Gut And Psychology Syndrome
Gut And Physiology Syndrome
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All diseases begin in the gut!
Hippocrates, 460–370 BC

Gut And Psychology/Gut And Physiology Syndrome

GAP Syndrome establishes a connection between the state of the gut and the health of the rest of the body

Roles of Gut Flora

• Protection from Invaders
• Health of the Integrity of the Gut
• Appropriate Digestion and Absorption
• Vitamin Production
• Detoxification
• Immune System Modulation

What can damage gut flora?

• Antibiotics
• Steroids, The Pill
• Other Drugs
• Stress
• Poor Diet
• Infections
• Disease
• Bottle Feeding
• Old Age
• Pollution
• Radiation
• Alcohol
• Toxic Chemicals
• Dental Work

What is GAPS?

• Abnormal gut flora
• Abnormal digestion leads to nutritional deficiencies
• Damaged gut lining leads to food allergies
• Toxins produced by the pathogens in the gut absorb and are distributed around the body causing symptoms
• Detoxification system collapses
• Autoimmunity joins in
• When brain is affected – Gut And Psychology Syndrome
• When the rest of the body is affected – Gut And Physiology Syndrome
• The two GAP Syndromes always overlap!

GAPS symptoms

1. Gut And Psychology Syndrome: mood alterations, memory and cognitive problems, behavioural and social problems, sleep problems, psychotic symptoms, panic attacks, anxiety, involuntary movements, tics and fits, obsessions, compulsions, eating problems, etc.

2. Gut And Physiology Syndrome: digestive problems, fatigue, muscular weakness, cramps and abnormal muscle tone, pain & ache in bones, joints and muscles, skin problems, neurological problems, hormonal abnormalities, headaches, frequent infections, allergies, anaemia, urinary problems, infertility, etc.

In every person symptoms of both GAPS overlap
Gut And Psychology Syndrome

Child
• AUTISM
• ADHD/ADD
• DYLEXIA
• DYSPRAXIA
• LEARNING, BEHAVIOURAL, SOCIAL PROBLEMS
• EPILEPSY

Adult
• SUBSTANCE ABUSE
• DEPRESSION
• EATING DISORDERS
• OBSESSIVE-COMPULSIVE
• MANIC-DEPRESSIVE
• SCHIZOPHRENIA
• EPILEPSY

Blood - brain barrier
• Very selective in letting things through
• Tight junctions & zonulin
• Microbial toxins and autoimmune attack
• Damaged blood – brain barrier
• Toxins, microbes & antibodies get through
• Impaired brain function leads to impaired learning, behaviour, social skills & perception – Gut And Psychology Syndrome
• Epileptic seizures

Gut And Physiology Syndrome

• All digestive disorders: IBS, IBD, gastritis, colitis, oesophagitis, celiac disease, etc
• Autoimmunity: multiple sclerosis, rheumatoid arthritis, diabetes type 1, osteoarthritis, lupus, interstitial cystitis, psoriasis, alopecia, etc – best part of 200 conditions
• Arthritis of many kinds
• ME, fibromyalgia, chronic fatigue
• Allergies, asthma, eczema, hay fever, etc.
• Endocrine disorders (thyroid, adrenal, PMS, etc)
• Migraines, neuropathy, other neurological conditions
• Chronic cystitis, nephropathy
• Food intolerances, FPIES (Food Protein Intolerance Enterocolitis Syndrome), etc.

A Typical Scenario
• Mother with gut dysbiosis
• The baby does not develop normal gut flora
• Immune system compromised
• Ear infections, antibiotics
• Chest infections, antibiotics
• Further damage to gut flora & immune system
• Vaccinations
• Usual weaning diet
• Gut dysbiosis leads to damaged gut wall
• Toxins, microbes, undigested foods enter the body
• Autoimmunity joins in

Digestive problems
• Abdominal pain, spasms or dull ache/discomfort
• Abnormal stools: diarrhoea, constipation, mixture
• Feeling of incomplete evacuation
• Painful stools
• Overproduction of gas: burping, flatulence, bloating
• Reflux and indigestion
• Compacted bowel
• Bad breath, coated tongue
Autoimmunity is always present in GAPS!

