Neurotransmitters and Perception

Awareness
Consciousness
Subconscious
Chemistry
Physical

All must be in perfect harmony or balance for perfect health.
Diagnostic entries into a person's state of well being
Body types via coloured acetates
State of Being
Energy (ATP) levels
Hormones
Neurotransmitters
Regeneration / Degeneration

The development of quantum physics in the 1920's changed the world we see and thought we understood from a material world to one of energy. Atoms were discovered to be bundles of energy and not solid matter as previously thought.

As all three aspects of a State of Being should be in harmony, disharmony would mean an imbalance in the person's energy fields i.e. their meridian system. Chi equates to prana (breath, life, vitality of the spirit) or vital energy. Meridians are energy channels that flow in specific and predictable patterns.
We can measure meridian imbalances at specific acupuncture points. Meridians are waves of energy. Energy is composed of both wavelengths and frequency. Thus each meridian has a specific colour associated with it (wavelength) and a specific sound associated with it (frequency).

Meridians B&E Points

Low Serotonin Bl3
High Dopamine GUV37
Low Dopamine CV3
High Serotonin Kid 23
High Inhibition Lu1
High Noradrenaline
High Acetylcholine Liv14
High Histamine Sp21
Low Excitatory TW23
Low Acetylcholine GB1
Low Histamine St1
Low Noradrenaline SI19
Low Inhibition LI20
High Excitatory Cx1
A meridian should be thought of reflecting its physiological function rather than just the organ its named after.

How the Nervous System Communicates
Nerves talk to each other by secreting specific chemicals called neurotransmitters.

The message is transmitted by electricity just like a telephone.

Neurotransmitters are chemicals made by neurons and used by them to transmit signals to the other neurons or non-neuronal cells (e.g., skeletal muscle, myocardium, pineal glandular cells etc) that they innervate.
The neurotransmitters produce their effects by being released into synapses when their neuron of origin fires (i.e., becomes depolarized) and then attaching to receptors in the membrane of the post-synaptic cells.

This causes changes in the fluxes of particular ions across that membrane, making cells more likely to become depolarized, if the neurotransmitter happens to be excitatory, or stimulatory or less likely if it is inhibitory.

Neurotransmitters can also produce their effects by modulating the production of other signal-transducing molecules ("second messengers“ such as cAMP, cGMP, Phosphatidylinositol) in the post-synaptic cells.
Ten compounds -- belonging to three chemical families -- are generally believed to function as neurotransmitters somewhere in the central nervous system or periphery.

- Excitatory
  - Aspartic acid
  - Glutamic acid

- Stimulatory
  - Acetylcholine
  - Noradrenalin
  - Dopamine
  - Serotonin
  - Histamine

- Inhibitory
  - GABA, Glycine, Taurine

In addition, certain other body chemicals, for example adenosine, enkephalins, endorphins, nitric oxide have neurotransmitter-like properties.
Glutamic acid and GABA are the most abundant neurotransmitters within the central nervous system, particularly in the cerebral cortex; glutamic acid tends to be excitatory and GABA inhibitory. Aspartic acid and glycine subserve these functions in the spinal cord.

Once released into the synapse, each neurotransmitter combines chemically with one or more highly specific receptors; these are protein molecules which are imbedded in the post-synaptic membrane.

This interaction can affect the electrical properties of the post-synaptic cell, its chemical properties, or both.
When a Neuron is in its resting state, it sustains a voltage of about -70 milli volts as the consequence of differences between the concentrations of certain ions at the internal and external sides of its bounding membrane.

Stimulatory neurotransmitters either open protein-lined channels in this membrane, allowing extracellular ions, like Sodium (Na+) to move into the cell, or close channels for potassium.

This raises the neuron’s voltage towards zero, and makes it more likely that the cell will become depolarized. If the postsynaptic cell happens also to be a neuron (i.e., as opposed to a muscle cell), this depolarization will cause it to release its own neurotransmitter from its terminals.
Inhibitory neurotransmitters like GABA, Glycine and Taurine activate receptors that cause chloride (Cl-) to pass through the membrane; this usually hyperpolarizes the postsynaptic cell, and decreases the likelihood that it will become depolarized.

The excitatory neurotransmitter glutamic acid, acting via its NMDA receptor, can also open channels for calcium ions (Ca++). Excessive activation of these receptors in neurological diseases can cause toxic quantities of calcium to enter the cells, and kill them.

Once neurotransmitters have been secreted into synapses and have acted on their receptors, they are metabolised from the synapse either by enzymatic breakdown - for example acetylcholine, which is converted to choline and acetate, neither of which has neurotransmitter activity.
For neurotransmitters like
Dopamine
Serotonin
GABA

a physical process called reuptake takes place.
Neuronal membranes

Lipids are classified as
1. Simple lipids – oils and fats
2. Complex lipids
   a) Phospholipids
   b) Glycosphingolipids containing a fatty acid, sphingosine and a CHO
   c) Lipoproteins
Simple lipids are
a) Saturated (no double bonds)
  \[\text{CH}_3 - \text{COOH}\]
b) Unsaturated (mono or poly double bonds)
  \[\text{CH}_3 \equiv \text{COOH}\]
  (Methyl (w) end Carboxyl end)

**Saturated fatty acids**

<table>
<thead>
<tr>
<th>Name</th>
<th>Number</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formic</td>
<td>1</td>
<td>Bee stings</td>
</tr>
<tr>
<td>Acetic</td>
<td>2</td>
<td>Rumen fermentation</td>
</tr>
<tr>
<td>Proprionic</td>
<td>3</td>
<td>Rumen fermentation</td>
</tr>
<tr>
<td>Butyric</td>
<td>4 (−8°C)</td>
<td>Rumen fermentation</td>
</tr>
<tr>
<td>Valeric</td>
<td>5</td>
<td>Rumen fermentation</td>
</tr>
<tr>
<td>Caproic</td>
<td>6 (−3°C)</td>
<td>Coconut</td>
</tr>
<tr>
<td>Caprylic</td>
<td>8 (17°C)</td>
<td>Coconut</td>
</tr>
<tr>
<td>Nonanoic</td>
<td>9</td>
<td>Licorice root</td>
</tr>
<tr>
<td>Capric</td>
<td>10 (32°C)</td>
<td>Coconut</td>
</tr>
<tr>
<td>Undecanoic</td>
<td>11</td>
<td>Castor bean oil</td>
</tr>
<tr>
<td>Lauric</td>
<td>12 (44°C)</td>
<td>Breast milk, Coconut</td>
</tr>
<tr>
<td>Myristic</td>
<td>14 (54°C)</td>
<td>Nutmegs, Coconut</td>
</tr>
<tr>
<td>Palmitic</td>
<td>16 (63°C)</td>
<td>Animal and plant fats</td>
</tr>
<tr>
<td>Stearic</td>
<td>18 (70°C)</td>
<td>Animal and plant fats</td>
</tr>
<tr>
<td>Arachidic</td>
<td>20 (75°C)</td>
<td>Peanuts</td>
</tr>
<tr>
<td>Behenic</td>
<td>22 (80°C)</td>
<td>Seeds</td>
</tr>
<tr>
<td>Lignoceric</td>
<td>24 (84°C)</td>
<td>Cerebrosides, Peanuts</td>
</tr>
</tbody>
</table>
### Unsaturated fatty acids can be in either cis or trans forms

