

# Treatments

- Methelyne Blue
- Nicotine
- Chlorine Dioxide (CDS / MMS)

# Methelyne Blue

## MB Intro

Originally created as a textile dye in 1876, it's now recognised for its role as an alternative electron carrier in mitochondria.

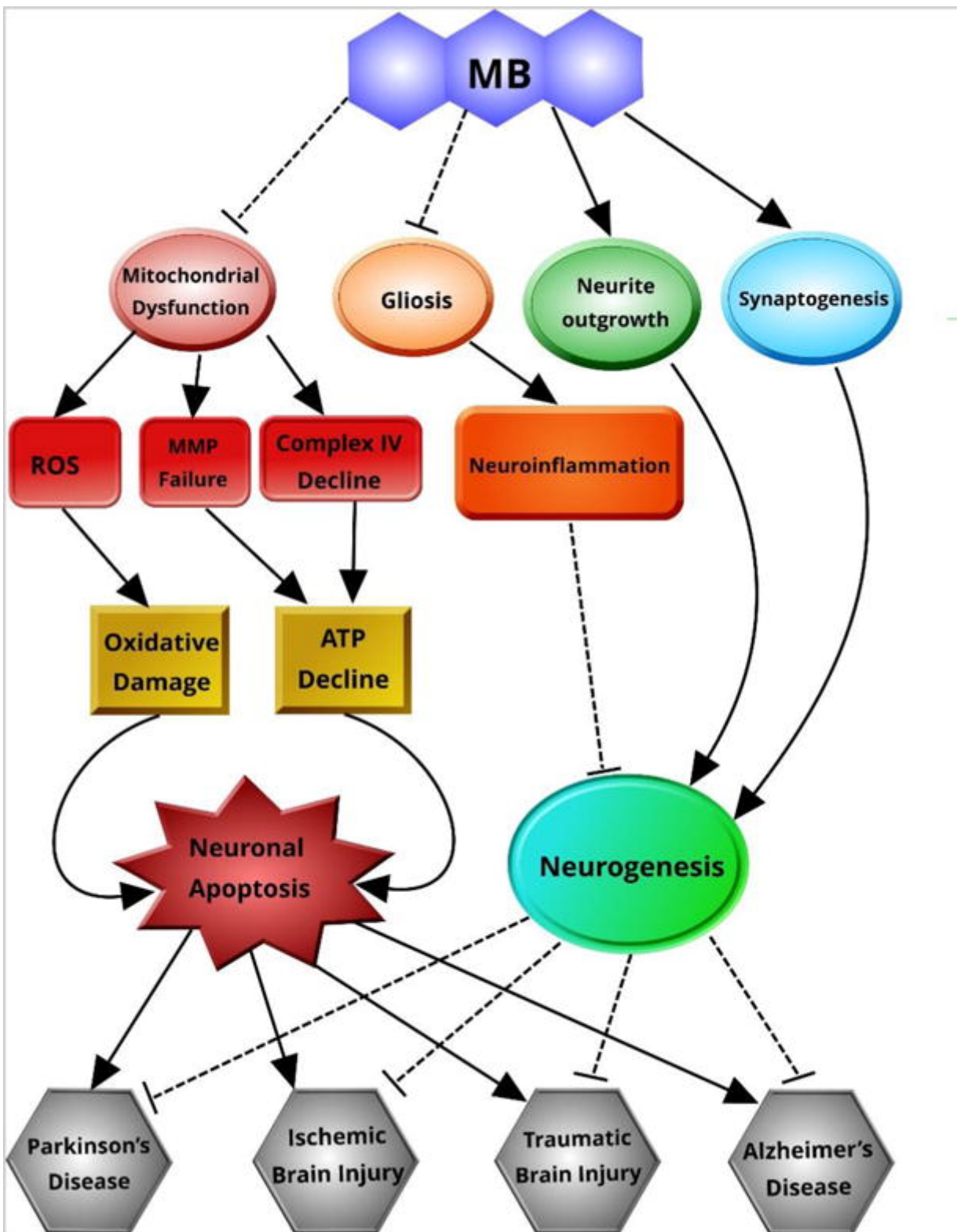
Methylene blue acts as an electron shuttle in the mitochondria, bypassing blocks in the electron transport chain. This helps maintain energy (ATP) production when the normal pathway is impaired.

