

**Review: Mark Sloan, *The Ultimate Guide to Methylene Blue*,  
EndAllDisease Publishing, 2021**

Pages: 486

**The Color of Health Is Blue!**

A fascinating look at the properties of a 19<sup>th</sup>C dye used in microscopy to illuminate bacteria, which after much research appears to be somewhat of a cure-all.

The author outlines causation of *why* methylnium chloride (MB) is so effective, which involves neutralising the powerful oxidant NO and its byproduct ONOO<sup>-</sup> (peroxynitrite) that cause methemoglobinemia (MG). As expected, MB also treats many other chemical exposures which cause MG, such as Al, As, Pb, Hg, and acetaminophen.

The beneficial effects on Alzheimer's and Parkinson's are also impressive; MB concentrates in the brain and is said to protect against  $\beta$ -amyloid plaque damage, and  $\tau$ -protein misfoldings. It also improves short-term memory and acuity.

In addition, it is a premier anti-malarial drug, used in production of the infamous (but highly effective) hydroxychloroquine.

For the combination of chemistry, biology, and health hacks, a must read (and must-have product for the medicine cabinet).

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**Introduction (pp. 1-12)**

Adding MB to an imaging plate enables illumination of organelle internal structures.

MB disinfects aquariums, and can treat nitrate and NH<sub>3</sub> poisoning of fish.

MB is a poison mushroom antidote and F-protector (activated charcoal and  $\text{NaHCO}_3$  also help).

It was the first antimalarial drug.

MB improves recall and attention .

It helps with Alzheimer's and Parkinson's.

90% of diseases are said to be caused by metabolism deficiency.

### **I) Nitric Oxide: Miracle Molecule or Aging Accelerant? (pp. 13-34)**

Dr Elliot Vallenstein: "A theory that is wrong is considered preferable to admitting our ignorance."

NO is a toxic free radical found in city smog.

Viagra is an NO agonist.

NO may be a stress response to the aging process.

Denham Harman proposed the free radical theory of aging. In 1956. NO synthase (iNOS) is the stimulate of NO production, and NO reacts with  $\text{O}_2$  to form peroxynitrite ( $\text{ONOO}^-$ ), a powerful oxidant.

Tight muscles after exercise is due to lactic acid build up; this suppresses the IS and triggers cortisol release.

NO inhibits testosterone.

In 2007, Viagra was linked to 1,824 heart attack deaths. Side effects include heart attack, stroke, skin cancer, and even penile gangrene. When given to pregnant women to dilate the placenta 11 babies died!

NO's vasodilatory effects are only beneficial at very low dosage.

NO is an  $\text{O}_2$  antagonist and binds to cytochrome c oxidase (CCO), reducing cell energy production.

CO<sub>2</sub> is the body's vasodilator of choice, also, to shut down O<sub>2</sub> absorption (the "Bohr Effect"). It also removes Ca from cells.

It's not the 'virus' that kills, rather, the resulting IS cytokine storm.

## **II) Gene Therapy Failure & the Future of Medicine (pp. 35-47)**

Dr Theodore Friedman was the 'Father of Gene Therapy', which has proven a great failure.

The naked mole-rat doesn't feel acid burns, is immune to poison, and doesn't get cancer! It's CO<sub>2</sub> blood level is 6% and O<sub>2</sub> only 7%.

## **III) Meet Methylene Blue (pp. 48-56)**

MB is methylnium chloride.

In 1880, Robert Koch used MB to stain microbe cells.

MB colors urine blue, and it concentrates in the brain.

A disappearing skin test shows any hypoxic skin condition.

The prime reaction pathway is an NO inhibitor and estrogen antagonist.

MB improves thyroid hormone release, and increases T.

## **IV) Top 10 Benefits of Methylene Blue (pp. 57-110)**

Poisons induce methemoglobinemia, wherein RBCs become oxidised (hemoglobin→methemoglobin). Symptoms include blue fingertips, dyspnea, confusion, and metabolic acidosis. Causes include acetaminophen, formaldehyde, Al, C, Cd, and F.

Quinine was the SOCT for Malaria prior to MB. In 1934, Hans Andersag of Bayer synthesised chloroquine which replaced MB.

HCQ is derived from MB.

Accumulated NO has been found in Alzheimer's (AZ) brain plaques.

Acetylcholine (AC) accumulated in brain and body with age. AC blocks Slow Wave Sleep preventing memory consolidation.

Cholinesterase breaks down AC.

8-16mg of MB p.d. is recommended for AZ; a 65-week study showed an 85% improvement.

AZ is characterised by abnormal “tau” proteins and beta amyloid plaques on the outside of neurons. There is also a decline in Complex IV, i.e., the electron transport chain (ETC) which involves CCO, and a reduction in glucose levels. The ETC is a 4-protein complex chain responsible for Oxidative Phosphorylation (OxPhos).

MB can improve short-term memory by 7%.

Reserpine was an ancient Indian tranquiliser which *lowers* serotonin.

Estrogen increase cortisol and NO.

Lipopolysaccharide is an endotoxin from gram negative gut bacteria.

MB reduces post-op pain.

Arthritic cartilage discs excrete 10X more NO.

The Warburg Effect is the cell switch from normal to abnormal (cancerous) metabolism.

MB can down-regulate malignant cells to a nontumorigenic phenotype.

Metastasis causes 90% of cancer deaths.

MB can rapidly oxygenate cancer cells.

Red Light Therapy (RLT) can enhance mitochondrial respiration.

**V) The Methylene Battery (pp. 111-114)**

**VI) Methylene Blue for Dogs, Cats, Cows, Fish and Horses (pp. 115-117)**

**VII) Safety, Dose, & Where to Get Methylene Blue? (pp. 116-127)**

Industrial or chemical grades can contain 8-11% of contaminants like As, Al, Cd, Hg, and Pb.

$2\text{mgkg}^{-1}$  is a standard dose (a 1% solution has 0.5mg per drop).

10-60mg is suggested for cancer.

**Conclusion (pp. 128-133)**

Voltaire: “Doctors put drugs of which they know little into bodies of which they know less for diseases of which they know nothing at all.”