UNIFIED THEORY OF AUTISM

AUTISM SYMPTOMS

Timothy Syndrome-cardiac arrhythmia

Rhett Syndrome which affects girls
breathing difficulty
speech
movement
Tremors

Asperger's Syndrome which affect boys
ADHD
ODD
Depression
Bipolar
Anxiety
OCD

Heller's syndrome
Loss of communication skills

Common Autism Syndrome symptoms
Epilepsy
Sensitivity to light
Sensitivity to sound
Sensitivity to pain
Fatty Acid digestion problems
Multiple Food allergy
Constant motion
Type I diabetes
Thyroid disorder
Inability to metabolize sulphur compounds
Celiac symptoms
Tantrums

As of July 10, 2008, studies indicated that at least 6 genes may be related to autism. The genes are:

1) C3orf58 - located at 3q24 (chromosome 3 - position q24)
This gene codes for a protein found in the human testes. It was deleted in cases of autism. The protein this codes for is not well known currently, but it is interesting that the protein is found in the male reproductive system considering that the risk of autism is greater in males than females. It is connected to tyrosine phosphorylation and epidermal growth factor. Is this a genetic clue as to why autism is more prevalent in males?

2) NHE9 - located at 3q24 (chromosome 3 - position q24)
This gene codes for solute carrier family 9 members. These proteins are linked to the CPA1 transporter family that is involved with sodium channels in the nervous system. It is found in large amounts in the heart muscle and the skeletal muscles as well as lesser amounts in the placenta, kidney and liver, brain, medulla, and spinal cord. It is also found in the ovary and the spleen. It is obviously involved in the proper development and operation of the nervous system. In persons with a mutation in this gene, ADHD symptoms may appear.

3) PCDH10 - located at 4q283 (chromosome 4 - position q283)
This gene codes for protocadherin 10 precursor. This gene is involved with cell-adhesion protein, calcium ion binding and cell communication. It is found in the brain, testes, and ovary. Again, the nervous system and the endocrine system are involved. Note that glutamate neurotoxicity involves calcium channels.

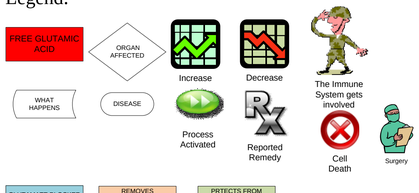
4) CNTN3 - located at 3p26 (chromosome 3 - position p26)
This gene codes for plasmacytoma associated neuronal glycoprotein. What is fascinating about this protein is that it is found in the brain - the frontal lobe, the occipital lobe, the cerebellum, and the amygdala. NOTE: the amygdala is what is targeted by MSG - it is involved in smell and taste as well as fear and may be responsible for the gaze-avoidance seen in autism. It is also associated with immunoglobulin. And so here is a link to the immune system, which in individuals with autism often is over-stimulated - resulting in multiple allergies.

5) RNF8 - located at 6p21.2 (chromosome 6 - position 21.2)
This gene codes for RING finger protein 8. What is extremely interesting about this protein is that it is used in ES ubiquitin - protein ligase formation. That may not mean much to you at the moment, but ligases are important in forming amino acids. Specifically, the ones that jumped out at us here were:
a) glutamate-cysteine ligase,
b) glutathione-synthase.
In other words, this gene is critical for the formation of glutathione. Glutathione is the body's natural means of chelating mercury and getting rid of it. No matter WHERE it comes from. Could THIS gene be the reason some children with autism often suffer from heavy metal toxicity? Is THIS the common genetic source of trouble with cysteine and sulfur metabolism seen in both children with autism and those of us sensitive to MSG?

6) SCN7A - located at 2q21-q23 (chromosome 2 - position q21 - q23)
This gene codes for proteins found in the heart and the uterus. Mutations in this gene result in: muscle weakness, trouble swallowing, blocked and inflamed blood vessels, swelling, and erythromelalgia, (which can be caused by MERCURY POISONING, and even bromocriptine - a drug used to treat both Parkinson's and prolactin - secreting pituitary tumors. Apparently the drug Effexor - and SSRI has been reported to relieve symptoms.) It is interesting that mutations in this gene ALSO give the same symptoms as mercury poisoning.

