

## **ADHD and other behavioural patterns that can be associated with an unbalanced body chemistry as revealed on a hair test.**

*taken from articles by Dr L Wilson © Dr L Wilson and Associates*

*NB Fast oxidation is a low calcium and magnesium and a higher sodium and potassium level. Slow oxidation is the exact opposite. Oxidation is the rate at which energy is produced in the body at cellular level.*

**ADD and ADHD** – fast oxidation, slow oxidation with copper imbalance, all toxic metals, low Na/K ratio,

**Alcoholic** - low zinc, high copper, (alcohol depletes zinc and magnesium and B-complex vitamins), fast oxidizers may crave acetates in alcohol. Slow oxidizers may crave sugars in alcoholic beverages and use alcohol to maintain blood sugar levels.

**Anger** – fast or slow oxidation, a low Na/K ratio, often with a calcium shell (very high level), copper, iron or manganese toxicity.

**Anxious** – fast or slow oxidation, especially a calcium imbalance, mercury, copper, cadmium or lead toxicity.

**Apathetic** – low energy, usually a very slow oxidizer, possibly other toxic metals that go with slow oxidation or perhaps a very low Na/K ratio.

**Anorexia** – high copper, low zinc (low appetite), low Na/K, hidden copper toxicity indicators or hidden low zinc indicators.

**Awareness, reduced** - calcium shell, very slow oxidation, elevated copper, low zinc, low Na/K ratio, four lows.

**Brain fog** – copper imbalance, usually a slow oxidizer, aluminum and often other toxic metals such as mercury, lead or cadmium.

**Bipolar disorder** – mixed oxidation, four highs, four lows, very slow oxidation rate.

**Compulsive** - four lows, fast oxidizers at times, low K at times.

**Defensiveness** – Ca/Mg ratio greater than 9 or so, spiritual defensiveness pattern, high Na/K ratio, very low Na/K ratio, fast oxidation, calcium shell.

**Depression** – very slow oxidation and low Na/K ratio, also toxic metals such as nickel, cadmium and others

**Developmental delay** (PDD and many other labels) – zinc deficiency, or toxic metal excess.

**Effeminate tendency** – excess copper in men, especially, or low zinc possibly.

**Emotional repression** – calcium shell, perhaps a low Na/k ratio.

**Irritable, nervous** – fast oxidation, high copper, toxic metals such as mercury, cadmium and others.

**Learning disorders** – many imbalances, low energy, all toxic metals, copper in gifted children.

**Low libido or low sex drive** – slow oxidation, calcium shell (numbed or suppressed), low Na/K and other low energy patterns.

**Macho (toughness)** – cadmium excess.

**Manic** – fast oxidation, high copper, mercury or perhaps other toxic metals.

**Mood swings** – see bipolar disorder.

**Obsessive-compulsive disorder** – fast or slow oxidation with high copper, low Na/K, perhaps other toxic metals such as mercury.

**Paranoid** – fast oxidation, especially if extreme, low Na/K ratio, very slow oxidation, or a calcium shell.

**Passive-Aggressive** – four highs plus a calcium shell, and perhaps with a low Na/K ratio.

**Phobias** – fast or slow oxidation, low zinc, high copper, low Na/K ratio.

**Psychosis** – high copper or most toxic metals.

**Schizophrenia** – high copper or manganese, possibly mercury or other metal toxicity.

**Self-esteem, low** – bowl pattern (high Ca/Mg with low Na/K), low energy patterns such as a very slow oxidation rate.

**Sexual dysfunctions** - high copper, very low copper in a fast oxidizer, toxic metals, very slow oxidation, for men only: low zinc, high cadmium, high copper associated with impotence and erectile dysfunction.

**Spacy or detached** – high copper or high manganese, mainly in slow oxidizers.

**Vitality, low** – four lows, low Na/K or phosphorus less than 12 mg%.

**Workaholic pattern** – four highs/three highs with a high sodium/potassium ratio.

**THE AGGRESSIVENESS PATTERN OR LOW CALCIUM.** In these cases, there is no protective wall of calcium for the hair mineral chart. This results in a tendency for hyper-irritability, nervousness, anxiety, aggressiveness, muscle tension and other symptoms of low calcium and magnesium in most cases.

The classic example is a young children with ADHD who cannot calm down, is hypersensitive and often hyperkinetic, and easily stressed or upset because he lacks the buffering element, calcium.

Magnesium patterns. Magnesium is similar to calcium in many ways. The levels of calcium magnesium generally move up and down together when one is healthy. Magnesium, however, is a bright, shiny, lightweight, electrically conductive metal, unlike calcium. So it is not as rigid and hard as calcium and instead is the main enzyme activating mineral in the human body required for thousands of critical enzymes.

