olive, coconut, almond
Protein: 1 serving = each person’s...

- 1 palm for fish, fowl, meat
  - Seafood – organic
  - Grass fed, pastured meats, poultry
  - Eggs – 1 egg = 1 oz seafood, meat, poultry
  - 1 – 2 oz for child, 3 – 4 for teen or adult

- 1 cupped palm for nuts / seeds
  - Organic, raw

- 2 cupped palms for beans

Vegetables, Fruits and Grains

High fiber vegetables: raw, juiced, steamed, in soups, smoothies, and purees added to spaghetti sauce and muffins.

Fruits: whole fruits are best. Add to smoothie. Avoid fruit juices or dilute juices with water 1:4

Grains: non-gluten, rice, quinoa, buckwheat

Protein Serving Sizes

Protein: 1 serving = each person’s...

- 1 palm for fish, fowl, meat
  - Seafood – organic
  - Grass fed, pastured meats, poultry
  - Eggs – 1 egg = 1 oz seafood, meat, poultry
  - 1 – 2 oz for child, 3 – 4 for teen or adult

- 1 cupped palm for nuts / seeds
  - Organic, raw

- 2 cupped palms for beans

Overwhelmed?? Hang in there!
THE “YUK” FACTOR

PERCEPTION IS REALITY

Zinc deficiency increases:
- Poor taste bud function and taste perception
- Sensory dysfunction and oral sensory dysfunction
- Accumulation of toxic metals

Toxic metals and zinc deficiency increase:
- Pica – appetite for non-food substances
- Food aversions

Correct the nutrient deficiencies
Get rid of the problem foods
Consider feeding therapy if needed

IMPROVING DIGESTION

BASICS FOR EVERYONE
- Deep breathe prior to eating
- Chew thoroughly
- Eat slowly
- Drink water with and between meals
- Eat smaller meals with fewer foods
- Select variety over the week
- Rotate foods if allergic
- Consider food combining

TIPS AND TRICKS
- Try ethnic foods (Chinese, Indian) – usually GFCFSF
- Have some family meals that are “The Diet”
- Try lunch and dinner foods for breakfast
  There are no “breakfast police”
- Are you “gellin’?” Gelatin helps digestion
  Use “real” homemade soups and broths
- Use fermented foods – homemade
- Use separate pans for special diets
- Educate the child’s teacher
- Send a toy in the lunch box
- Send special diet treats to school for party use

THE DIET – SOME BASICS

- Select the diet that matches the symptoms
- Start one diet at a time
- For GFCFSF – if removing both is difficult
  First avoid milk – it clears sooner
  Then remove gluten
  It is best to avoid soy too
- Go gently into the diet – slow introduction
- Withdrawal symptoms are common
- Keep diet diaries and note reactions
- Read labels and check with manufacturers
- Check all medications
- Get ideas from parents and web sites

MEET THE CHILD’S

ORAL SENSORY NEEDS

- Most feeding problems begin with solid foods.
- In those with sensory delays, solids and textures may be rejected. The child is not ready.
- Feed according to the sensory age, not the chronological age.
- Go back to purees and baby foods if needed.
- Expand as oral sensory development improves.
- Consider feeding assessment and therapy.

RULES TO MAKE

- Keep mealtime pleasant
- No cell phones or interruptions
- Include pleasant background music
- No gross talk at the table
- No negative comments about the food

A RULE TO BREAK

Allow TV or favorite video in order to:
- Reduce the sensory focus on the food
- Sneak more food in
- Make a positive connection with eating
### THE “TROJAN HORSE TECHNIQUE”

Hide purees of healthy fruits, vegetables, and meats in:
- Smoothies
- Applesauce
- Spaghetti sauce
- Meatloaf, meatballs
- Nut butters, hummus
- Muffins, brownies, pancakes

**How to do it:**
- Start with 1/2 to 1 teaspoon
- Increase gradually as tolerated
- The puree should be free of “lumps”

*This improves nutrition and accustoms the body to new foods.*

---

### LOOK WHAT YOU CAN HIDE IN A MUFFIN

- Egg = protein, amino acids
- Nuts = protein
- Dried fruit, molasses = iron
- Flaxseed = fiber and EFA’s
- Protein powder
- Calcium powder
- Pureed vegetables
- Pureed meats

*Karyn Seroussi*

---

### GET CLEVER

- Study the food your child loves
- Cut chicken to similar size and shape
- GFCFSF flour
- Fry in tolerated oil
- Serve in BK or McD container if necessary!

