TARGETED NUTRITIONAL TREATMENT OF MENTAL ILLNESS

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This presentation details the impact that the introduction of targeted nutritional treatment for the management of mental illness has had on a standard general medical practice.

Areas covered include:
- **Getting started**
- Different types of nutritional imbalance
- Clinical patterns with different imbalances
- Biochemical patterns
- Nutritional protocols
- Case presentations
- 12 month follow-up on 567 patients
- The future
INVESTIGATIONS

**Serum Zinc Normal Distribution**

- Standard Zinc Levels
- Patient Zinc Levels

*Serum Zinc Levels umol/l*
INVESTIGATIONS

- **WHOLE BLOOD HISTAMINE**: 0.4--- 0.6 micm/l
- **URINE PYRROLE EXCRETION**: under 10 micgm/100ml
UNDERMETHYLATION (HISTADELIA):
Clinical Characteristics

- High achiever
- Self motivated through school
- High achiever before illness
- Strong willed
- High motivation
- High libido
- High energy
- High motivation
- Addictive behaviour
- Calm demeanour
- High inner tension
- Low pain tolerance
- Sparse hair growth
- Family history
<table>
<thead>
<tr>
<th>Clinical Characteristics (cont)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Catatonic psychosis</td>
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<tr>
<td>- Delusional</td>
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<tr>
<td>- Phobias</td>
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<tr>
<td>- Diagnoses of OCD/ODD</td>
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<td>- Frequent headaches</td>
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<td>- Difficult transitions</td>
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<td>- Denial of illness</td>
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<td>- Non compliance</td>
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<td>- Social isolation</td>
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<tr>
<td>- Ruminations regarding past</td>
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<td>- Heat intolerant</td>
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<td>- Seasonal allergies</td>
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</tbody>
</table>
BIOCHEMISTRY OF UNDERMETHYLATION

- High histamine
- Low Zinc
- Low copper
- High basophil count
- Low homocysteine
- High heavy metals on hair analysis
UNDERMETHEYLATION: Medication Reactions

- Adverse reactions to benzodiazepines
- Good response antihistamines
- Adverse reaction B complex vitamins
- Good response SSRIs
UNDERMETHYLATION: Supplements & Improvements

- SUPPLEMENTS:
  - Vitamin C, vitamin B6, P5P, Zinc, Methionine, SAMe, Calcium, Magnesium

- IMPROVEMENT EXPECTATION:
  - 8 to 12 months
OVERMETHYLATION (HISTAPENIA): Clinical Characteristics

- Poor achiever
- Poor motivation
- Artistic/musical ability
- High anxiety/panic
- Low libido
- Overweight
- Easily frustrated
- Sleep disorder
- Paranoia
- Depression
- Self mutilation
- Self isolation
- Nervousness
- Tinnitus
OVERMETHYLATION: Clinical Characteristics (cont)

- Food/chemical sensitivities
- High pain threshold
- Past Hx ADHD
- Hyperactive psychosis
- Religiosity
- Grandiosity
- Nil family history
- Hirsutism
- Eczema/dry skin
BIOCHEMISTRY OF OVERMETHYLATION

- Low histamine
- Low Zinc
- Low basophil count
- Copper overload
OVERMETHYLATION: Medication Reactions

- Adverse reaction anti-histamines
- Good response benzodiazepines
- Adverse reaction SSRIs
- Improvement on Lithium
- Adverse reaction oestrogen therapy
- Adverse reaction Methionine/ SAMe
OVERMETHYLATION: Supplements & Improvements

- **SUPPLEMENTS:**
  - Vitamin C, vitamin B6, P5P, Zinc, Niacinamide, Folate, vitamin B12, vitamin E

- **IMPROVEMENT EXPECTATION**
  - 3 to 6 months
PYRROLURIA (zinc deplete): Clinical Characteristics

- Poor stress control
- Anxiety
- Mood swings
- Temper
- Severe depression
- Irritability
- Little or no dream recall
- Poor short term memory
- Noise/light sensitivity

- Affinity for spicy food
- Reading disorder
- Behaviour/learning problems
- Underachievement at school
- Fear or airplane travel
- Impulsivity
- Hyperactivity
PYRROLURIA
Clinical Characteristics (cont)