<table>
<thead>
<tr>
<th>Source</th>
<th>Monoenoic acid (one double bond)</th>
<th>Dienoic acids (two double bonds)</th>
<th>Trienoic acids (three double bonds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Palmitoleic</td>
<td>Cis-9-Hexadecenoic</td>
<td>All-cis-9,12-Octadenoic</td>
<td>All-cis-8,12,15-Octadecatrienoic</td>
</tr>
<tr>
<td>Olive</td>
<td>Cis-9-Octadecenoic</td>
<td></td>
<td>γ-Linolenic</td>
</tr>
<tr>
<td>Hydrogenated</td>
<td></td>
<td></td>
<td>α-Linolenic</td>
</tr>
<tr>
<td>Rapeseed</td>
<td>Erucic Cis-13-Docosenoic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cerebrosides</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pumpkin</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tetraenoic acids (four double bonds)

Pentaenoic acids (five double bonds)

Hexaenoic acids (six double bonds)

Fatty Acid Properties

A Phospholipid
Polar head group (hydrophilic)
Apolar, hydrocarbon tails (hydrophobic)
The unsaturated fatty acid tails are kinked and lead to more spacing between the polar heads and hence more movement.

Cell Membranes
Neuronal cell membranes
Glial cells – the C1 position is taken by a saturated fatty acid and C2 by an unsaturated fatty acid
Neurones – in many neurones the C1 position is taken by Arachidonic acid and C2 by DHA.
Retina – both C1 and C2 positions are taken by DHA.
Key nutrients for synthesising the phospholipids
Acetyl CoA (Vit B5)
NAD, NADPH (Vit B3)
Mg, Zn, SAM (Mg, B6, Folates, B12)
Choline
Ethanolamine
Serine
Inositol
Saturated fatty acids C16-18 (palmitic – stearic)
Unsaturated fatty acids C18-24
REGULATORY NEUROTRANSMITTERS
open Na+ channels causing depolarisation or stimulation.

CHOLINE

Acetyl CoA

choline acetyltransferase
thiamine triphosphate
Mn++

CoA

ACETYLCHOLINE

ACETYLCHOLINE

Inhibited by chemicals – pesticides toxic metals radiation galantamine

Hb0
acetylcholinesterase
B2
B3
Mn++
Zn++

Recycled

Acetate + Choline
Acetylcholine Receptors

1. Muscarine from the fungus Amanita muscaria. The effect of muscarine is tearing eyes, pupillary constriction, profuse sweating, drooling saliva, faecal dribbling or explosion from the anus. Painful peristalsis, low blood pressure and bradycardia.

Acetylcholine Receptors

1. Muscarinic receptor stimulation occurs physiologically when the parasympathetic nervous system is active during rest and sleep.
   i) Slows the heart rate
   ii) Stimulates the release of NO in blood vessels and so vasodilates
   iii) Stimulates the secretion of salivas, mucous, HCl, digestive enzymes and skin sweat glands.
   iv) Stimulates intestinal tone and peristalsis.
   v) Stimulates the ciliary muscle contraction.
   vi) Stimulates the ciliary muscle contraction in the eye causing relaxation of the lens which is then focused for near vision. Stimulates contraction of the iris ciliary muscles causing constriction of the pupil. Stimulates reduction of the intraocular pressure by better drainage through the canal of Schlemm.
2. Nicotinic (agonised by curare) receptors occur at

i) CNS especially in the hippocampus.

ii) The neuromuscular junctions

Acetylcholine is possibly the most widely used neurotransmitter in the body, and all axons that leave the central nervous system (for example, those running to skeletal muscle, or to sympathetic or parasympathetic ganglia) use acetylcholine as their neurotransmitter.
1. Muscarine receptors occur in the parasympathetic nervous system

2. Nicotinic receptors occur at
   i) CNS especially in the hippocampus.
   ii) The neuromuscular junctions

Muscarinic receptors can be assessed by “the looking into a bright light” test.
Natural sources of Acetylcholine

Shepherds purse  Fennel
Coriander      Black pepper
Hawthorn       Spinach
Carrot         Fenugreek
Cardamom       Stinging nettle

Acetylcholine is contained in
Egg yolks, peanuts, wheat germ, liver, meat, fish, milk, cheese and vegetables (especially broccoli, cabbage and cauliflower), legumes, organ and muscle meat, milk, and whole-grain cereals.
Anticholinergics
Solanacea family
Tomatoes
Potato
Tobacco
Jimsonweed
(Thorne apple)

Alpha-Solanine
Solanine is one of the main glycoalkaloids found in potatoes.

Natural Acetylcholinesterase Inhibitors
Natural Acetylcholinesterase Inhibitors

Galantathine (Galanthamine)  Snowdrops  Daffodils  Lemon balm

In a study done in 2003 at Nottingham University researchers investigating the use of Lemon balm for both mood elevation and cognitive performance in healthy volunteers aged 18-22 years, found that a low dose of 500mg a day was much more effective than taking either 800mg and suggested best taking the dose twice a day.
<table>
<thead>
<tr>
<th>Lemon balm</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tincture low dose</td>
<td>↑Calmness</td>
</tr>
<tr>
<td>Tincture high dose</td>
<td>↑Memory</td>
</tr>
<tr>
<td>Powder low dose</td>
<td>↑Memory</td>
</tr>
<tr>
<td>Powder high dose</td>
<td>↑Calmness</td>
</tr>
</tbody>
</table>

High dose Powder also increased secondary memory.

<table>
<thead>
<tr>
<th>Limonene – a powerful ACh-E inhibitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosemary</td>
</tr>
<tr>
<td>Black walnut</td>
</tr>
<tr>
<td>Cardamom</td>
</tr>
<tr>
<td>Tangerine</td>
</tr>
<tr>
<td>Lemon</td>
</tr>
<tr>
<td>Corn</td>
</tr>
</tbody>
</table>

Recent research has shown that Sage (Salvia) oil (50-150mg) can inhibit acetylcholinesterase improving memory recall by 8%. (Probably due to a high limonene concentration).