*Yes, these really are GFCFSF!*  
*Karyn Seroussi*

---

### WHEN THE WHOLE FAMILY GOES ON THE DIET

- Easier on the child and better compliance
- Less opportunity for sneaking
- Less cross contamination (utensils)
- Others may experience improvement in digestion, energy, focus, attention, immunity
- Helpful with ADD, ADHD, and mood disorders

---

### PROMOTE OPTIMISM

*My Special Diet is cool! My food rocks!*

---

### HOW CAREFUL?

- Strictness counts:
  - Milk clears the system in weeks to months.
  - Soy clears the system in weeks to months.
  - Gluten may take 3 to 6 months or more.
- Common Mistakes: Rice Krispies, Goat’s Milk, Wheat-free Bread, etc.
- Gluten reaction? It might set you back a few days or weeks.
- If you are sitting on 12 tacks and remove 6, there may be no noticeable difference. Don’t quit!
WHAT ABOUT MISTAKES?

- Give extra digestive enzymes ASAP
- Alkalize! Sodium potassium bicarbonate.
- Increase fluids
- Activated charcoal – works if given immediately (it can also bind medications and supplements)
- Benadryl or other antihistamine
- Epsom salt and baking soda bath or Mg sulf cream
- Increase probiotics (double or triple)
- Melatonin for the reaction of insomnia
- Investigate the reason, and create safeguards

IS THE DIET FOREVER?

- Three month trial of strict GFCFSF is reasonable
- Take one day at a time
- There is no way to know exactly when to stop
- The underlying issues must be resolved
- Early reintroduction can result in regression
- Introduce one food type at a time, weeks apart:
  - Start with small amounts first
  - If tolerated, introduce large amounts frequently
  Why? You need to know if the food is safe.

WHEN WILL WE SEE RESULTS?

Days, weeks, or months – depending upon…

- Age
- Autism subtype
- Other conditions present
- Compliance
- Length of time on diet
- Nutritional status
- Toxic exposures
- Bowel health and dysbiosis

ARTIFICIAL FOOD ADDITIVES

AVOIDING SALICYLATES - 5 YEAR OLD GIRL WITH ADHD

On Artificial Additives Coloring, Preservatives Processing Therapy Recommended

Organic Feingold Diet After 1 Week Coloring Within The Lines

Organic Feingold Diet After 2 Weeks Processing Therapy Not Needed

CASE STUDIES

Quick Response to an Organic, Additive-Free Diet

CASE STUDIES

Preventing Autism
**HISTORY**
- Healthy infant
- Breast fed
- Delays in:
  - Sitting
  - Crawling
  - Standing
  - Walking
  - Language
  - Eye contact
  - Oral motor
  - Social awareness

**MOTHER'S DIET CONNECTIONS**
- MOM: On Gluten, Milk and Soy
  - Regression occurred
  - Social and eye contact
  - Communication
  - Crawling (lopsided)
  - Ceased pulling up to stand
  - Not walking

- MOM: GFCFSF Diet
  - Development progressed
  - Social
  - Communication
  - Physical milestones

*MARY age appropriate by 18 mo*

**SIMPLE QUICK DIET RESULTS**

<table>
<thead>
<tr>
<th>SETH – ASPERGER’S – AGE 6 ½</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BEFORE GFCF</th>
<th>AFTER 7 DAYS ON GFCF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor school work habits</td>
<td>Significant improvement</td>
</tr>
<tr>
<td>Poor attention to work</td>
<td>Better attention to work</td>
</tr>
<tr>
<td>Difficulty getting to task</td>
<td>Settled in immediately</td>
</tr>
<tr>
<td>Constant reminders</td>
<td>Responds to requests</td>
</tr>
<tr>
<td>Hyperactivity</td>
<td>Calm</td>
</tr>
<tr>
<td>Stims and OCD</td>
<td>Significantly reduced</td>
</tr>
</tbody>
</table>

- Peptide test - negative - symptoms suggested GFCF
- Non-opioid reaction to gluten and casein

His teacher called to note a “dramatic improvement. This is the first time. What changed?”

**WHAT IF THE DIET DOES NOT HELP?**

Diet is one part of the nutritional approach. The nutritional approach is one part of...

“The Treatment Triad”

**SUMMARY: HEALTHY GFCFSF DIET**

- Protein
- Vegetables
- Fruits
- GF Grains
- Limited Sugars
- No Junk Food
- GFCFSF
Hippocrates said...
“Let thy food be thy medicine
and thy medicine be thy food.”

Good advice, but probably a lot easier to follow in
400 B.C. when he didn’t have to contend with …
three McDonald’s,
two Starbucks,
and a Cinnabon
within a five-mile radius of the Parthenon.

Kathryn Scott In Living Without

The challenges of the ASD
diets are not nearly
as difficult…
as living with an untreated
child with autism.

Kathryn Scott

These books are dedicated to the courageous children, and to all who
love and serve them. We are humbled in your presence.