High magnesium=fatigue, lethargy and depression. This is for similar reasons as with calcium, as both minerals affect the nervous system somewhat in the same way.

Biounavailability. Magnesium, as with calcium, becomes biounavailable when it is too high in the hair. This can give rise to a combination of symptoms of deficiency due to

biounavailable magnesium, along with tissue excess of this mineral.

While calcium is more structural material (like cement), magnesium is more about protein material in the body, which is more flexible and softer. Magnesium is in the bones, too, but not as much as calcium. Dr. Eck did not identify a magnesium shell although high magnesium often accompanies a calcium shell. He did identify a pattern associated with a low magnesium that he called **belligerence pattern** when magnesium is less than about 3 mg%.

**ADRENAL STRESS PATTERN.** Those with a level of sodium above about 50 mg% or so are often very active, angry or aggressive. These emotions are associated with a faster oxidation rate and more adrenal glandular activity. The higher the sodium level, the more pronounced the pattern, in general. However, as with all the minerals, at times other factors can temporarily displace the sodium reading upwards.

**HIGH OR HIDDEN LEAD.** Lead is associated with violence, behavioral problems, irritability, anxiety, sluggishness and dullness of the mind. It can replace calcium in some areas of the body such as the bones, and replaces zinc in some key enzyme systems in the nervous system and elsewhere. Unfortunately, fast oxidizer babies and children are extremely prone to lead absorption because it replaces calcium, which they must have for their growth and development. Paints, tiles, auto fumes from the past and other sources combine to make lead toxicity one of the worst in the world, even today, 35 or more years after lead was removed from auto and aircraft fuel.

**HIGH OR HIDDEN CADMIUM.** Dr. Eck called cadmium the pseudo-male or macho element. It gives a kind of false and rigid or macho type of strength. It may be called a "lower male" element, as it tends to harden and toughen the personality a little bit. It replaces zinc and selenium in some enzymes, and also hardens the arteries and other body structures.

Symptoms. Women. Women with cadmium are "tough cookies", as they say. The basic effect of cadmium is to harden a person. In excess, this leads to many behavioral problems including hatred, violence, cruelty and more.

A positive aspects of cadmium is that gives women a chance in society. It literally hardens the women, just as it hardens their arteries and kidneys. This is positive for women although they suffer the physical consequences such as cancer and heart disease.

The hardening due to cadmium is superficial. Underneath the personality is brittle, somewhat like iron only worse, and unhealthy. This is very important to recall when working with those who are loaded with cadmium.

Men with the pattern do well in positions such as the military and police. The cadmium hardens them so they can take chances and do their jobs properly. If cadmium becomes excessive, they can turn violent, cruel, heartless and criminal in their outlook and behavior.

The weakness factor of cadmium causes post-traumatic disorders and occasionally disasters for the military. A study of Navy recruits found the most behavior issues with

those who had elevated cadmium in their hair tissue.

**Children. Most children are born today with some cadmium toxicity that is passed on from their mothers. The children are sickly, often suffer from ADD or ADHD or autism, and may be fussy, hard to manage, aggressive and not relaxed and happy.** When the cadmium is removed by a nutritional balancing program, the children can suddenly become much sweeter and nicer.

## **FAST OXIDATION**

Everyone is born in fast oxidation. Babies are generally happy, outgoing, expressive and announce their needs without hesitation. About age 3 to 10, most of us change to slow oxidizers, and this is happening at earlier and earlier ages today.

Some children are simply ill and they "run out of steam" by age 3 or 4. Others have a difficult home life and the stress causes them to "burn out" to some degree at an early age. Others are becoming much more spiritual and tend to turn inward, a slow oxidizer quality. Others change due to infections, other illnesses, effects of vaccines, nutrient deficiencies and for other reasons.

Children. If the rate becomes too fast, the children may have many behavioral problems associated with fight or flight tendencies such as ADD and even more so ADHD and at times, autism. In autism, however, the tendency for anxiety and irritability is turned inward, apparently, until mercury and other toxic metals are cleared so that the brain functions better.

This pattern is also common in many learning disorders and behavior problems of young children, especially those under age 3 or 4. Later, most become slow oxidizers with copper toxicity and other toxic metal problems.

**TEEN AND ADULTS.** Most older children, teens and adults are slow oxidizers. Teenagers are often exhausted from a lack of enough sleep and rest and poor diets, along with pressures to succeed and other types of pressure. The level of suicide, drug use, sexual experimentation and other problems of teens is directly related in part to their imbalanced body chemistry.

Good parenting is critical, but just better parenting will not correct the biochemical imbalances seen in these children.