Neurexin 1 - In addition, in February of 2007, it was reported that the area of the human genome found to be associated with autism, contains the genes involved in building glutamate synapses - the very locations where glutamate is used as a neurotransmitter by the nerve cells.

Legend:



FOODS PROCESSED INTENTIONALLY TO FREE GLUTAMIC ACID

GLUTAMATE MG/100 GRAMS

AMOUNTS GIVEN ARE TOTAL UNLESS NOTED AS FREE

SOY 7774
YEAST 4154
WHEAT 3900
PEAS 3632
BARLEY 2771
MEAT 2703
FISH 2655
CORN 1800
COWS MILK 764

SOY SAUCE 1090 FREE
YEAST IS AUTOLYZED BY KILLING THE YEAST - LEAVING INTACT ENZYMES TO SPLIT THE PROTEINS APART
WHEAT GLUTEN 44,370
HYDROLYZED VEGETABLE PROTEIN CONTAINS APPROX. 20,000 MG FREE GLUTAMATE PER 100 GRAMS OF FOOD
HYDRO = "WATER" LYSE = "TO SPLIT"
MALTING BARLEY INCREASES ITS FREE GLUTAMATE CONTENT X 5
SLOW COOKING MEAT WITH MOIST HEAT HYDROLYZES THE PROTEIN – USED TO CREATE BEEF "EXTRACT"
DECOMPOSED FISH = "EXTRACT" OR "FISH SAUCE" GLUTAMATE CONTENT INCREASES (GLUTAMINE CONVERTS TO GLUTAMATE)
CORN PROTEIN 25,560
PARMESAN 1200 FREE
CHEESE 3691
MILK POWDER 5328
CASEIN 25,490
SOY PROTEIN 20,000
WHEY 19,000

HYDROLYZED PROTEIN IS APPROX 20% FREE GLUTAMATE BY WEIGHT!

PROCESSED FOODS CONTAINING EXCESSIVE GLUTAMATE

SOY PROTEIN USED IN BAKED GOODS, HOT DOGS, VEGETARIAN FOODS
POWDERED CHEESE USED IN SNACK CHIPS LIKE DORITOS
MALTED BARLEY USED IN BREADS, BEER
HYDROLYZED PROTEIN USED IN CANNED TUNA, SELF-BASTING POULTRY CANNED AND DRIED SOUPS
POWDERED MILK IS USED IN LOW FAT MILK AND BAKED GOODS

OTHER UNEXPECTED SOURCES OF GLUTAMATE

VACCINES
FREE GLUTAMIC ACID ADDED TO PRESERVE VIRUS
CIGARETTE MAKERS ADD AMMONIA WHICH CONVERTS TO GLUTAMATE IN THE BRAIN
AUXIGRO CROP SPRAY
29% FREE GLUTAMIC ACID

IMPORTANT FOOD SCIENCE NOTES:

- HIGH HEAT DESTROYS TAURINE
- HIGH HEAT AND SUBSTANCES IN CORN DESTROY TRYPTOPHAN
- MOIST HEAT PRODUCES MORE FREE GLUTAMATE
- GABA FITS THE SAME RECEPTORS AS VALIUM
- CARBOHYDRATES INCREASE SEROTONIN FORMATION
- VITAMIN C PROTECTS FROM NEUROTOXICITY
- VITAMIN B6 HELPS CONVERT AMINO ACIDS AND FORM COQ10
- GINGER CONTAINS ANTI-INFLAMMATORY AGENTS

EXCESS FREE GLUTAMIC ACID (GLUTAMATE)

BRAIN AND CENTRAL NERVOUS SYSTEM (CNS)
START
GLUTAMATE SWITCHES MANY CELLS IN THE CENTRAL NERVOUS SYSTEM TO ON!

