

## Excerpt ...

### Methylation: The Molecule That Unlocks The Body's Healing Response

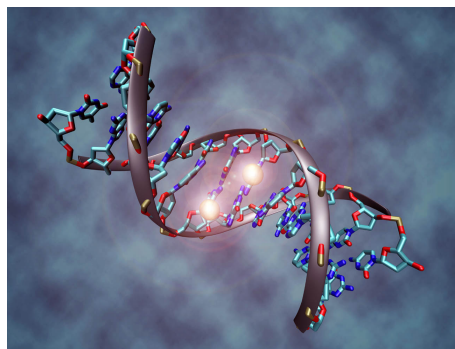
A Key To: Detoxification, Cell Repair, Graceful Aging, Weight Loss, Neurotransmitter Balance, Healthy Immunity, Disease Prevention, Nerve Protection, and so much more.

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*A molecular biologist could write a million pages on methylation and only touch on a small fraction of the subject. Methyl groups are largely ignored in nutritional healing, much to the detriment of a therapeutic program's ultimate success. Here, in this 2-part discourse, discover how providing the body with nutritional methyl donors can be the dividing line between success and failure. Even more importantly, methylation holds an answer to the chemical toxicity and electromagnetic field damage that causes inflammation, mitochondrial dysfunction, and DNA breakage. Natural health clinicians today are quickly realizing that methyl donors are a new solution to environmentally caused maladies.*

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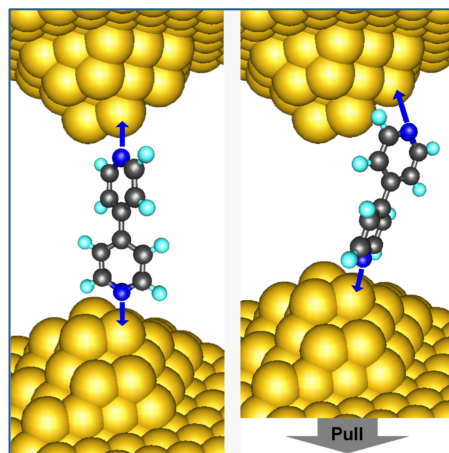


*Graphic of DNA methylation. Methyl groups switch genes on and off and help repair damaged DNA.*

Our bodies conduct over a billion methylation<sup>1</sup> processes every moment of our lives! More than any other molecule, methyl groups<sup>2</sup> (CH<sub>3</sub>) are involved in the healthy function of the body's life processes, and more than any other molecule, the lack of methyl groups for methylation is involved in chronic, degenerative developments, autoimmune concerns, hormonal processes, and neurotransmitter imbalances. In fact, healthy methylation processes are synonymous with good health and an inability to methylate is synonymous with symptom expressions and poor health. For many people, improving methylation provides new hope for depression, anxiety, autism, and the myriad symptoms that come from exposure to environmental toxins that interfere with the body's genetic expression of optimal health.

**On/Off Switches.** Methyl groups are the on/off switches of the cells' activities—turn on a genetic expression, turn off an enzyme reaction, turn on serotonin (and feel good), turn off inflammation (and prevent chronic degenerative and auto-immune concerns), turn on melatonin (and sleep), turn off delusional thoughts (and survive), turn on the detoxification of a phenol (and stop food allergies), turn on neurotransmitters (and not be depressed), turn off neurotransmitters (avoid anxious excitability), turn on the tissue repair mechanism (and heal), turn off the stress response before it damages healthy cells.

These are but a few of the many important switches that methyl groups facilitate, and thus here is a critically important topic. If our patients are short a few methyl groups, their bodies cannot respond to the healing directive of our natural therapies. If vitamins, minerals, nutriment, coenzymes, herbs, and homeopathic remedies are to help the body, methylation processes must be available and able to perform. Hence, methylation takes us deep into the heart of healing, into the very core of the individual cells where all lasting healing



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<sup>1</sup> **Methylation** – the adding, and in some cases the subtracting (demethylation), of a methyl molecule to a chromo- some, toxin, enzyme, molecule, etc.

<sup>2</sup> **Methyl Groups** – a molecule with one Carbon atom and three Hydrogen atoms, thus CH<sub>3</sub>. It is often abbreviated *Me*. Methyl groups can be found in 3 forms: anion, cation and radical. The anion has 8 valence electrons, the radical 7 and the cation 6. All three are highly reactive and perform many of the wonders of life.

occurs.