- Food and chemical allergies
- Delay/skip breakfast
- Inability to tan
- Frequent infections
- Poor growth – FTT
- Premature greying
- Poor muscle development
- Delayed puberty
- Poor wound healing
- Delicate facial features
BIOCHEMISTRY OF PYRROLURIA

- Elevated Kryptopyrroles
- Zinc depletion
PYRROLURIA: Supplements & Improvement

- SUPPLEMENTS:
  - Vitamin C, vitamin B6, P5P, Zinc

- IMPROVEMENT
  - 1 to 3 months
CASE HISTORY 1: Schizophrenia Characteristics

- Male, age 26
- Average scholar, average at sport, did not try hard to improve either
- Attended TAFE and worked in bank
- Regular marijuana use from age 18
- Psychotic breakdowns age 23 and 24 in hospital both times
- Clinical characteristics: overmethylation
- Biochemistry: normal methylation.
  - Histamine 0.6  Zinc 12.6  Urine Kryptopyrroles 7.2
CASE HISTORY 1: Schizophrenia

Progress

- 6 months later
  - No difficulty with supplements
  - Prescription medication unchanged
  - Family notices big improvement
  - Major improvements: head clearer, thinking better, more alert, no voices, reacting better

- 12 months later
  - Continued clinical improvement
  - Reduced prescription medication
  - Reduced nutritional supplement dose
  - Has again enrolled at University to complete his study
CASE HISTORY 2: Schizophrenia Characteristics

- Male, age 28
- Multiple hospitalizations over prior 6 years
- Had not worked for 6 years
- Floridly psychotic at time of consultation
- Clinical characteristics: overmethylation
- Biochemistry: overmethylation
  - Histamine 0.1  Zinc 13.7  Urine Kryptopyrroles 16.6
CASE HISTORY 2: Schizophrenia

Progress

- 12 months later:
  - Feels generally healthy and stable
  - Almost nil delusions and paranoia
  - Not hospitalised during the year
  - Better quality of life
  - Commenced paid computer instruction work
  - Would also like to work with schizophrenic support groups
CASE HISTORY 3: Depression Characteristics

- Female, age 41
- High achiever at school and at ballet - pushed hard by father
- Severe depression commenced when touring with ballet company at age 20 - depressed ever since
- Two failed marriages
- Frequent suicide ideations, 3 suicide attempts, best friend suicided
- Regular hospital admissions, was having weekly ECT prior to consultation
- Clinical characteristics: undermethylation
- Biochemistry: overmethylation
  - Histamine 0.3  Zinc 13.1  Urine Kryptopyrroles 0
CASE HISTORY 3: Depression

Progress

- **6 months later:**
  - Moderate dyspepsia with supplements so dose reduced
  - Prescription medication unchanged
  - Days more even
  - No hospital
  - No ECT
  - Not “down” as much

- **12 months later:**
  - No hospital admissions
  - No ECT
  - Reduced prescription and nutritional doses
  - Resumed painting and has had a number of public showings
CASE HISTORY 4: Depression Characteristics

- Male, age 39
- Many years of relapsing depression, anxiety and lack of energy
- Had not worked for 2 years
- Clinical characteristics: overmethylation
- Biochemistry: zinc deplete
  - *Histamine* 0.6  *Zinc* 10.8  *Urine kryptopyrroles* 11
CASE HISTORY 4: Depression Progress

- Initial treatment was as zinc deplete with no change in 3 months
- Switched to overmethylation protocol which lead to steady improvement
- 12 months later:
  - Been in work 6 months in his own water purification business
  - Gradually increased hour worked to 8 hours per day
  - Aropax dose and nutrient dose halved
  - Clinical control maintained
CASE HISTORY 5: ODD

Characteristics

- Female, age 11
- Normal birth and neonatal period
- Abnormal tantrums age 2 and explosive temper ever since
- “Dysfunctional” family. Parents split and alternated care of child. Mother could no longer cope with the anger so child cared for by grandmother with parents having access alternate weekends
- Multiple attempts at behaviour therapy and extensive counseling failed
- Clinical characteristics: Pyrroluria
- Biochemistry: undermethylation and Pyrroluria
  - Histamine 1.3
  - Zinc 11.5
  - Urine Kryptopyrroles 23
CASE HISTORY 5: ODD
Progress