Eye
Ear
Light Sensitivity
Blindness Myopia
Flashing Lights
Meniere's Disease
Tinnitus
Oligodendrocytes Killed
Myelin
Inter-leukin 12
Multiple Sclerosis
Fibro-myalgia
Amygdala
Smell
Taste
Feal
Insomnia
Hypothalamus
The Hypothalamus regulates Fight/Flight Reflex, Hunger, Temperature, Metabolism, and Reproduction. It directs the endocrine system by controlling the pituitary.
Oxytocin Lower?
Hunger
Fever Heat Sensitivity
Anxiety
PANIC
Rage
Microglia
The Microglia are the brain's immune system. They are free moving cells that can induce inflammation in the brain.
NMDA Receptors Sensitized
Valproic Acid exposure in the first trimester increases NMDA receptors and autism
Reduced NMDA Receptors
A.L.S
Migraine
Alzheimer's
Addiction
Epilepsy Seizures
AMPA Receptors
Substantia nigra
Dopamine
Restless Legs
Parkinson's
Depression
Binge Eating
Anti-bodies to Serotonin Receptor
Tryptophan
Indoleamine 2,3 dioxygenase
Serotonin
Niacin
Serotonin
Cytokines
Mastocytosis
Allergy
Histamine
Urinary Incontinence
Gastric Reflux
Asthma Excess NGF
Inflammation
Rosacea
Anorexia
Starvation
Heart Muscle Wasting
Psycho-therapy
SSRI Anti-Depressants
SSRI Increases Serotonin – the problem in anorexia in the first place. Are Doctors creating a vicious cycle by giving anorexia patients SSRI's???
Thyroid
Nodular Hyperplasia
Thyroid Hormone
NMDA Receptors
Thyroid Hormone
Hyper-thyroid
Tremors
Hypo-thyroid
Pituitary Tumor
Pituitary
Prolactin
Depression
Libido Decrease
Erectile Dys-function (ED)
Infertility
Pancreas
GABA
Growth Hormone
Hyperplasia
Acromegaly
Glutamic Acid Decarboxylase (GAD) turns Glutamate into GABA
Insulin
Hypo-glycemia
Anti-bodies to GAD
Islet cells killed by Immune System
GABA
Insulin Decrease
Type I Diabetes
Over 85% of those with Type 1 Diabetes have antibodies to GAD putting Type I diabetes patients at risk of excess glutamate
Ovaries
Progest-erone
Estradiol
Error of Fatty Acid Metabolism
Error of Sulfur Metabolism
Sulfite Sensitivity
Vitamin B12
Liver
Vitamin B6
Cysteine Metabolism
Uric Acid
Uric Acid is a neuroprotective anti-oxidant that increases as glutamate does
Taurine
Gout
Kidney Stones
Homo-cysteine
Vitamin B6
Gluta-thione
Vitamin B6
CoQ10
Gum Disease
AMPK
Leptin Resistance
Activity Decreases
Obesity Insulin Resistance Type II Diabetes
Mercury and Heavy Metal Toxicity
PMS
Blindness
Seizures
Atrial Fibrillation
Osmotic Imbalance
Bile
Cholesterol Solubility
Free Radical Damage
Gall Bladder "Attack"
Gallstones
Cancer
Constipation Diarrhea