---

## MB Benifits

### Brain Mitochondrial Enhancer

Our brain relies on oxidative metabolism for energy, making proper mitochondrial function crucial for brain health. MB prevents premature brain cell death while supporting energy production and the growth of new neural connections



## 2 - Cognitive Enhancer

MB is known as a nootropic. It increases ATP production in the brain, providing the energy needed for enhanced brain performance. It's one of the best options for improving attention span, memory, and overall cognition.

The concept of cognitive enhancement via mitochondrial modulation has been investigated increasingly in recent years. The general concept is that by improving mitochondrial function and oxidative defenses, neurons can function with improved efficiency and maintain proper health, improving basal function and stymieing cognitive decline associated with age and neurodegeneration [154]. Early work by Gonzalez-Lima has shown that MB improved spatial memory retention alongside long-lasting mitochondrial respiratory function, mediated through complex IV [26]. The long-term upregulation of CCO may be related to increased H<sub>2</sub>O<sub>2</sub> production without superoxide formation, via MB in physiological conditions, leading to upregulation of Nrf2/ARE [135]. In a human study, MB administration increased cerebrovascular reactivity in psychomotor vigilance task and a short-term memory test. This was accompanied with modest improvements in performance on the short-term memory test [155]. These benefits correlated with mitochondrial function are corroborated by experiments showing similarly improved cognition with photobiomodulation, the stimulation of complex IV with transcranial near-infrared laser irradiation [156].

### 3 - MB Against Infectious Diseases

MB has antimicrobial properties, making it effective against various pathogens (bacterial, viral, and fungal). It also aids in C19 treatment by inhibiting SARS-CoV2 replication.

**Table 1**

Mechanisms of action of methylene blue (MB) in COVID-19 disease. Abbreviations: ACE2: Angiotensin-converting enzyme 2.