Medicinal Plant Research Centre, University of Newcastle and Northumberland August 2003
Many of the current drugs that inhibit acetylcholinesterase such as “Donepezil” have unpleasant side effects.

No side effects were noted in the sage trial, details of which are published in the journal “Pharmacology and Biochemistry”.

Possible mechanism by which lemon balm and sage may improve memory by increasing cerebral circulation.

<table>
<thead>
<tr>
<th>SYMPTOMS</th>
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</thead>
<tbody>
<tr>
<td><strong>DEFICIENCY</strong></td>
</tr>
<tr>
<td>Grief and Blame</td>
</tr>
<tr>
<td>Tachycardia, Hypertension</td>
</tr>
<tr>
<td>Dry mouth, Poor digestion</td>
</tr>
<tr>
<td>Constipation, Urinary retention</td>
</tr>
<tr>
<td>Long sight (hypermetropia)</td>
</tr>
<tr>
<td>Glaucoma, Myasthenia gravis</td>
</tr>
<tr>
<td>Hypercholesterolemia</td>
</tr>
<tr>
<td>Inhibition of short term memory</td>
</tr>
<tr>
<td>Confusion, Delirium</td>
</tr>
<tr>
<td>Hallucinations</td>
</tr>
<tr>
<td>Alzheimer’s</td>
</tr>
</tbody>
</table>
NORADRENALIN (NOREPINEPHRINE)
Noradrenalin is a neurotransmitter @
1. Postganglionic sympathetic nerves
2. The Brain stem
3. Some spinal pathways
4. The Pontine – thalamic, hypothalamic, limbic, hippocampus and neocortex tracts.

Adrenoreceptors
Two sub-types designated alpha and beta.

Alpha 1 receptors are found postsynaptically.
Alpha 2 receptors are found in presynaptic autoreceptors, postsynaptically and in the CNS.
Post synaptic effects
i) Contraction of the radial muscles of the iris leading to papillary dilation. Also keeps the eyelid open.
ii) Vasoconstriction.
iii) GI smooth muscle relaxation but sphincter contraction.
iv) Seminal vesicle and vas deferens contraction.
v) Constriction of trigone and bladder sphincter
Beta 1 receptors are found in the heart and increases force and contraction.

Beta 2 receptors cause
i) Skeletal muscle and liver vasodilation
ii) Brochodilation.
iii) GI smooth muscle relaxation.
iv) Relaxation of the uterus in pregnancy.
v) Relaxation of the bladder detrusor muscles.
vii) Release of renin causing hypertension
vii) Stimulates glycogenolysis, lipolysis and hypoinsulinism.

Noradrenaline enhances
Alertness,
Arousal
and Mood
Noradrenaline (NA) is secreted by many neurones in the brain stem and hypothalamus. Neurones in the locus ceruleus in the pons send fibres to many areas of the brain and help to regulate the overall activity and mood of the mind.
NA has both stimulatory and inhibitory actions.

Noradrenalin is the neurotransmitter released by sympathetic nerves
(e.g., those innervating the heart and blood vessels)
and, within the brain, those of the locus ceruleus, a nucleus activated in the process of focusing attention.

Sources of Noradrenalin
Banana,
Orange,
Plum,
Sweet potato,
Potatoes,
### SYMPTOMS

<table>
<thead>
<tr>
<th>DEFICIENCY</th>
<th>EXCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression, Apathy (Sloth)</td>
<td>Anxiety, tension</td>
</tr>
<tr>
<td>Lack of &quot;get up and go&quot;</td>
<td>† Superoxide production</td>
</tr>
<tr>
<td>† Superoxide production</td>
<td>Aggressive, violent, and impulsive behaviours</td>
</tr>
<tr>
<td>Memory impairment</td>
<td>Irritability (nothing right)</td>
</tr>
<tr>
<td>Dementia, Delusions</td>
<td>Hypertension</td>
</tr>
<tr>
<td>Delirium</td>
<td>Constipation</td>
</tr>
<tr>
<td>Hypotension</td>
<td>Underweight</td>
</tr>
<tr>
<td>Short sighted (Myopia)</td>
<td>Palpitations and Tachycardia</td>
</tr>
<tr>
<td>Bronchoconstriction-Asthma</td>
<td>Heart Arrhythmias</td>
</tr>
<tr>
<td>Small intestine problems – food allergy / intolerance</td>
<td></td>
</tr>
</tbody>
</table>
Tyramine is an indirect acting catecholaminergic amine found in Bananas and Avocados, Barley grass, Mandarin, Tangerine, Orange, Lemon, Grapefruit, Tomato, Pea, Plum, Aubergine, Cacao, Potato Cheese, Sour cream, Pizzas, Chocolate. 

*Pickled Herrings, Caviar, Liver, Salamis, Broad Beans pods.*

Fermented dairy products such as Yoghurt, Sauerkraut

Yeast extracts including Beer and Wine, Bovril, Oxo, Marmite, MSG and all fermented Soya Bean products.

Normally tyramine is completely inactivated by MAO when taken in the diet. Thus inhibition of MAO enzymes will lead to excess sympathetic activity. When these foods are eaten in the evening they often cause disrupted sleep and nightmares if high dopamine.

We know these foods because they are not permitted to be ingested when patients are taking monoamine oxidase inhibitor drugs such as

“Marplan”,
“Nardil”,
“Parnate”.
SLEEP DISTURBANCES

1. Difficulty in going to sleep. Check for high Noradrenalin and Tyramine excess.
2. Nightmares. Check for high Dopamine and Tyramine.
3. Awakes in the middle of the night. Usually a liver problem. Check for high Acetylcholine and detoxification defects.
4. General sleep disturbances maybe due to low serotonin leading also to low melatonin. Check especially for magnesium.