- **6 months later:**
  - clear change in 1st 2 months
  - Trying to be a better person
  - Does not yell or shout at grandmother
  - Cleans room
  - Doing better at school
  - Regresses at weekends with either parent, father feels she does not need supplements

- **12 months later:**
  - Much the same as at 6 months
  - Behaviour clearly different if taking the supplements and in grandmother’s care
CASE HISTORY 6:
Aggression Characteristics

- Male, 11 years
- Expelled from 3 schools - daily fights and bullying
- Poor attention, poor academic performance
- Had insight into his behaviour but could not explain his outbursts
- Clinical characteristics: Pyrroluria
- Biochemistry: Undermethylation
  - Histamine 1.0
  - Zinc 8.5
  - Urine Kryptopyrroles 2.5
CASE HISTORY 6: Aggression Progress

☐ 4 months later:
- No fights
- Walked away from confrontation
- Less victimization by teachers
- Grades from C/D to B/A
- Showing affection to mother

☐ 12 months later:
- Normal child
- Above average scholar
- Nil aggression
- Supplement dose reduced
- Clinical improvement maintained
CASE HISTORY 7: Anxiety Characteristics

- Male, age 26
- Preader-Willi Syndrome
- Delayed mental development
- Severe anxiety, temper and intermittent aggression
- Clinical characteristics: Pyrroluria
- Biochemistry: Pyrroluria
  - Histamine 0.4    Zinc 9.8    Urine Kryptopyrroles 30
CASE HISTORY 7: Anxiety Progress

- **6 months later:**
  - Happier, calmer, less anxiety and aggression
  - Psychiatrist comment, “Is this the same patient?”

- **12 months later:**
  - “Different person”
  - Minimal anxiety
  - Supplement dose reduced
  - Clinical control maintained
CASE HISTORY 8: Anxiety

- **Characteristics:**
  - Male, age 7
  - Generalised anxiety with extreme separation anxiety at school
  - Biochemistry: undermethylation
    - Histamine 1.1  Zinc 12.5  Urine Kryptopyrroles 19.6

- **Progress - 12 months later:**
  - steady improvement throughout year
  - Attending school with nil separation difficulty
  - Socialising normally
CASE HISTORY 9: Anxiety

- **Characteristics:**
  - Female, age 44
  - Many years of anxiety, stress, pessimism and worry
  - *Histamine 1.2  Zinc 12.5  Urine Kryptopyrroles 6.5*

- **Progress - 12 months later:**
  - Internal anxiety slowed a lot
  - Stress level down, less worried
  - Happier, calmer, optimistic
CASE HISTORY 10: Anxiety

- **Characteristics:**
  - Male, age 62
  - Highly successful and wealthy business man
  - Many years has been anxious and “over reactionary”
  - Biochemistry: Zinc deplete
    - Histamine 0.5  Zinc 10.5  Urine Kryptopyrroles 0

- **Progress - 12 months later**
  - Less anxious
  - Less reactionary
  - “Best he has felt for years”
CASE HISTORY 11: OCD

Characteristics

- Female, age 42
- Obsessive Compulsive Disorder (OCD) for last 10 years, developed through an abusive first marriage.
- Reclusive
- 12 hours of personal or house cleaning each day
- Hours spent under the shower
- Frequent headaches
- Attendance at the consultation was a major effort
- Biochemistry: Pyrroluria
  - Histamine 0.5  Zinc 11.1  Urine Kryptopyrroles 139.5
CASE HISTORY 11: OCD

Progress

- Rapid improvement initially and steady improvement over the year
- 12 months later:
  - House cleaning 2 hours, 2 days per week.
  - Self hygiene and showering like a “normal” person. No headaches.
  - Socialises normally, shops as others would and leads a normal life.
  - Reluctant to phase out the anafranil as she is doing so well
- Husband’s comment: “Thank you for giving me my wife back”
- Feels she has OCD beaten
CASE HISTORY 12: Bipolar Affective Disorder
Characteristics