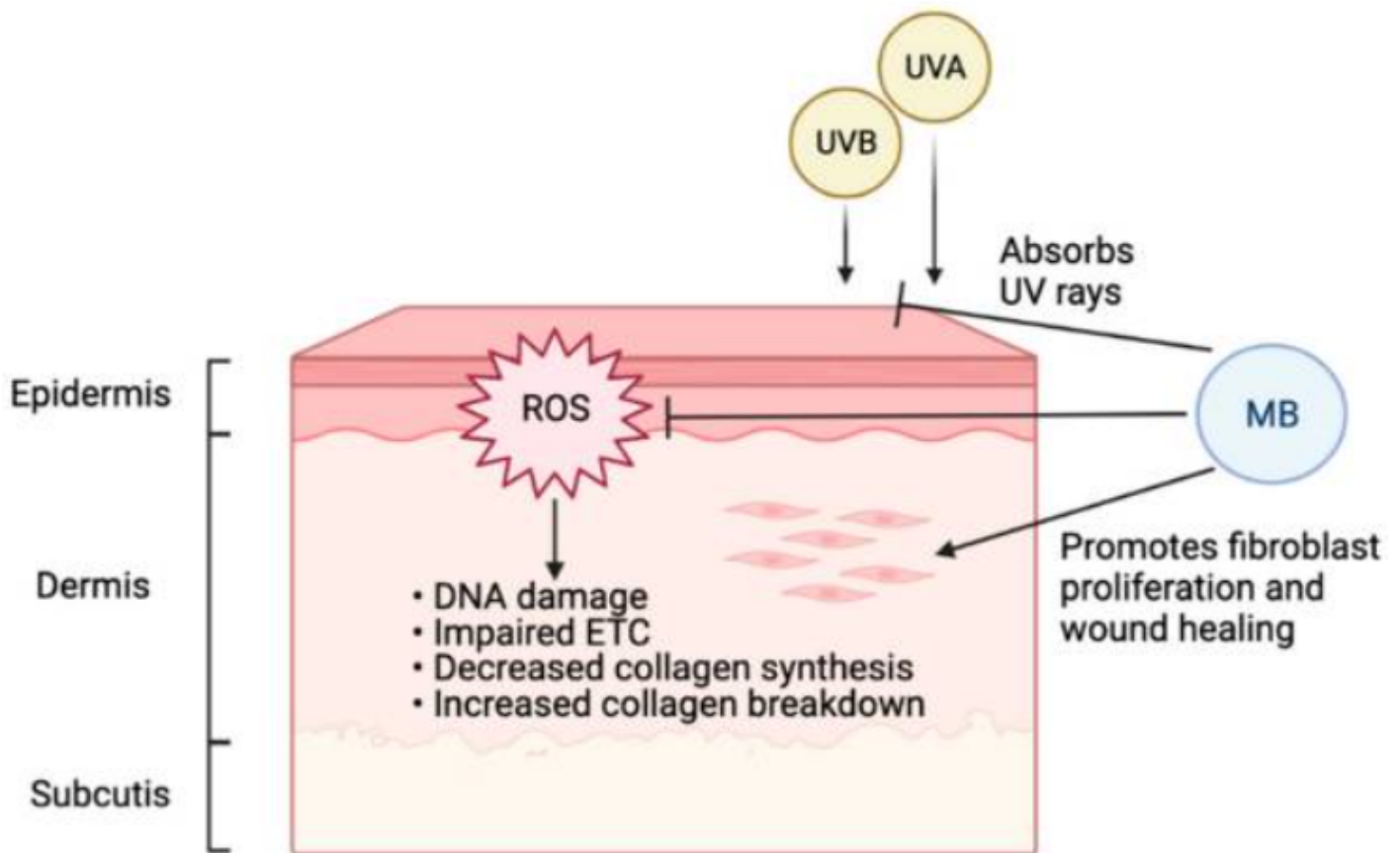
<b>Actions against SARS-CoV-2 Virus</b>	
Reduced Viral Entry	<ol style="list-style-type: none"><li>1. Inhibits binding of spike protein to ACE2 receptor</li><li>2. Impairs membrane fusion/endocytosis</li></ol>
Reduced Viral Replication	<ol style="list-style-type: none"><li>1. Reduces viral uncoating (increases lysosomal pH)</li><li>2. Reduces protein translation (increases lysosomal pH)</li><li>3. Inhibits RNA dependent RNA polymerase (zinc ionophore)</li></ol>
Photo-Oxidative Viral Inactivation [activation by 660 nm light]	<ol style="list-style-type: none"><li>1. Targets viraemia</li><li>2. Augments the effects of topical oral/nasal PDI</li></ol>
<b>Reduced Organ Damage</b>	
Reduced Cytopathic Effects	<ol style="list-style-type: none"><li>1. Reduced viral replication/protein translation</li><li>2. Reduced oxidative stress</li><li>3. Reduced cytokine damage</li></ol>
Reduced Hypoxia	<ol style="list-style-type: none"><li>1. Improves mitochondrial respiration</li><li>2. Rapidly reduces methemoglobinemia</li><li>3. Reduces micro-thrombi (reduces platelet aggregation)</li></ol>
Reduced Hyper-Inflammation	<ol style="list-style-type: none"><li>1. Inhibits NLRP3</li><li>2. Reduces excess nitric oxide/bradykinin activity</li><li>3. Scavenger of reactive oxygen/nitrogen species</li></ol>
<b>Broad Spectrum Antimicrobial (Bacterial/Fungal/Other Viruses)</b>	
Reduced Secondary Infections	<ol style="list-style-type: none"><li>1. Intrinsic anti-microbial actions</li><li>2. Intravascular photo-oxidative anti-microbial actions</li></ol>

## 4 - MB Delays Skin-Aging

MB has the ability to delay skin aging as well

- Increases cell longevity
- Protects skin from UV exposure
- Accelerates the wound healing process

Additionally, MB's antimicrobial properties are beneficial for skin, too.



## 5 - MB as Anti-Depressant

MB works as a monoamine oxidase inhibitor (MAOI), increasing serotonin, norepinephrine, and dopamine levels.

Plus, it reduces brain inflammation.

Clinical research shows 15mg/day significantly improved depression symptoms compared to placebo in a controlled trial

Methylene blue, 15 mg/day, was compared with placebo in treatment of severe depressive illness. The 3-week trial was designed to avoid bias by placebo response and also to avoid observer bias. Improvement in patients receiving methylene blue was significantly greater than in those receiving placebo. Methylene blue at a dose of 15 mg/day appears to be a potent antidepressant, and further clinical evaluation is essential.