DOPAMINE
TYROSINE

L. DOPA

DOPAMINE

MAO

Oxidized Dopamine
(Dihydroxyphenyl acetic acid)

COMT

Methoxylated Dopamine
(Homovanillic acid)

Conjugates

DOPAMINE

\[ \text{O}_2 + \text{H}_2\text{O} \rightarrow \text{H}_2\text{O}_2 \]

\[ \text{Fe}^{++} \rightarrow \text{Fe}^{+++} \]

monoamine oxidase

\[ \text{Cu}^+ \text{ FAD} \]

Dihydroxyphenyl acetic acid + NH₂

catechol-O-methyltransferase

\[ \text{Mg}^{++}, \text{Zn}^{++} \]

Homovanillic acid
HOMOVANILLIC ACID

- Glutathione (Cysteine, Glycine, Glutamic acid)
- NAC, Zn++, P53, Sel
- Sulfation (PAPs) S, MSM
- Glucuronidation (UDP Glucuronic acid). Glucuronate
- Acetylation (Acetyl-CoA)
- Pantetheine, Acetyl-CoA

Conjugates excreted through the bile or urine

HOMOVANILLIC ACID

- Glutathione (Cysteine, Glycine, Glutamic acid) Spinach, Onion, Garlic, Rosemary, Watercress
- Sulfation (PAPs) Dill, Parsnip, Horseradish, Cabbage, Stringing nettle
- Glucuronidation (UDP Glucuronic acid) Cashew, Soy, Licorice, Flax, Almonds
- Acetylation (Acetyl-CoA) Endive, Pop, Cucumber, Watercress, Tomato

Dopamine circuits

Active in fear and negative emotions
Dopamine is a neurotransmitter:
1. Some sympathetic ganglion.
2. Some exocrine glands.
3. The gastrointestinal tract.
4. Mesenteric and renal arteries causing vasodilation.
5. Carotid body controlling respiratory reflexes. Hypoxia decreases dopamine release in the carotid body and reflexly stimulates respiration.

6. The dopaminergic nigro-neostriatal (extrapyramidal) pathway.
7. Dopaminergic midbrain mesolimbic forebrain system associated with cognitive, reward and emotional behaviour.
8. Dopaminergic tubero-infundibular system associated with neuronal control of the hypothalamic-pituitary endocrines.
9. Retina and is associated with photophobia and illumination.

Dopamine Receptors
Mainly are located in the CNS but many peripheral tissues such as the gut, blood vessels and the heart respond to exogenously applied dopamine indicating their sensitivity.
Receptors are sub-typed as
D1 located in post synaptic structures.
D2 located pre and post synaptically.
D3 located mainly in the mesolimbic pathways.
Some dopaminergic (i.e., dopamine-releasing) neurons run from the substantia nigra to the corpus striatum; their loss gives rise to the clinical manifestations of Parkinson's Disease; others, involved in the rewarding effects of drugs and natural stimuli, run from the mesencephalon to the nucleus accumbens.

Dopaminergic neurons involved in the actions of most antipsychotic drugs (which antagonize the effects of dopamine on its receptors) run from the brain stem to limbic cortical structures in the frontal region, while the dopamine released from hypothalamic cells travels via a private blood supply the pituitary portal vascular system, to the anterior pituitary gland, where it tonically suppresses release of the hormone prolactin.

(Drugs that interfere with the release or actions of this dopamine can cause lactation as a side-effect, even in men.)
Dopamine enhances
Sex drive
Mood
Alertness
Movement

L.DOPA is contained in
Avocado,
Banana,
Beans especially broad beans.

Natural sources of Dopamine
Hawthorn
Banana
Poppy seeds
Avocado
All proteins (meat, milk products, fish, beans, nuts, soy products).
Dopamine facilitates critical brain functions when present in normal amounts. It is associated with the feeling of pleasure and pain, and helps to mediate the reinforcing effects of natural rewards such as food, water, and sex. It is associated with emotional responses and subconscious skeletal muscle movements.

Dopamine is used to communicate between the hypothalamus and the pituitary gland, in the control of movement, and in the communication between the limbic system and frontal cortex.
Cannabis is the biggest cause of mental illness in UK, warns expert

SYMPTOMS
Bipolar manic depression

<table>
<thead>
<tr>
<th>DEFICIENCY</th>
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</thead>
<tbody>
<tr>
<td>Grief and Regret</td>
<td>Craving and Desire</td>
</tr>
<tr>
<td>1 TH2 production</td>
<td>1 TH2 production</td>
</tr>
<tr>
<td>Indecision</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Poor concentration</td>
<td>Aggression</td>
</tr>
<tr>
<td>Irrational behaviour</td>
<td>Confusion</td>
</tr>
<tr>
<td>A world without pleasure</td>
<td>Nightmares</td>
</tr>
<tr>
<td>Clumsiness, Photophobia</td>
<td>Psychoses</td>
</tr>
<tr>
<td>Dendritic growth inhibition</td>
<td>Schizophrenia</td>
</tr>
<tr>
<td>Depression/ Manic depression</td>
<td></td>
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<tr>
<td>Loss of smell, Tremor</td>
<td></td>
</tr>
<tr>
<td>Rigidity, Pains</td>
<td></td>
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</tbody>
</table>

4/17/2012
Charles Dickens, manic energy fed his creativity but also led to insomnia and depression.

SEROTONIN

The Gin of the Neurotransmitters
**SEROTONIN**

\[ \text{O}_2 + \text{H}_2\text{O} \rightarrow \text{H}_2\text{O}_2 \rightarrow \text{Fe}^{++} \rightarrow \text{Fe}^{+++} \rightarrow \text{SAM} \rightarrow \text{catechol-O-methyltransferase} \rightarrow \text{Mg}^{++}, \text{Zn}^{++} \rightarrow \text{Methoxyindole acetate} + \text{NH}_4 \]

\[ \text{O}_2 + \text{H}_2\text{O} \rightarrow \text{H}_2\text{O}_2 \rightarrow \text{Fe}^{++} \rightarrow \text{Fe}^{+++} \rightarrow \text{SAM} \rightarrow \text{catechol-O-methyltransferase} \rightarrow \text{Mg}^{++}, \text{Zn}^{++} \rightarrow \text{Methoxytryptamine} + \text{NH}_2 \]

**METHOXYINDOLE ACETATE**

- Glutathione (Cysteine, Glycine, Glutamic acid)
- NAC, Zn++, PSP, Sel
- or
- Sulfation (PAPs) S, MSM
- or
- Glucuronidation (UDP Glucuronic acid) Glucuronate
- or
- Acetylation (Acetyl CoA) Pantethine, Acetyl CoA

Conjugates excreted through the bile or urine
Serotonin is a neurotransmitter at
1. the midline raphe nuclei of the rostral pons
2. basal ganglion
3. hypothalamus
4. thalamus
5. hippocampus
6. limbic forebrain
7. areas of the cortex
8. brain stem to the medulla and spinal cord

The cell bodies, of serotoninergic neurons reside in the brain stem; their axons can descend in the spinal cord (where they "gate" incoming sensory inputs and also decrease sympathetic nervous outflow, thus lowering blood pressure) or ascend to other parts of the brain.
Brains of women produce only about two-thirds as much serotonin as those of men; this may explain their greater vulnerability to serotonin-related diseases like depression and obesity. Within the pineal gland serotonin is also the precursor for the sleep-inducing hormone melatonin.