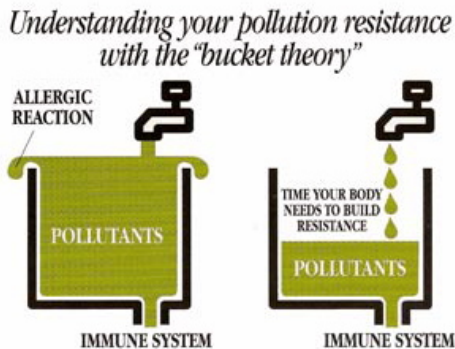
### A Growing Problem. A New Solution!

As a seminar teacher for natural health professionals around the world, I have been hearing a consistent concern throughout all the disciplines (doctors, chiropractors, acupuncturists, naturopaths, and clinical nutritionists) that's only getting more noticeable each year. Natural health clinicians are not getting the results that they used to get, and results are more hard won than ever before.

*The times have changed and our natural health therapeutic approaches must evolve, or there is a diminishing return in results and patient referrals.*

Not too long ago, a chiropractor could give an adjustment, restore full nerve energy, and the body would quickly correct a wide variety of symptoms including hypoglycemia, migraines, and asthma. Not so today. Years ago, food-based supplements worked quick miracles for people needing tissue supports. Not so today. Years ago, a single dose constitutional homeopathic remedy often quickly restored vital health. Not so today as homeopaths must become experts in "case management" and even deviate from the founding principles of the *Organon of Medicine*<sup>3</sup> (e.g. repeating the dose) to more effectively address what the body must do to restore health in the 21<sup>st</sup> Century.

*If the instruction manual (DNA) is damaged or flawed, or the transcriber of the instructions (RNA) misinterprets the information, then the job won't get done correctly. The "job" is proper cellular function upon which our health depends.*



**Bucket Theory?** Simply put, clinicians are not getting the positive results today that they were getting ten years ago. The "bucket theory" proposes that the thousands of modern-day toxins (chemicals, pesticides, water pollutants, cosmetics, dental fillings, vaccinations, industrial wastes, etc.) gradually accumulate in the body's 70 trillion cells and then, when there is a tipping point such as too much accumulation or a stressful phase of life, then the body's self-regulatory processes break down and chronic degenerative diseases result.

This break down is often called "cellular inflammation" and Time Magazine<sup>4</sup>, featured this information as the "Secret Killer"

and demonstrated the link between inflammation and the degenerative maladies that afflict humanity.

The bucket theory, often rejected by the medical model that prefers to link one cause with one effect as a non-individualized occurrence, is still considered to be part of the reason that there are so many "no-known-cause, no-known cure" diseases. It's not the sole cause because nutritional depletion is an equal factor. Nutrition provides fuel for the chemical energy of life (ATP – Adenosine TriPhosphate), anti-oxidants to reduce inflammatory and free radical processes, fatty acids for cell membrane integrity, detoxification support, and methyl groups for proper genetic expression and cellular function.

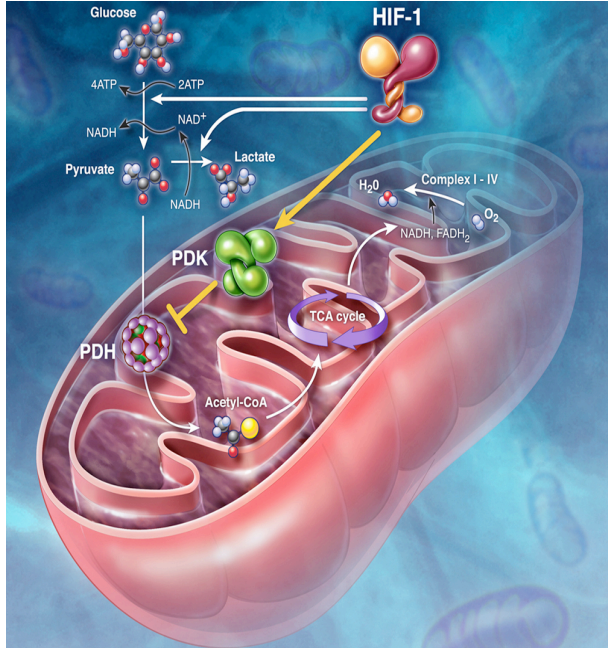
The onslaught of cellular damage has only increased in the past ten years despite the heroic efforts of green, organic, and environmentalist movements. The toxic environment damages cellular function deep within the cell's epigenetics<sup>5</sup>, ionizing (X-rays, mammograms) and non-ionizing (cell phones, airport scanners) radiations damage

<sup>3</sup> *Organon of Medicine* – by Dr. Samuel Hahnemann. The founding philosophy of classical homeopathy and presentation on the laws of health, disease and cure.