## Dosage

- Start with 5 drops (2.5 mg) daily, steadily increase to 12 (6 mg) if you respond well
- Up to 15 drops (7.5 mg) if I have a key outcome that I'm taking it for (anti-infection, cognitive enhancement, etc.)
- I have experimented with 15 drops twice per day and seen diminishing returns. (No additional benefits seen)

## Consumption

Add MB to fresh orange juice to avoid blue tongue/mouth staining. Other liquids that also work well: Kombucha, raw milk. Be cautious not to spill—it stains. Note: If it does get on your skin, it's always worn off within a day for me

---

## MB Side effects

Scientific studies have proven MB's cognitive effects and its antimicrobial powers (it was one of the earliest antimalarial drugs). But here are the risk-factors you should be aware of

### 1 - The Herxheimer reaction

When MB rapidly kills bacteria, they release endotoxins faster than your body can clear them. This causes temporary inflammatory responses that manifest as "die-off" symptoms.

#### Understanding the Herxheimer Reaction:

The Herxheimer reaction, also known as Jarisch-Herxheimer reaction, is essentially an acute exacerbation of symptoms that occurs when microorganisms release toxins into the body during the process of being killed off by antibiotics or other antimicrobial agents. It typically manifests as an initial worsening of symptoms, followed by improvement as the body clears the toxins.

The mechanism behind the Herxheimer reaction lies in the rapid destruction of pathogens, which leads to the release of endotoxins or other harmful substances. These toxins can overwhelm the body's detoxification systems, triggering an inflammatory response that exacerbates existing symptoms or causes new ones. Common symptoms of the Herxheimer reaction include fever, chills, headache, muscle aches, and fatigue.

The phenomenon is commonly observed in the treatment of various infections, including Lyme disease, syphilis, and certain bacterial, fungal, and parasitic infections. It is particularly prevalent in conditions where the pathogen burden is high or when aggressive antimicrobial therapy is initiated.

Herxheimer reactions from MB can include:

- Headaches
- Debilitating fatigue
- Nausea
- Brain fog
- Flu-like symptoms
- Muscle aches
- Fever or chills

These symptoms are documented in Lyme disease treatment literature.

## 2- MB's role as a Monoamine Oxidase Inhibitor (MAOI).

Studies confirm MB is a potent reversible inhibitor of MAO-A, which normally breaks down serotonin and other neurotransmitters. By blocking this enzyme, MB increases serotonin levels.

# Methylene blue and serotonin toxicity: inhibition of monoamine oxidase A (MAO A) confirms a theoretical prediction

R R Ramsay <sup>1</sup>, C Dunford, P K Gillman

Affiliations + expand

PMID: 17721552 PMCID: [PMC2078225](#) DOI: [10.1038/sj.bjp.0707430](#)

## Abstract

**Background and purpose:** Monoamine oxidase inhibitors (MAOI) are known to cause serotonin toxicity (ST) when administered with selective serotonin reuptake inhibitors (SSRI). Methylene blue (methylthionium chloride, MB), a redox dye in clinical use, has been reported to precipitate ST in patients using SSRI. MB was assessed for MAO inhibition and so for its potential to precipitate ST.

**Experimental approach:** Inhibition of purified human MAO was quantified using kinetic assays and visible spectral changes to study the interactions of MB with MAO A.

**Key results:** MB was a potent (tight binding) inhibitor for MAO A. It also inhibited MAO B but at much higher concentration. Interactions of MB with the active site of MAO A were confirmed by its action both as an oxidising substrate and as a one-electron reductant.

**Conclusions and implications:** MB is a potent reversible inhibitor of MAO A with implications for gut uptake of amines when administered orally. At concentrations reported in the literature after intravenous administration, MAO B would be partially inhibited but MAO A would be completely inhibited. This inhibition of MAO A would be expected to lead to perturbations of 5-hydroxytryptamine metabolism and hence account for ST occurring when administered to patients on SSRI treatment.

This MAOI activity creates a serious danger: combining MB with serotonergic drugs can trigger serotonin syndrome. The FDA has issued explicit warnings about this interaction, citing severe CNS reactions when MB is given to patients on psychiatric medications

# FDA Drug Safety Communication: Serious CNS reactions possible when methylene blue is given to patients taking certain psychiatric medications

The FDA has issued new information about this safety issue, see the [FDA Drug Safety Communication issued 10-20-2011](#).