Serotonergic nerve terminals are found in virtually all regions, enabling this transmitter to modulate mood; sleep; total food intake and macronutrient (carbohydrate vs. protein) selection; aggressive behaviors; and pain sensitivity.
Experiments using Prozac showed initially an increase in transit time in the gut motility. As the dose increased the motility slowed until it stopped. This indicated a loss of receptor activity due to over saturation. This may occur in the brain and it may predispose to an acute depressive crisis leading in severe cases to suicide.

Migraines and Serotonin

Serotonin is systemically a vasoconstrictor, but a vasodilator of the mid meningeal artery.
SEROTONERGIC RECEPTORS

5-HT release either from nerves or from platelets causes vasoconstriction of all large blood vessels.

Currently there are fifteen different receptor subtypes.

Natural sources of Serotonin
Sallow thorn, Avocado
Stinging nettle Banana
English walnut Cocoa
Pineapple Chocolate
Dates Plum
Tomato Turkey
The neurotransmitters serotonin, noradrenaline and dopamine are involved in the control of many of our mental states, sometimes acting on their own and other times acting together. These, and other neurotransmitters, are likely to play a pivotal role in the pathological basis of mental illness and brain disease.

Understanding the numerous neurotransmitters, their receptors, their location, and their interactions with one another has been central to the design of medicines for mental illness and has led to the development of successful products for many brain disorders.

Any activity in a garden such as weeding, pruning, cultivating and harvesting has been shown to increase low levels of serotonin.

Dr Roger Ulrich Texas A&M University August 2003
HISTAMINE

DEFICIENCY
- Shame and humiliation
- B cell production
- Depression (the blues)
- Suicide, sleep disorders
- Compulsive disorders
- Obsessive behavior such as Anorexia Nervosa, Bulimia, weight gain
- Decreased libido
- Impulsive aggression
- Alcoholism, Sexual deviance
- Explosive rage
- Low blood pressure
- Low body temperature
- Bladder problems - Toxic metal

EXCESS
- Anxiety and Fear
- B cell production
- Migraine
- Depression
- Pains
- Anorexia
- Masked aggression
- Obsessive compulsion
- Shyness
- Lack of self confidence
- Low sex drive
- Hypertension
- High body temperature
- Kidney problems - Toxic metal
- Need for more water
Histamine is most often thought of as a bad guy, associated with irritation. In fact it is associated with arousal.

HISTIDINE

Histidine decarboxylase

PLP
Zn++
Mg++

CO2

HISTAMINE

HISTAMINE

Methylhistamine

Imidazole acetic acid

Histamine decarboxylase

SAM (B6, Zn++, P5P)
Methylcobalamine
Methylhydroxybenzene

O2

Vit C

P5P

Methyl imidazole acetic acid

(systemic histamine)
Natural anti histamines - Vit E, Zn, Mg, Bioflavonoids
Low stomach acid (hypochlorhydria) causes the morning nausea and sickness often associated with pregnancy.

Histamine activates cAMP.
cAMP stimulates a Protein kinase which phosphorylates carbonic anhydrase.
Carbonic anhydrase forms HCl in the stomach and NaHCO3 in the pancreas.
Low stomach HCl leads to nausea.

Histamine stimulates Hydrochloric acid
Pepsinogen
Secretin
Nitric Oxide (from iNOS)
So stimulating Alertness
Sexuality
Motor activity
Histamine is a neurotransmitter at CNS pathways involved in
1. Arousal
2. Nausea and vomiting
3. Control of blood pressure
4. Control of water metabolism

Natural sources of Histamine
Prickly pear  Stinging nettle
Cabbage     Milk thistle
Shepherds purse
Celendine
Melon
Sunflower

Histamine is contained in
Bass, Beer, Chicken, Cocoa, Chocolate, Cod, Crab, Haddock, Ham, Lobster, Milk (cow and goat), Mutton, Oyster, Salmon, Scallop, Shrimp, Trout, Tuna, Turkey, Yeast.
Histamine receptors in the CNS
Ligand binding studies have shown H1, H2, H3 receptors in the CNS of uneven distribution.

Histamine receptors outside the CNS
H1 receptors stimulation induces
Brochoconstriction.
Constriction of intestinal smooth muscle.
Constriction of large arteries and veins.
Relaxation of arterioles, small veins and capillaries especially in the brain.
Increased capillary permeability.
H2 receptor stimulation induces gastric acid secretion.

<table>
<thead>
<tr>
<th>SYMPTOMS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEFICIENCY</strong></td>
</tr>
<tr>
<td>Lethargy</td>
</tr>
<tr>
<td>Hypochlorite production</td>
</tr>
<tr>
<td>Loss of libido</td>
</tr>
<tr>
<td>Oedema</td>
</tr>
<tr>
<td>Low immune function</td>
</tr>
<tr>
<td>Stomach problems - hypochlorhydria</td>
</tr>
</tbody>
</table>
GABA is an inhibitory neurotransmitter in parts of
1. The brain especially the cortex, hypothalamus, basal ganglia, cerebellum and hippocampus
2. Substantia gelatinosa of the dorsal horn of the spinal cord
3. Retina - It is not present in peripheral nerves

GABA receptors
GABA A receptor stimulation leads to an increase in chloride ion permeability.

They are present mainly in the cerebral cortex and the hippocampus.
GABA β receptor stimulation leads to changes in potassium conduction. They are present mainly in the cerebellum and spinal cord.

GABA δ receptor for
*benzodiazepine* and *barbiturate*

---

### Symptoms

<table>
<thead>
<tr>
<th>DEFICIENCY</th>
<th>EXCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apathy and Despair</td>
<td>Anger and Hate</td>
</tr>
<tr>
<td>↓ TH1 production</td>
<td>↑ TH1 production</td>
</tr>
<tr>
<td>Symptoms of Glutamate excess</td>
<td>Muscle relaxation</td>
</tr>
<tr>
<td>Convulsions such as epilepsy</td>
<td>Stuttering (Phos serine)</td>
</tr>
<tr>
<td>Tetany and spastic disorders such as torticollis.</td>
<td>Lung problems</td>
</tr>
<tr>
<td>Decreased cerebellar reflexes</td>
<td></td>
</tr>
<tr>
<td>Extrapyramidal disorders such as dystonia</td>
<td></td>
</tr>
<tr>
<td>Lateral inhibition of the retina</td>
<td></td>
</tr>
<tr>
<td>Thalamic sensory disorders</td>
<td></td>
</tr>
<tr>
<td>Large intestine problems such as parasites / lungs</td>
<td></td>
</tr>
</tbody>
</table>
GLYCINE

Glutamate  
transaminase

Choline  
Betaine

Serine  
CO₂+NH₄+NADH+H⁺

Glycine is an inhibitory neurotransmitter at some pathways in the
1. spinal cord
2. retinal
3. brainstem and forebrain
Glycine is a free form amino acid found in protein foods and can be synthesised from glutamate, alanine, serine, choline via DMG and from carbohydrates.