- Autoimmunity is born in the gut!
- Caused by absorption of undigested protein and toxins through damaged gut wall
- Immune system produces antibodies, which then attack body's own tissues
- In type 1 diabetes pancreatic cells are attacked
- In celiac disease small intestine is attacked
- In MS, autism & other mental and neurological problems nervous system is attacked
- Always more than one tissue is attacked

Cleaning the flow from the gut

Water soluble nutrients & toxins
- Stage 1: through the gut wall into the bloodstream
- Stage 2: liver
- Stage 3: lungs

Fat soluble nutrients & toxins
- Stage 1: through the gut wall into lymph
- Stage 2: lungs

Liver

- Greatly increased toxic flow from the gut
- Breakdown of detoxification system
- Toxins go into the blood stream
- From the environment: toxic metals, phenols, petro-chemicals, glue adhesives, agricultural chemicals, personal care & cleaning products, plasticisers, etc, etc
- By-products of body's own metabolism (neurotransmitters, enzymes, hormones, etc.)
- All liver functions suffer, bile stones form

Elimination of toxins & undigested food

- through lungs: asthma, other chronic lung conditions
- through skin: eczema, psoriasis, dermatitis & other skin problems
- through urine: nephropathy, chronic cystitis, kidney stones, bed wetting, thrush
- through mucous membranes: sinusitis, post-nasal drip, rhinitis, gingivitis, vaginitis, diarrhoea/constipation, etc – all chronic
Most GAPS people have feeding problems!

Fussy eating habits
- Often a first sign of GAPS
- More than 90% of children with learning disabilities, and their siblings
- Limit their diet to sweet & starchy foods
- Have solid physiological reasons
- Chapter “It’s feeding time. Oh, no!”
- Using behaviour modification technique you can get 100% success

The treatment of GAPS

GAPS Nutritional Protocol
1. GAPS Diet
2. Supplements
3. Detoxification, sunbathing & life style changes

Foods to avoid
- All grains
- Starchy vegetables
- Sugar, other commercial sweeteners
- Milk sugar Lactose
- Starchy beans including soy
- All processed foods
- All food additives
(For full list, go to www.gaps.me)

Recommended foods
- All meats cooked from fresh or frozen
- All fish cooked from fresh or frozen
- Organ meats
- Good quality eggs
- Non-starch vegetables
- All ripe fruit including dried fruit
- Nuts and seeds
- Fermented dairy
- Cold extracted honey
(For full list, go to www.gaps.me)
**Meat & fish stock**
- Homemade meat & fish stock
- Soups and stews made with stock
- Meat jelly made at home
- Bone marrow
- Joints and cartilage
- Natural gelatine

_Avoid commercial stock cubes or granules!

**Fermented foods**
- Sauerkraut – type fermentation
- Fermenting vegetables with yoghurt/kefir starter
- Fermented fish
- Fermented dairy
- Fermented beverages
- Fermented nuts and seeds
- Fermented beans and grains (when the patient is ready)

**Natural fats**
- All animal fats
- Butter and ghee
- Coconut oil and palm oil
- Cold pressed virgin olive oil

_Avoid all margarines, butter replacements, vegetable oils and cooking oils

**Breads, pies, cakes, muffins, pancakes, waffles etc.**
- Nuts or seeds ground into flour
- Eggs
- Butter, ghee, coconut oil, goose fat, duck fat
- Carrot, winter squash, marrow, courgette
- Dried fruit: dates, figs, apricots, raisins
- Ripe banana
- Salt, sun dried tomato, tomato pure, spices
- Cheese and fermented cream

**The three parts of GAPS diet**
GAPS Diet – 3 parts

1. GAPS Introduction Diet

2. Full GAPS Diet

3. Coming Off the diet

GAPS Introduction Diet

- Low fibre - gentle and healing
- Foods introduced gradually
- Structured in stages
- Provides building blocks for the enterocytes
- Provides beneficial microbes through fermented foods (dairy and vegetables)
- Removes food intolerances quicker
- Requires patience and perseverance

Stage one

- Meat, bone and fish stocks
- Soup made with meat stock & vegetables
- Probiotic foods: dairy (whey, yoghurt, sour cream) and/or vegetable based: sauerkraut juice
- Ginger, mint or camomile tea with honey
- In extreme diarrhoea: no vegetables! Meat or fish stock, whey and/or yoghurt, juice from sauerkraut, raw egg yolks
- In extreme constipation: start with sauerkraut juice; replace yoghurt and whey with sour cream

Stage two

- Continue with previous foods, increasing amounts of fermented foods per day
- Add raw egg yolks, then soft-boiled eggs
- Add stews and casseroles: meat with vegetables
- Add fermented fish and Swedish gravlax
- Add homemade ghee

Sensitivity Test
Use whenever food allergy is suspected and when introducing new foods

