

How Diet affects the Pathways of Behaviour, Learning and Development

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Genetic, Environmental A Combination of Both

- Family Histories of digestive, immune, neurological and psychological disorders
- Genes can be switched on or off by environmental toxins

A New Way of Thinking

- Kanter 1943 "Autistic Disturbances of Affective Contact" noted that there were also immune and digestive problems in his patients but the symptoms were not added to his diagnosis.
- Now there is a growing number of ASD specialists who agree there is a "Biology" in autism and related neuro-developmental disorders
- Complex in most, a number of factors involved

"I no longer see autism as a disorder of the brain but as a disorder that affects the brain. It also affects the immune system and the gut."

Dr Martha Herbert Paediatric Neurologist, Harvard

Enteric Nervous System

- Derived from the same tissue as the brain
- Acts independently
- Extends the whole length of gut
- Same receptors, neurotransmitters and proteins as the brain
- 90% messages are from the gut to the brain
- Interference to neural pathways can occur immediately
- Connection between the brains is a two way street, emotions and psychological factors play a role in GI disorders
- Disturbances in the connection at the gut level alters behaviour
- Learns, remembers and produces gut feelings

Why Diet is Important

We are what we eat.....

SIGNS IN BABIES

Reflux
Projectile vomiting
Constant crying especially after feeds
High pitched screaming
Poor sleep patterns
Colic
Diarrhoea
Burning and red bottom
Unexplained skin rashes
Eczema

Food Intolerance Signs

- Early intolerance to dairy, cow's milk or breast milk
- History of abnormal bowel function, diarrhoea/constipation
- Stomach pains and bloating
- Constant runny nose
- Night sweats
- Self restricting diet choices
- Flushed red cheeks
- Strong smelling urine
- Hyperactivity
- Poor attention and focus
- Irritability
- Mood swings
- Fears, anxieties and phobias
- Bed wetting
- Night terrors and or poor sleep

Where Do I Begin?

- Don't try to guess, difficult when it is food intolerance and the body does not react for up to 72 hours
- Immunology Dept will do the skin prick test for IgE immediate food allergies
- For IgG delayed food sensitivity reactions
Australian Biologics in Sydney
ARL in Melbourne

Allows for individualisation of a diet program and helps guide to whether there are other issues underlying: salicylates, phenols and oxalates

Why Dairy & Wheat are a Problem

- Can have both allergy and sensitivities
- Gluten can cause immune responses leading to inflammation of gut wall
- Decrease absorption of nutrients
- Gliadin mucosal damage in genetically susceptible
- Interfere with insulin
- Leaky gut

Food Addiction

- Incomplete breakdown of dairy & wheat result in opiate like molecules from casein in milk and gluten/gliadin in wheat, rye and barley
- Act as false neurotransmitters and bind to opiate receptors in the gut
- Food addiction, self restricting diet
- Cause changes to the brain tissue, oxidative damage, immune dys-regulation
- Interfere with nerve transmission altering sensory input
- Changes to perception and cognition leading to behavioural, mood and emotional imbalances

Additives, Preservatives & Colours

- Biochemical toxins
- Physical reactions
- Information processed more slowly

Parent ratings of behavioural effects of special diet therapies

Source: Autism Research Institute
ARI publication 34 / March 2005

	Got Worse ^A	No Effect	Got Better	Better: Worse	No. of Cases ^B
Candida Diet	3%	44%	54%	19:1	756
Feingold Diet	2%	45%	53%	25:1	758
Gluten- /Casein-Free Diet	3%	32%	65%	20:1	1446
Removed Chocolate	2%	49%	49%	30:1	1721
Removed Eggs	2%	58%	40%	19:1	1096
Removed Milk Products/Dairy	2%	49%	49%	32:1	5574
Removed Sugar	2%	51%	48%	24:1	3695
Removed Wheat	2%	50%	48%	29:1	3159
Rotation Diet	2%	50%	48%	21:1	792