Glycine receptors are blocked by strychnine.

<table>
<thead>
<tr>
<th>SYMPTOMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFICIENCY</td>
</tr>
<tr>
<td>Apathy and despair</td>
</tr>
<tr>
<td>Anxiety (loss of inhibition)</td>
</tr>
<tr>
<td>Symptoms of glutamate excess.</td>
</tr>
<tr>
<td>Motor neurone spasticity</td>
</tr>
<tr>
<td>Large intestine problems such as parasites / fungi</td>
</tr>
</tbody>
</table>

GLYCINE MERIDIAN DIAGNOSTIC POINTS

YANG POINTS (DEFICIENCY)

YIN POINTS (EXCESS)
Taurine is the most abundant amino acid in the body and acts as an inhibitory or neuro-modulatory neurotransmitter at some pathways in the
1. Brainstem
2. Retina at the inner plexiform layer
3. Striated muscles

Taurine receptors are blocked by strychnine.

Died whilst eating an apple

Symptoms

<table>
<thead>
<tr>
<th>DEFICIENCY</th>
<th>EXCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apathy and despair. Anxiety</td>
<td>Anger and hate</td>
</tr>
<tr>
<td>Hypercholesterolemia</td>
<td>Stuttering</td>
</tr>
<tr>
<td>Muscular dystrophies</td>
<td>Lung problems</td>
</tr>
<tr>
<td>Photoreceptor degeneration</td>
<td></td>
</tr>
<tr>
<td>Retinitis pigmentosa</td>
<td></td>
</tr>
<tr>
<td>Toxicity</td>
<td></td>
</tr>
<tr>
<td>Large intestine problems</td>
<td></td>
</tr>
</tbody>
</table>
EXCITATORY NEUROTRANSMITTERS (open Na⁺, K⁺ and/or Ca²⁺ channels causing multiple depolarisation or stimulation)
Excitatory Neurotransmitters

- Glutamic acid: Salt taste
- Aspartic acid: Sweet taste
- Cystathione: Bitter taste (blocked by AMP)
- Arginosuccinate: Sour taste

ASPARTATE (ASPARTIC ACID)

Asparagine synthesis

Asparagine oxidase

Asparagine synthetase

Oxaloacetate

Pyruvate

Asparagine

Amino acid oxidase

FAD

Fe

COO⁻

CH₂

H

NH₃⁺

COO⁻
RECEPTORS
Aspartate and Glutamate receptors occur throughout the CNS.

Glutamate receptors
In the spinal cord glutamate receptors are most concentrated at the primary afferent fibres in the dorsal roots and may serve to relay sensory information and to regulate motor activity and spinal reflexes.

In the brain glutamate receptors are found in high concentration in the cortex, hippocampus, neostratum and cerebellum with lower levels in the hypothalamus. They are also present in the retina of the eye.
ASPARTATE RECEPTORS

Aspartate receptors are located in the dorsal and ventral grey matter where they cause excitation of spinal excitatory interneurones where it may regulate motor and spinal reflexes and in the retina of the eye.

SYMPTOMS

<table>
<thead>
<tr>
<th>DEFICIENCY</th>
<th>EXCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aimless</td>
<td>Manic</td>
</tr>
<tr>
<td>NO production</td>
<td>NO production</td>
</tr>
<tr>
<td>Learning disorders</td>
<td>Hyperactivity</td>
</tr>
<tr>
<td>Weight gain</td>
<td>ADDH / Dystexia / Amnesia</td>
</tr>
<tr>
<td>Loss of libido due to low NO</td>
<td>Muscle spasm, Restless legs</td>
</tr>
<tr>
<td>Memory loss</td>
<td>Nystagmus and Tinnitus</td>
</tr>
<tr>
<td>Hypothyroidism</td>
<td>Irritable Bowel Syndrome</td>
</tr>
<tr>
<td></td>
<td>Chronic Fatigue Syndrome</td>
</tr>
<tr>
<td></td>
<td>Fibromyalgia</td>
</tr>
<tr>
<td></td>
<td>Convulsions / Epilepsy</td>
</tr>
<tr>
<td></td>
<td>Hypothyroidism</td>
</tr>
</tbody>
</table>

EXCITATORY MERIDIAN DIAGNOSTIC POINTS

YANG POINTS (DEFICIENCY)  
YIN POINTS (EXCESS)

TW 23  
C-1
ASPARTAME and DEPRESSION

Aspartame decreases the availability of Tryptophan to the brain.

Tryptophan is the essential amino acid building block to serotonin, which when present in the brain in low amounts leads to depression and compulsive disorders.

ASPARTAME DEGREDATION

ASPARTAME is
ASPARTIC ACID + PHENYLALANINE
Aspartame production

INGESTED AND WARMED TO BODY TEMPERATURE 37°C IT IS ACTIVATED UPON BY CHYMOTRYPSIN

WITH THE CREATION OF METHANOL IN THE ILEUM.

METHANOL IS OXIDISED TO FORMALDEHYDE AND FORMIC ACID
Energy production

1. Glycolysis

2. Kreb's or Citric acid cycle

3. Electron transport or Oxidative phosphorylation

Mg-ATP
Mg-ADP

Glycogen

Glucose

Pyruvate

Glyceraldehyde-3-phosphate

Fructose-1,6-bisphosphate

Fructose-6-phosphate

G6P - Glucose-6-phosphate

F6P - Fructose-6-phosphate

F1,6B - Fructose-1,6-bisphosphate

G3P - Glyceraldehyde-3-phosphate

3-PG - 3-Phosphoglycerate

1,3-BPG - 1,3-Bisphosphoglycerate

Pi - Inorganic phosphate

3-PO4 - 3-Phosphate

ADP - Adenosine diphosphate

ATP - Adenosine triphosphate

AMP - Adenosine monophosphate

ADP - Adenosine diphosphate

Mg-ADP - Magnesium-adenosine diphosphate

Mg-ATP - Magnesium-adenosine triphosphate
Oxygen

the most vital nutrient

of all
Hypoxia challenge
1. Eyes up and down 6x
2. Weak muscle strengthens to O2

Challenge from weakness against
1. Citrated Iron
2. Citrated Hydroxycobalamin
3. Adenosylcobalamin
4. Methylcobalamin