Niacin
NRQX Prolactin
Ibuprofen
Ibuprofen Protects Dopamine Receptors from Toxicity
Does the body produce prolactin to protect the body from the neurotoxicity of glutamate and is this why glutamate causes prolactin increase and infertility in animal studies? Is prolactin the body's protective response to the destruction seen in MS? Could the higher protective Prolactin levels cause the lower number of autism cases in girls?
Valium
Lunesta Valium
In Children with ASD, the amygdala is activated – resulting in avoiding eye contact because the gaze of others is considered threatening
Candy
Soda
Sweets
Children given a GF/CF Diet often crave what appears to be the very foods they should not have. What if it is simply carbohydrates they crave to quiet down the CNS? Low Glutamic and Aspartic Acid foods that are higher in carbohydrate may be helpful for these children.
Ibuprofen
Valium
Valium fits GABA receptors
Ice Cream
ICE CREAM BUTTERFAT SUPPLIES GABA, MILK PROTEIN SUPPLIES TRYPTOPHAN
Divalproex
Haloperidol
Baclofen Riluzole Tramadol Nzandrine Ibuprofen
Memantine Ibuprofen
Memantine
CoQ10
Do ALS, and Alzheimer's patients share some of the same genes with autistic kids? Would they also be autistic if their brains were damaged before the age of 6 or 7? Are our Alzheimer's patients simply autistic kids born too soon????
Absinthe was outlawed in the US in 1910. It used to be considered a treatment for drug addiction to "downers" but was considered too dangerous because it could cause seizures.
Nicotine
Ketamine (Special K)
Cocaine
Alcohol
Aspartic
Taurine
Cocaine fits dopamine receptors
Alcohol sensitizes NMDA Receptors and leads to Vitamin B6 Deficiency
Absinthe contains a GABA Blocker and has the OPPOSITE effect of Alcohol – leading potentially to a vicious "self-medicating" cycle with alcohol abuse
Vitamin B6
Vitamin B6
Vitamin B6 helps turn glutamate into GABA and helps make CoQ10
Red Bull
Red Bull contains: Taurine Vitamin B6 – 250%RDA Niacin-100%RDA B12 – 80% RDA Pantothenic Acid – 50%RDA
Are Red Bull "Addicts" simply self-medicating??
Topiramate
Topiramate
Dopamine Agonist L-Dopa Bromocriptine Cabergoline
CoQ10
Lamotrogine Ketamine
Vitamin B6
Magnesium
Ane-Histamins
Magnesium
Singulair Leukotriene Blocker
Benadryl
Benadryl Aspirin Singulair Leukotriene Blocker
Guillane Barre Syndrome and Lupus
Cardio-vascular disease
Leaky Gut
Statins
Aspirin
CoQ10
Vitamin B6
Taurine
Note: Statins linked to CoQ10 Deficiency
In Japan, taurine is prescribed to lower blood pressure
OREGANO ROSEMARY GINGER CURCUMIN TUMERIC
QUERCETIN TRANS-RESVERATROL
Vitamin B6
Dopamine Agonist
Dopamine Agonist
Dopamine Agonist
Dopamine Agonist
In animal studies: MSG Increased Prolactin and Decreased Dopamine and resulted in infertility
Ice Cream
Orange Juice
Insulin
Vitamin B6
Vitamin E
Magnesium
Vitamin C
Cinnamon
Statins
CoQ10
Surgery
Topiramate
Surgery
Taurine
Surgery
Magnesium
Potassium
Surgery
Surgery
Statins
CoQ10
Surgery
Vitamin E
CoQ10
Vitamin C, Idebenone Alpha-Lipoic Acid
Surgery Chemo Radiation
Blue-berries
Orange Juice
Glutathione
Taurine
Selenium
Cilantro Rosemary Ginger
Amalgam Removal
No Fish
No Thimerosol
Surgery
Psycho-therapy
Cinnamon
Leuprolide acetate (Downregulates Hypothalamus) Also used to treat Prostate Cancer
Would Vitamin B6 help cure tremors in Alcoholics?
Should extremely tall people avoid MSG due to the increased growth hormone?
Would taurine help with PMS?
Do women crave Red Bull more than men when estrogen is high?
Is it miltdal what is necessary for growth in young mammals because the GABA and butyric acid stimulate pituitary to release growth hormone?

TAURINE, is an important sulfur-containing free amino acid (made from cysteine). It is the second most prevalent free amino acid in the human body after glutamate.

Taurine:
1) Regulates Heartbeat
2) Regulates osmotic balance
3) Acts as a water soluble anti-oxidant
4) Is used to make bile,
5) Is an inhibitory neurotransmitter
6) Is critical in the development of the nervous system and vision
7) Is an essential amino acid for human babies
8) Was only added to baby formula in 1986
9) Was found to be low in persons who had just had an epileptic seizure
10) Is used in Japan to lower blood pressure

Carol A. Hoernlein
Founder, MSGTruth
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