Plan of Treatment

- Testing
- Removal of casein (dairy)
- Removal of gluten (wheat, oats, barley & rye)
- Identify and remove other reactive foods (salicylates, amines, MSG, egg, corn, soy, phenols, oxalates)
- Identify Candida and other Organisms
Remove yeast products, refined sugars and carbohydrates. Supplement with high quality probiotic.
- Consider specific vitamin and mineral supplements (zinc, vitamin C, B6, magnesium)
- Advanced supplementation, additional interventions and therapies
Digestive enzymes, Epsom salt baths, Olive leaf extract, Vitamin B12, Omega 3 Oils.
Heavy metal testing and detoxification

How Do I Start?

- Practitioner who understands, help and support
- Give at least 3-6 months
- Probiotics
- Remove dairy
- Remove gluten
- Be strict
- If improvements early then a drop off- underlying infections in the gut, important to treat now
- Fine tune diet

Adding a New Dimension

- Diet is an important first step.
- Clearing their minds, calming their systems and keeping them well
- Allows for all other intervention therapies to have maximum benefit
- Rewarding for child, therapist and parent

Body Ecology Diet

- Body Ecology Diet (Recovering our Kids)
- Aimed at restoring and maintaining "inner ecology".
- Based on premise of a systemic Candida overgrowth.
- Starts with a GFCF diet and eliminates sugars and bad fats.
- Eat and drink (every day) foods that are fermented or cultured.
- Introduces raw saturated fats such as raw butter and cream, antifungal coconut oil, cod liver oil and seed oils.
- Raw egg yolks to help nourish the brain.
- Fermented coconut water (cultured using Kefir)

- www.donnagates.com


Specific Carbohydrate Diet

- Eliminates specific dietary sugars and starches (complex carbohydrates) known to feed intestinal bacteria and yeast

Breaking The Vicious Cycle
Elaine Gottschall BA MSc
www.breakingtheviciouscycle.info

GAPS DIET

- Gut & Psychology Syndrome groups together Autism, learning disabilities, dyspraxia, ADD, ADHD, Dyslexia and behavioural disorders. Also depression, bipolar disorder, schizophrenia & OCD as having an underlying disorder of the gut.
- Compromised immune systems
 - As a result, possible adverse reactions to vaccination.
- Essential or beneficial gut flora vs opportunistic flora
- Neurotoxins produced by opportunistic flora absorbed through the damaged gut wall.

 Gut & Psychology Syndrome
- Dr Natasha Campbell-McBride

MD, MMedSci (neurology), MMedSci (nutrition)

Elimination Diet

- Eliminates all foods, toiletries, medications, vitamins and mineral supplements that contain **salicylates, amines and glutamates**
- **Strengths:**
 - reduces natural chemicals, additives & preservatives in processed foods and some fresh foods.
- **Weaknesses:**
 - doesn't allow for current research findings into leaky gut and the effects of undigested casein & gluten proteins – opiate effect on brain chemistry.
 - Doesn't provide gastro-intestinal support & healing through reduction of sugars and yeast to treat bacteria & yeast infections.
 - Doesn't allow for probiotic or other nutritional supplements to correct imbalances

Fail Safe Diet

- Independent information about the effects of food on behaviour, health and learning ability in both children and adults.
- Support for families using a low-chemical elimination diet free of additives, low in salicylates, amines and flavour enhancers (FAILSAFE) for health, behaviour and learning problems.



www.fedupwithfoodadditives.info



Fed Up by Sue Dengate



Fed Up with ADHD by Sue Dengate

Low Oxalate

- Often overlooked in a diet for salicylate intolerance.
- Some foods that are high in oxalates incl.
 - Golden delicious apples
 - Bananas
 - Chocolate
 - Buckwheat, millet, amaranth, quinoa, brown rice

Good luck on your journey

There is always hope

They teach us all to stay open, be flexible and daring

Autism & Attention Deficit Disorders

Understanding and Managing Diet Therapy for Your Child