## [Safety Announcement](#)

## [Additional Information for Patients](#)

## [Additional Information for Healthcare Professionals](#)

## [Data Summary](#)

## [References](#)

## [Safety Announcement](#)

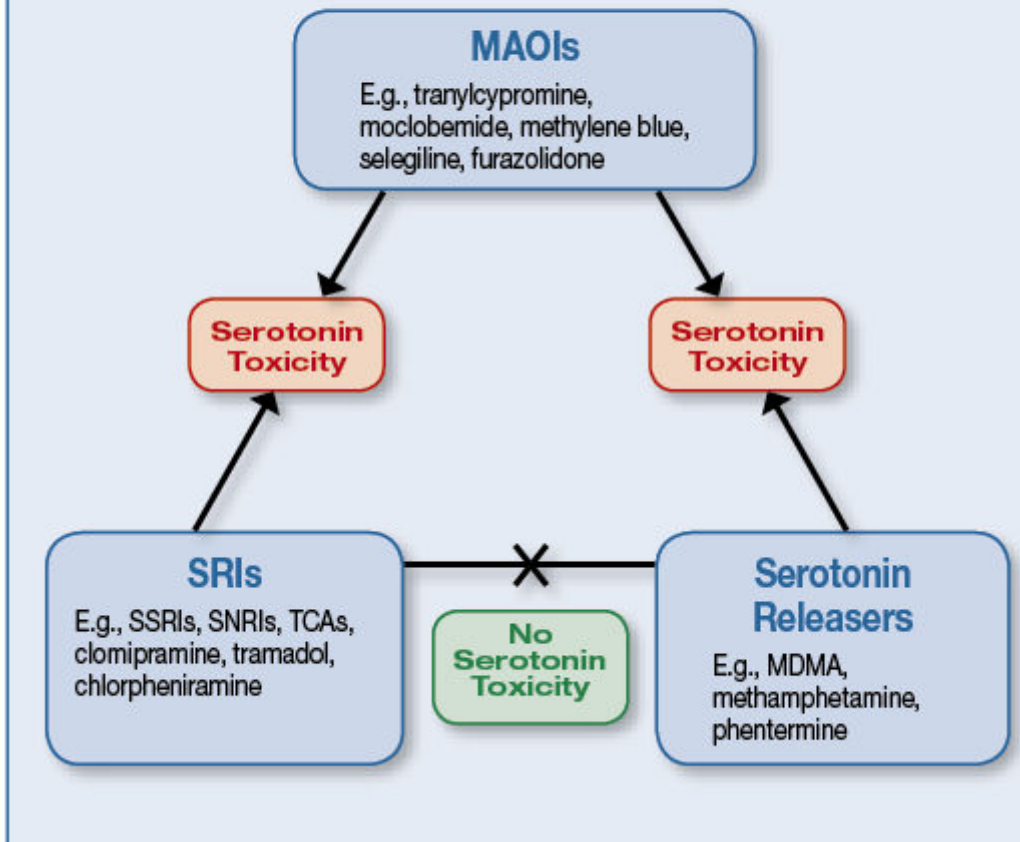
**[07-26-2011]** The U.S. Food and Drug Administration (FDA) has received reports of serious central nervous system (CNS) reactions when the drug methylene blue is given to patients taking psychiatric medications that work through the serotonin system of the brain (serotonergic psychiatric medications). Methylene blue is commonly used in diagnostic procedures and is also used to treat a number of medical conditions (see Facts about methylene blue box). A list of the serotonergic psychiatric medications that can interact with methylene blue can be found [here](#).

### **Facts about Methylene Blue**

- Used to treat methemoglobinemia, vasoplegic syndrome, ifosfamide-induced encephalopathy, cyanide poisoning
- Used as a dye in therapeutic and diagnostic applications
- Is a potent, reversible monoamine oxidase inhibitor (MAOI).

## The “Serotonin Toxicity Triangle.”

Interactions among the classes of serotonergic drugs that can produce serious serotonin toxicity with examples.



Symptoms of serotonin syndrome include:

- Mental status changes (confusion, agitation)
- Neuromuscular abnormalities (tremor, muscle rigidity)
- Autonomic instability (sweating, fever)
- High blood pressure
- Seizures

Medical literature includes fatal cases.

Although the exact mechanism of this drug interaction is unknown, methylene blue inhibits the action of monoamine oxidase A—an enzyme responsible for breaking down serotonin in the brain. It is believed that when methylene blue is given to patients taking serotonergic psychiatric medications, high levels of serotonin can build up in the brain, causing toxicity. This is referred to as Serotonin Syndrome. Signs and symptoms of Serotonin Syndrome include mental changes (confusion, hyperactivity, memory problems), muscle twitching, excessive sweating, shivering or shaking, diarrhea, trouble with coordination, and/or fever.

