

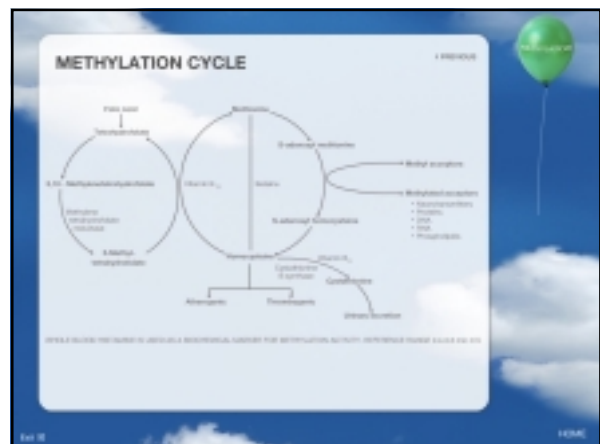
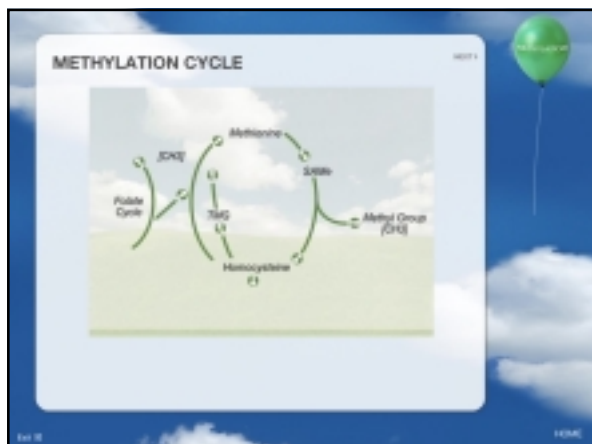
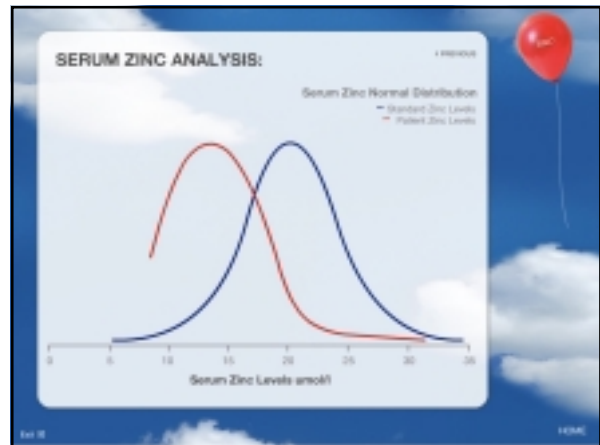
ZINC

The vast majority of autistic children have low zinc levels.

This clinic uses serum zinc as a marker. Levels are checked at the same laboratories using the same protocol. Specimens are collected by the same blood collectors using the same collection techniques. With this degree of standardization we are confident that our results are accurate and reproducible.

The spread of zinc levels is charted below and it is clear that on average the autistic group have a significantly lower level than non symptomatic people.

CAUSES:
 Poor absorption
 Increased excretion
 Low dietary intake.



METALLOTHIONEIN

Metallothionein proteins are found in most cells of the body. They contain between 61 and 68 amino acids and fulfil many functions.

HIGHEST CONCENTRATIONS:
Gastrointestinal tract
Brain

FUNCTIONS:
Breakdown of casein and gluten in GIT
Transport and sequestration of heavy metals
Correct brain maturation
Transport of zinc

METALLOTHIONEIN PROMOTION THERAPY:

The Pfeiffer Clinic have developed and patented a supplement of the 14 amino acids that make up metallothionein proteins in the same ratios that would be in the natural proteins.

1. PRE TREAT WITH ZINC
2. ENHANCE METHYLATION STATUS
3. SUPPLEMENT WITH METALLOTHIONEIN PROMOTER

SUGGESTED WEB SEARCH:
metallothionein, autism, Walsh

METHYL B12 INJECTIONS

A percentage of autistic children respond to methyl B12 injections. The response is often most marked in the development of speech.

Solution concentration 25mg methyl B12/ml.
Dose 63.5mg/kg each 3rd day.
Given with diabetic needle whilst child sleeps.

MODE OF ACTION:
Donation of methyl groups
Stimulation of D4 dopamine receptor

SUGGESTED WEB SEARCH:
www.dmsubrandar.com
Defn autism: D4 receptor

CHELATION THERAPY

One of the common theories of the cause of Autism is that heavy metal build up is a part of the problem. The metal most commonly implicated is Mercury.

HEAVY METAL MEASUREMENT:
Hair Analysis
Chelation Challenge
Urine Porphyrin Screen

CHELATION:
Giving a substance that binds to [chelates] another substance allowing the complex to be excreted.

CHELATION THERAPY

DMP5:
Intravenous, transdermal.
Mercury

DMSA:
Oral.
Mercury

EDTA:
Intravenous, rectal.
Lead

SUGGESTED WEB SEARCH:
Butar, autism, chelation, DMP5

RESEARCH AND EVIDENCE

MEASLES VIRUS IN CSF:
"Brody et al, presented DAN 2004, not published at that time.
67 children, Group A, 30 with regressive autism after MMR
Group B, 37 non autistic having LP [eg leukaemia].
Test for live measles RNA in CSF:
Group A, +ve in 18/30 or 60%
Group B, +ve in 1/37 or 3%

MEASLES VIRUS IN BOWEL:
"Walshfield et al, Lancet 1997; 351: 637-641.
Biopsy of reactive lymphoid follicles and tested for live measles virus RNA
+ve in 81% of ASD patients
+ve in 7% of controls.

RESEARCH AND EVIDENCE

GENETIC SUSCEPTABILITY:
 J James et al, presented 2004 DAN.
 Genetic mutations known as "Single Nucleotide Polymorphisms" for an enzyme important in the methylation pathway [methyltetrahydrofolate reductase, MTHFR.]
 +ve in 22% ASD patients
 +ve in 11% of controls

METHIONINE LEVELS:
 J James et al, presented DAN 2004.
 Demonstrated significant reduction in levels of methionine, SAMe, cysteine and glutathione in ASD patients of controls.
 Also showed normalization of methionine levels after supplementation with folic acid, TMG, and MB12 injections.

RESEARCH AND EVIDENCE

OXIDATION STATUS:
 Three recent studies show reduced antioxidant enzyme activity in ASD group.
 This supports the theory that OXIDATIVE STRESS causes autism symptoms in susceptible children.

MERCURY:
 Thimerosal (ethyl mercury) has been the preservative of choice in the immunization schedule for many years.
 Australia switched to mainly thimerosal free vaccines in 2001

SURVEY

Patients surveyed in June 2008
 Date of commencement in program Dec 2005 - Jun 2007
 All had established diagnosis of Autism or Autism Spectrum Disorder.
 Total number of patients 130 of whom 120 commenced treatment
 Age range 3yrs - 35 yrs. Most common age 3yrs - 6yrs. Only 4 patients over 16 yrs.
 Virtually all were having assorted early intervention therapies.
 Success criteria specified at initial interview. "What are the 3 major issues?"