Stage three

- Continue with previous foods, increasing amounts of fermented foods per day
- Add ripe avocado
- Add pancakes made with egg, nut butter & squash
- Add scrambled eggs or omelette
- Add sauerkraut and other fermented vegetables
- Keep increasing fat consumption: animal fats

Stage four

- Continue with previous foods, increasing amounts of fermented foods per day
- Add roasted & grilled meats
- Add cold-pressed olive oil
- Add freshly pressed juices: by whisking a raw egg and some sour cream or coconut oil into juice make GAPS ‘milkshake’
- Add homemade nut bread
**Stage five**

- Continue with previous foods, increasing amounts of fermented foods per day
- Add apple pure or baked apple
- Add raw vegetables
- Increase variety of fruit and vegetables in juicing

This stage has to be introduced cautiously. Many patients go back and forth between the stages 4 and 5 for a while

**Stage six**

- Continue with previous foods, increasing amounts of fermented foods per day
- Add raw fruit, starting from peeled apple
- Add more honey
- Add baking: cakes, muffins, etc. made with nut flour, eggs, dried fruit and fat

This stage has to be introduced cautiously. Many patients go back and forth between the stages 4, 5 and 6 for a while

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**The Full GAPS Diet**

- Should be followed for 2 years minimum
- Juice / milkshake twice a day: first thing in the morning and mid-afternoon
- Main meals should be made with eggs, meats, fish and vegetables and plenty of animal fats. Meat stock and soups should be consumed every day
- Nut bread, pancakes, cakes and fruit should be consumed between meals
- If starting from the Full Diet, use Dairy Introduction Structure

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**Dairy Introduction Structure**

- Only organic!
- Step 1: Introduce unsalted ghee
- Step 2: Introduce unsalted butter
- Step 3: Introduce homemade yoghurt, fermented cream & kefir
- Step 4: Introduce homemade cheese
- Step 5: Introduce mature traditional cheese
- Step 6: Introduce raw double cream & clotted cream, introduce raw milk

Avoid all pasteurised milk and milk substitutes

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**Coming off the GAPS Diet**

- Try after complete recovery, on the Full GAPS Diet for 1.5 – 2 years minimum
- Introduce new potato
- Introduce fermented buckwheat or quinoa
- Introduce fermented millet
- Introduce one food at a time, and gradually
- Serve with good amounts of natural fats
- Try sourdough
- Try buckwheat, quinoa & millet without fermenting

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**What diet to start from?**
Supplements

- Keep supplements to a minimum; the diet is the main treatment!
- Probiotics
- Cod liver oil
- Essential fatty acids
- Iodine paint
- Digestive enzymes
- Specific supplements

Probiotics

- Die-off reaction
- When starting from the Intro Diet, wait with the probiotic until the die-off from fermented foods is over, then introduce probiotics gradually
- If fermented foods are not introduced, use the probiotic from the start
- When starting from the Full Diet, use the probiotic from the beginning
- Always start from a small dose and build it up gradually to a therapeutic level

Cod liver oil & essential fatty acids

- Good quality cod liver oil with natural vitamins A and D
- Fish oils with EPA and DHA
- Nut & seed oil blend: cold pressed and good quality
- Start from half the therapeutic dose per day and gradually increase
- NOT for people with epilepsy, fits, tics and other involuntary movements

Emphasise that animal fats are the most important!

Iodine paint

- Essential for healing and elimination of toxins
- Essential for the brain and the immune system
- Iodine paint is good for testing for iodine deficiency and for supplementing iodine
- Use Lugol’s solution or an iodine tincture
- Paint a patch the size of the patient’s hand once a day in different places on the body
- When digestive symptoms are gone, replace with supplemental iodine-rich seaweed

Digestive enzymes

- Not for everybody!
- Stomach acid booster: HCl&Pepsin or Betaine HCl for adults with reflux, burping and indigestion
- For children and adult: fresh or fermented cabbage or cabbage juice before and with meals
- For children occasionally Betaine HCl with meals
- Pancreatic enzymes at the end or between meals
- Ox bile for people with removed gallbladder and those who cannot digest fats
Detoxification & life style changes

- Detoxification system
- Gut is the main source of toxicity – GAPS Programme will remove it
- Reduce general toxic load
- Juicing
- Baths with Epsom salt, sea salt, seaweed and bicarbonate of soda
- Sunbathing is essential!
- As the detoxification system recovers, heavy metals are removed naturally without chelation

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