Gangliosides.
SPHINGOMYELINS

CoA + Palmitic Acid

Palmitoyl CoA + Serine

3-Ketosphinganine

3-Ketosphinganine

NADPH reductase

NADP

Dihydrosphingosine

P5P, Mn++, CoA-SH

Sphingosine

Sphingosine + Palmitic Acid

Acy-CoA acyltransferase

CoA-SH

Dihydroceramide

P5P desaturase

2H

Ceramide

Sphingomyelin

Sphingosine + Palmitic Acid

Acyl-CoA acyltransferase

CoA-SH

Dihydroceramide

P5P desaturase

2H

Ceramide

Sphingomyelin

NADPH reductase

NADP

Dihydrosphingosine

P5P, Mn++, CoA-SH

Sphingosine

3-Ketosphinganine

CoA + Palmitic Acid

Palmitoyl CoA + Serine

3-Ketosphinganine

Sphingosine

Dihydrosphingosine

Sphingomyelin

P5P, Mn++, CoA-SH

3-Ketosphinganine

Dihydrosphingosine

Sphingosine

Sphingomyelin
GLYCOSPHINGOLIPIDS

Ceramide → Ceramide
UDPGlucose → UDP
UDPGalactose → UDP
Galactosyl cerebroside → Galactosyl cerebroside
UDPGalactose → PAP
UDPGlucose → UDP
Glucosyl cerebroside → Glucosyl cerebroside

Sulfatides → Sulfatides

Gangliosides

The fatty acid maybe Palmitic, Stearic, Behenic or Lignoceric acids or a monounsaturated fatty acid such as Nervonic acid.

Sphingosine + Fatty acid + Glucose + Galactose + N.A. Neuraminic
Ganglioside GM2

Sphingosine + Fatty acid + Glucose + Galactose + N.A. Neuraminic + N.A. Galactosamine + Galactose
Ganglioside GM1

Gangliosides are attached by UDP and CMP carriers.

The level of gangliosides in myelin is low but Ganglioside GM1 prevails. Specific binding has been proven for many kinds of gangliosides. When administered parenterally, gangliosides:
1. Circulate in the bloodstream continuously.
2. Do not express toxicity.
3. Pass through blood-brain barrier.
4. Incorporate themselves into neuronal membranes.
Ganglioside GM1

1. Restores dopaminergic neurons after damage to nigro-striatal system, enhances uptake of dopamine and activity of tyrosine hydroxylase.
2. Restores cholinergic neurons after damage to the hippocampus, enhances activity of choline acetyl transferase and AChesterase.
3. Restores high-affinity uptake of choline in the cortex after injuries of the forebrain.
4. Protects serotonin and noradrenergic neurons from neurotoxin-induced degeneration.
5. Diminishes cerebral oedema and restores ionic balance after cerebral traumas.
6. Stimulates regeneration of the optic nerve.
7. Possibly restores melatonin uptake.

Common neurological diseases

Multiple sclerosis
Low ACh

Parkinson’s disease
Low Dopamine, High ACh

Motor neurone disease
High Glutamate
Alzheimer’s disease  
Low ACh

Epilepsy  
Low GABA

Haemorrhagic stroke  
Homocysteineamia

Ischemic stroke  
Oxidised cholesterol

**SUBCONSCIOUS EMOTIONS**

Subconscious emotions  
1. Challenge with eyes straight down making sure the eyes do not converge.

2. And / Or Therapy localise left then right greater wing of sphenoid (Amygdala) and then right and then left greater wing of sphenoid.
Amygdala Therapy localise to the greater wing of the right and then left sphenoid. Then reverse therapy localisation.

Subconscious emotions
2. Positive hormonal substrate challenge is negated by cross therapy localisation to GV 19

GV19 appears to be an access point to the limbic system connections to the hypothalamus.

Cross therapy localisation to GV19 thus indicates a probable subconscious emotional involvement affecting the local endocrine gland.
If therapy localisation negates the substrate challenge then find the B&E point that negates.

THIS WILL BE THE THERAPEUTIC MERIDIAN.

NOT THE CAUSE.
Shame and Humiliation  I truly am Triumphant
Guilt and Blame  I truly am Released
Apathy and Despair  I truly am Motivated
Grief and Regret  I truly am Liberated
Anxiety and Fear  I truly am Grounded
Craving and Desire  I truly am Thankful
Anger and Hate  I truly am Joyous
Pride and Scorn  I truly am Meek (resilient)
Agitation  I truly am Emphatic
Lethargy  I truly am Aroused
Tense  I truly am at Ease
Lazy  I truly am Dynamic
Manic  I truly am Calm
Aimless  I truly am Focused

The causal meridian will therapy localise in the clear with the complementary acetate(s) on.
### Subconscious emotions

<table>
<thead>
<tr>
<th>Meridian</th>
<th>Emotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bladder 1</td>
<td>Shame and Humiliation</td>
</tr>
<tr>
<td>Gallbladder 1</td>
<td>Guilt and Blame</td>
</tr>
<tr>
<td>Large intestine 20</td>
<td>Apathy and Despair</td>
</tr>
<tr>
<td>Conception vessel 24</td>
<td>Grief and Regret</td>
</tr>
<tr>
<td>Kidney 27</td>
<td>Fear and Anxiety</td>
</tr>
<tr>
<td>Governing vessel 27</td>
<td>Craving and Desire</td>
</tr>
<tr>
<td>Lung 1</td>
<td>Anger and Hate</td>
</tr>
<tr>
<td>Liver 14</td>
<td>Pride and Scorn</td>
</tr>
<tr>
<td>Spleen 23</td>
<td>Agitation</td>
</tr>
<tr>
<td>Stomach 1</td>
<td>Lethargy</td>
</tr>
<tr>
<td>Heart 1</td>
<td>Tense</td>
</tr>
<tr>
<td>Small Intestine 19</td>
<td>Lazy (inability to act)</td>
</tr>
<tr>
<td>Circulation / sex 1</td>
<td>Manic</td>
</tr>
<tr>
<td>Triple warmer 23</td>
<td>Aimless</td>
</tr>
</tbody>
</table>

A YIN causal meridian will be negated by a YANG meridian.

A YANG causal meridian will be negated by a YIN meridian.

### Therapeutic options for over-writing a subconscious program.

1. Affirmation
2. Tapping
3. Flower essence or tree essence
4. Culinary herbal adaptogen
5. Colour therapy
6. Music therapy
7. Deep massage
8. Hypnosis
Subconscious emotions
“Right now there is a subconscious emotion generating your hormone imbalance”.