<sup>4</sup> *Time Magazine*, 2/23/2004, *Inflammation: The Secret Killer*.

<sup>5</sup> **Epigenetics**— In biology, and specifically genetics, **epigenetics** is the study of heritable changes in phenotype (appearance) or gene expression caused by mechanisms other than changes in the underlying DNA sequence, hence the name *epi-* (Greek: *επι-*

DNA, and genetically modified foods damage DNA more and more every day as “Round Up® Ready<sup>6</sup>” genetically modified (GMO) toxins are being incorporated into infants DNA around the world<sup>7</sup>. No one who eats, drinks, or breathes is immune or safe from the onslaught of health damaging environmental influences, and the accumulation and effects of these negative influences become “obstacles to cure” that block the body’s efforts to correct errant processes that result in disease.



**Mitochondrial Dysfunction.** Recently we’ve seen where Science’s attention has turned to “mitochondrial<sup>8</sup> dysfunction” as a catch-all for all the *no know cause, no know cure* diseases. This is the realm of the mitochondria organelle and its functions known as the Krebs Cycle<sup>9</sup>, beta-oxidation<sup>10</sup>, and mitochondrial mDNA damage from free radicals and inflammation. Blessedly, once again, our natural therapies are able to rise to this old but newly named challenge and deliver effective solutions despite humanity raising the ante on Mother Nature.

The one key area of cellular function that has been overlooked (until now) is methylation. Based on my clinical experience and the experience of hundreds of practitioners who are embracing healing at the cellular level as necessary for clinical results, nutritional methyl donors are restoring the vibrancy to our patients and practices because they unlock the aforementioned resistance to healing by supporting the cells with the nutrition required for them to health themselves.

**Cellular Healing.** All genuine healing is within the cell. As we master nutritional support of the cells, the cells respond by healing themselves and thus restoring their optimal function. When cells function optimally, then tissues function properly. When tissues function optimally, then organs and glands function properly, and when that occurs, the body can live in excellent health. Seems simple enough.

Today, the cells are blocked from their optimal function as man made chemicals and radiations damage the DNA, cause membrane inflammation, and damage the very energy processes within the cells. This means that our healing therapies must be able to address the cell, its organelles, and life processes which include the production of ATP energy, RNA transcription of healthy DNA, and of course, methylation is right in the middle of it all.

**End of excerpt. The article continues for 16 pages.**

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over, above) -genetics. For example, DNA methylation or histone acetylation, serve to suppress gene expression without altering the sequence of the silenced genes.

<sup>6</sup> **Round Up Ready** – trademark by the Monsanto Corporation. Denotes genetically modified crops that are resistant to death by the neurotoxic herbicide, Round Up® that are now infiltrating the global food supply including soy, corn, beet, and alfalfa.

<sup>7</sup> “GM Food Toxins Found In The Blood Of 93% Of Unborn Babies,” The Daily Mail, **6/08/2011**: Department of Obstetrics and Gynaecology, at the University of Sherbrooke Hospital Centre, Quebec, Canada.

<sup>8</sup> **Mitochondria** – the organelles with a eukaryote cell that produce the body’s miracle of chemical life energy (ATP).

<sup>9</sup> **Krebs Cycle** – also called the citric acid cycle, is part of a metabolic pathway involved in the chemical conversion of carbohydrates, fats and proteins into carbon dioxide and water to generate a form of usable energy. This occurs in the mitochondria.

<sup>10</sup> **Beta-oxidation** is the process by which fatty acids, in the form of Acyl-CoA molecules, are broken down in mitochondria and/or in peroxisomes to generate Acetyl-CoA, the entry molecule for the Citric Acid cycle.