## 3 - MB with dopaminergic substances.

If MB is combined with L-DOPA, selegiline, or stimulants (Adderall), it can inhibit dopamine breakdown and increase synthesis via mitochondrial effects. This risks dopaminergic overstimulation (agitation, insomnia, paranoia).

## 4 - MB can turn your brain blue

But only under specific conditions like high doses (>5 mg/kg or >300-400mg/day), chronic use (daily for months/years), IV administration, etc. Most cases are seen in post-mortem studies.

# Greenish–blue discoloration of the brain and heart after treatment with methylene blue

Images in Forensics | Published: 17 September 2020

Volume 17, pages 148–151, (2021) [Cite this article](#)

[Carlos Durão](#), [Frederico Pedrosa](#) & [Ricardo Jorge Dinis-Oliveira](#) 

 1206 Accesses  8 Citations  32 Altmetric [Explore all metrics](#) →

## Abstract

Greenish–blue discoloration of the brain and heart was observed during the autopsy of a 63-year-old woman who had been treated with methylene blue for septic shock following a traffic accident. This “pistachio” or “avatar” discoloration occurs when the colorless metabolite leucomethylene blue is oxidized to methylene blue upon exposure to atmospheric oxygen. Other clinically documented adverse effects of methylene blue include greenish–blue urine and bluish discoloration of the skin and mucosa. In medicine, methylene blue is an inhibitor of nitric oxide synthase and guanylate cyclase with different clinical applications, namely, rapid reversal of circulatory shock that is refractory to fluid administration, inotropic agents, and vasoconstrictors. Postmortem differential diagnosis with putrefaction and hydrogen sulfide poisoning should be made, and forensic pathologists should be aware of methylene blue–related greenish–blue discoloration to avoid unnecessary workup and investigations.

Here are supplements and substances to AVOID with Methylene Blue:

- 5-HTP • L-Tryptophan
- St. John's Wort
- Rhodiola rosea
- SAmE
- SSRIs, SNRIs, TCAs
- Tramadol, dextromethorphan
- L-DOPA (mucuna pruriens)

To minimise die-off reactions if using MB: Start with micro-doses (0.5-1mg) and increase by 0.5mg every 4-5 days Stay hydrated with electrolytes. And don't forget to take breaks between usage periods.

## Who should NOT use Methylene Blue

- Anyone on SSRIs, SNRIs
- Pregnant or breastfeeding women
- Those with G6PD deficiency
- People with severe gut dysfunction or dysbiosis
- Individuals with kidney disease / renal insufficiency

# Nicotine

## Nicotine & Mental Focus

Whenever you need deep focus for intensive work, use 3mg of nicotine.

It's a cheat code for productivity. Unlike caffeine, nicotine has a shorter half-life. Which means less adrenal stress.

## Nicotine & The Sympathetic Nervous System

Nicotine activates the sympathetic nervous system (your fight or flight mode). It releases:

- Dopamine
- Epinephrine
- Norepinephrine Which boosts your focus, energy, and metabolism. But remember...

Nicotine isn't ideal near meals.

Why?

It hinders your digestion.

So avoid using it when eating to let your body stay in a calm (parasympathetic) state.

# Nicotine For Brain Activity

Your brain loves burning fat for energy.

Especially during intense focus periods.

Nicotine helps mobilize fat, allowing your brain to use it as fuel.

This makes it an essential tool for maintaining high cognitive output, especially during prep.

Caffeine + Nicotine = a 100% increase in thermogenesis.

## Nicotine Burns Fat

Here's how nicotine accelerates fat loss:

- Dopamine acts as an appetite suppressant, increasing satiety.
- Epinephrine and norepinephrine elevates your basal metabolic rate & fatty acid oxidation.
- Nicotine also boosts Uncoupling Proteins (UCPs), which force the body to use more fat as a fuel source.

## How to Use Nicotine Effectively

1mg nicotine with 100mg caffeine is a POWERFUL combination.

Chew half a nicotine gum (typically 2mg) with a cup of coffee.

However, if you tend to be anxious, use it sparingly.

Nicotine boosts catecholamines, which can increase anxiety.

Adding L-theanine or ashwagandha can help keep you calm.

## Nicotine vs. Other Fat Burners

Nicotine is a unique uncoupling agent.