- Male, age 22
- Anxiety, depression, mania for last 4 years.
- Four hospitalisations during this time
- Not worked or studied for 4 years
- Erratic bowel motions for many years
- Biochemistry: undermethylation
  - Histamine 0.7  Zinc 12.8  Urine Kryptopyrrole 0
CASE HISTORY 12:
Bipolar Affective Disorder
Progress

- Rapid clinical response to gluten withdrawal
- Steady improvement over 12 months
- 12 months later:
  - Feeling well
  - Doing more
  - More confidence
  - No “highs”
  - No hospitalizations
  - Resuming study of fine arts at university in 2006
CASE HISTORY 13: Autism

- **CHARACTERISTICS:**
  - Male 6 years
  - Normal physical development, virtually mute, panic in close situations
  - Biochemistry: Undermethylation, Pyrroluria
    - Histamine 1.7    Zinc 12.1    Urine Kryptopyrrooles 39.6
- Progress - 8 weeks later:
  - Quieter, more relaxed
  - Said more words in 4 weeks than he had in 4 years
- Progress - 12 months later:
  - Steady increase in vocabulary
  - Some short sentences, better comprehension
  - Less anxiety
  - Able to sit in consultation room with doors closed
  - Repetitive, obsessive behaviour persists
CASE HISTORY 14: Autism

- CHARACTERISTICS:
  - Male 4 years
  - At start mute, irritable, unable to remain in consulting room.
  - Obsessive behaviour
  - Grossly abnormal bowel motions
  - Biochemistry: normal methylation, Pyrroluria
    - Histamine 0.7    Zinc15.4    Urine Kryptopyrroles 27.5

- Progress
  - 4 months later: Counting to 20 repetitively. Shut door of consulting room
  - 8 months later: Said “Good morning Doctor Stuckey”
  - 12 months later: Bowels normal, toilet trained, saying 4+ word sentences, markedly better receptive language
## 1 YEAR SURVEY RESULTS

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Start</th>
<th>Drop</th>
<th>Total Comp 1 Year</th>
<th>Nil Respond</th>
<th>Partial Improv</th>
<th>Major Improv</th>
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<tbody>
<tr>
<td>AUTISM</td>
<td>130</td>
<td>118</td>
<td>10</td>
<td>108</td>
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<tr>
<td>ASPERGERS</td>
<td>12</td>
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<td>4</td>
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<tr>
<td>ADHD</td>
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<td>37</td>
<td>9</td>
<td>28</td>
<td>9</td>
<td>3</td>
<td>16</td>
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<tr>
<td>ANXIETY</td>
<td>90</td>
<td>84</td>
<td>18</td>
<td>66</td>
<td>9</td>
<td>14</td>
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<td>15</td>
<td>25</td>
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<tr>
<td>DEPRESSION</td>
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<td>117</td>
<td>34</td>
<td>83</td>
<td>14</td>
<td>16</td>
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<tr>
<td>SCHIZOPHRENIA</td>
<td>81</td>
<td>66</td>
<td>17</td>
<td>49</td>
<td>8</td>
<td>11</td>
<td>30</td>
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<tr>
<td>OTHER</td>
<td>27</td>
<td>19</td>
<td>3</td>
<td>16</td>
<td>3</td>
<td>2</td>
<td>11</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td><strong>567</strong></td>
<td><strong>492</strong></td>
<td><strong>110</strong></td>
<td><strong>382</strong></td>
<td><strong>70</strong></td>
<td><strong>91</strong></td>
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<tr>
<td>% of starters</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td>14.2%</td>
<td>18.5%</td>
</tr>
<tr>
<td>% of compliers</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td>18.3%</td>
<td>23.8%</td>
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</table>
CONTROL GROUP

- 30 PATIENTS WHO DID NOT START
  - MAJOR IMPROVEMENT......5......16%
  - PARTIAL IMPROVEMENT.....5......16%
  - NIL IMPROVEMENT..........16.....53%
  - RETURNED ....................  4..... 15%

- Hospital Days for these 30............650
- Hospital Days [est] for 489
  in treatment group.......................300