1. Affirmation
Shame and Humiliation  I truly am Triumphant
Guilt and Blame  I truly am Released
Apathy and Despair  I truly am Motivated
Grief and Regret  I truly am Liberated
Anxiety and Fear  I truly am Grounded
Craving and Desire  I truly am Thankful
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Agitation  I truly am Emphatic
Lethargy  I truly am Aroused
Tense  I truly am at Ease
Lazy  I truly am Dynamic
Manic  I truly am Calm
Aimless  I truly am Focused

2. Tapping
Tap at 2 Hz the negating meridian B&E point bilaterally where applicable and vocalise the subconscious affirmation 20x three time per day or more often as necessary.

Magic figure is 1000 repetitions.
3. Flower or Tree essence

Bach
Bush
Californian
Findhorn
Orchid
Petit fleur

Tree essences

Beech  Horse chestnut
Birch   Mountain ash
Box     Pine
Fir     Plum
Ginkgo biloba  Sweet chestnut
Hawthorne  Walnut

All Tree essences are obtained from the Champion trees of Kew gardens.
Tree essence
Identify Tree Essence and negating meridian colour and simulate into the culinary herbal tincture.

Patient to take culinary herb 3x day just before saying their affirmation and tapping.

4. Culinary herbal tinctures
Culinary herbs are adaptogens for the hypothalamic hormones. Thoughts create feelings and emotions. These are modulated by the hypothalamic hormonal output instigated neurologically by the limbic system.

Hypothalamic hormone modulators
CTRH ↑↓ TRH ↑↓
LHRH ↑↓ FSRH ↑↓
GHRH ↑↓ GHIH ↑↓
PLH ↑↓ PRIH ↑↓
Endorphins ↑↓
Oxytocin ↑↓
When there is a subconscious emotion showing up one hypothalamic hormone will be high and another low. One culinary herbal tincture will modulate the imbalance and relieve the negative feelings and emotion associated with the imbalance.

Culinary herbs

- Basil also Parasites
- Coriander also Toxic metals
- Dill also Radiation
- Marjoram also Virus
- Oregano also Bacteria
- Rosemary also Chemicals
- Sage also Fungi

Simulate any flower or tree essence into the culinary herbal tincture.

Patient to take culinary herb 3x day just before saying their affirmation and tapping.
5. Colour Therapy

Either use a LIGHT BOX with a coloured acetate corresponding to the therapeutic meridian colour

Or

Simulate the colour vial (Genesis kit) corresponding to the therapeutic meridian colour into the culinary herbal tincture.

6. Music therapy

“Water Crystal Healing”
Music and Images to Restore Your Well-being

Masaru Emoto

Hardback copy contains two CDs that have the music for each meridian.
Water Crystal Music works well alongside light therapy on a LIGHT BOX.
One 15 minutes session together each day.

7. Deep Massage
Releases somatic manifestations of subconscious emotional stress locked into deep muscle tissues. Usually these tensions are in the meridian associated muscles.

Deep massage has been demonstrated to release endorphins. Candice Pert "Molecules of Emotion."
8. Hypnosis

Can be by regression to past incidents relating to the current subconscious emotion or
By implanting positive new emotions over the old to rewrite the program.

Unconscious emotions

An unconscious emotion will be the one associated with the priority meridian.

Negative thinking leads to a loss of vital energy or vitality (Chi or prana). This is why the person will weaken to the BLACK acetate. Constant negative thinking will hard wire into the subconscious neuronal loops in the limbic system and create imbalances in the hypothalamic hormones.
Unconscious emotions can be challenged for

Either weakening to the BLACK acetate

And / Or therapy localisation to the right frontal eminence and then the left frontal eminence. The challenge other way round.

The frontal eminences are immediately adjacent to the frontal orbital lobes of the frontal cortex. The decision making part of the brain.

Unconscious emotions

Bladder 1  
Gallbladder 1  
Large intestine 20  
Conception vessel 24  
Kidney 27  
Governing vessel 27  
Lung 1  
Liver 14  

Shame and Humiliation  
Guilt and Blame  
Apathy and Despair  
Grief and Regret  
Fear and Anxiety  
Craving and Desire  
Anger and Hate  
Pride and Scorn
Unconscious emotion points

Shame and humiliation
Craving and desire
Apathy and despair
Anger and hate
Pride and scorn
Guilt and blame
Anxiety and fear

Therapy for Unconscious emotion
Self negative thoughts
1. Affirmation
2. Love
3. Exercise
4. Deep massage
5. Meditation
6. Being with others
7. Sex – orgasm
8. Walk in the woods

Therapy for Unconscious emotion
Third party negative thoughts
1. VEP spray with Love and Bliss
2. Aromatherapy
3. Prayer and meditation
Therapy for Unconscious emotion
Collective unconscious negative thoughts
1. VEP spray with Love and Bliss
2. Aromatherapy
3. Light therapy
4. Prayer and meditation
5. Walk in the woods
6. No newspaper or TV
7. Keep away from negative people

Affirmations
An effective treatment to elevate the Scale of Consciousness and release unconscious negative emotions to is an affirmation.

I truly want to release my unconscious emotion of ……………… and replace it with the infinite power of love now and forever.

Patient aims to say this 20 times just before going to sleep for 4 weeks.

Most people fall asleep saying the affirmation.
Therapy for Unconscious emotions

Use the VEP spray containing the twelve gem stone essences
1. Jasper  2. Sapphire
3. Chalcedony  4. Emerald
5. Sardonyx  6. Sardius
7. Chrysolite  8. Beryl

St John Revelation 21 v19

VEP (Vital Energy Protector) spray contains the 12 gemstone essences, the frequency of LOVE and BLISS and Lemongrass aromatherapy oil.
You can tag the VEP with the complementary colour(S) and other aromatherapy oils.

Calibration for the consciousness of the priority meridian.

Using the Scale of Consciousness of David Hawkins – “Out of 1000 with 700 being the state of enlightenment and 540 being that of unconditional love, your ........ meridian calibrates at .......”
Therapy for Unconscious emotions

The “LOVE” frequency vial - 528Hz

There is a special sound and colour of love according to Dr. Horowitz, a Harvard-trained award-winning investigator. Broadcasting the right frequency can help open your heart, prompt peace, and hasten healing. "We now know the love signal, 528 Hertz, is among the six core creative frequencies of the universe because math doesn’t lie, the geometry of physical reality universally reflects this music; these findings have been independently derived, peer reviewed, and empirically validated,” Dr. Horowitz says.