Unlike T3 or DNP, nicotine boosts fat burning without any intense side effects

(like heat from DNP or heart stress from T3).

It's safer and effective when combined with caffeine, making it an excellent addition to your fat loss stack.

## Motility Benefits

Nicotine also increases bowel motility.

If you're dealing with slow digestion or backed-up bowels...

Nicotine can definitely help to keep things moving.

## Nutrient Partitioning & Fat Loss

Nicotine drives nutrients into muscle cells instead of fat cells during lipogenesis.

When combined with a good cardio routine...

It ensures more nutrients will go to preserving muscle rather than adding fat.

## How To Use Nicotine Safely:

There's a blood pressure response to nicotine.

It causes vasoconstriction, which increases blood pressure.

To mitigate this, take:

- 1200mg of Hawthorn Berry
- 1000mg of Citrulline
- 1000mg of Arginine

These supplements help promote vasodilation, ensuring good blood flow and reducing the risk of hypertension.

Use them alongside nicotine for a more balanced approach.

## How To Implement Nicotine For Fat Loss

The best way to use nicotine for fat loss:

- 1mg nicotine + 100mg caffeine before fasted cardio
- Use it again after your first meal
- Another dose when you hit that afternoon crash

This keeps your focus and fat burning high throughout the day.

While minimizing other more intense fat burners.

Nicotine isn't necessarily bad for you...

When used correctly, it can:

- Burn fat
- Improve digestion
- Increase cognitive performance

It's up to you to figure out how to responsibly use it.

# Chlorine Dioxide (CDS / MMS)

## CDS (Chlorine Dioxide Solution)

CDS is the gas dissolved in water

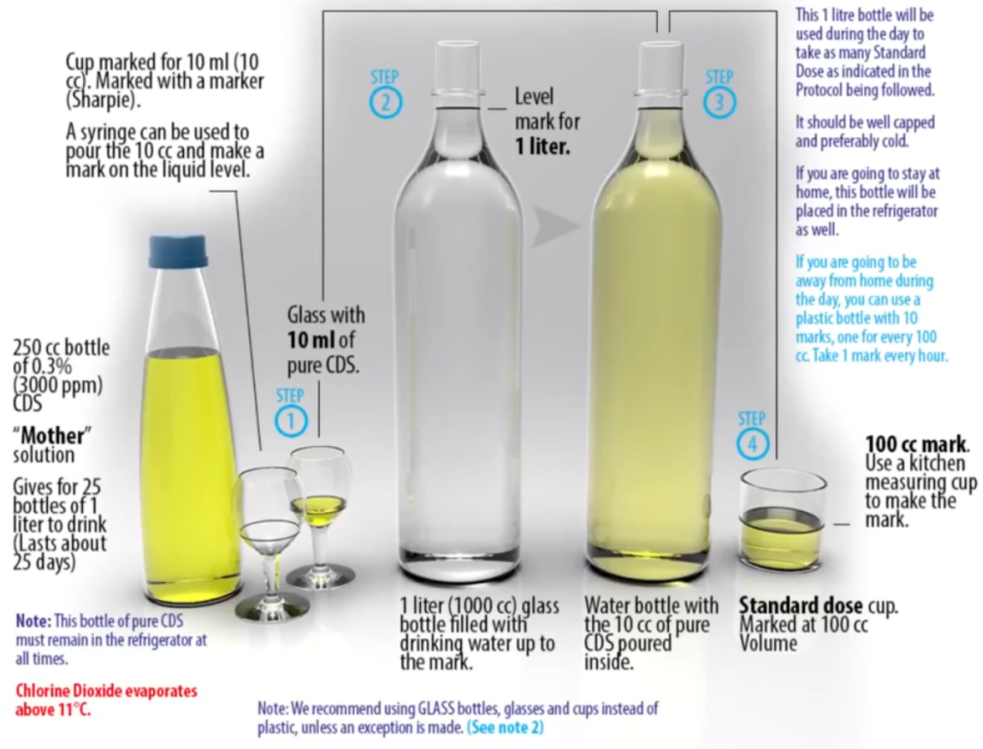
- Evaporates as a gas from 11c upwards
- PH Neutral
- A further development of MMS
- CDS diffuses from the stomach into the body
- Great against:
  - Small bacteria & viruses
  - Acidic (proton rich) zones
- Does NOT
  - Enter the small intestines
  - Cause Diarrhea
  - Cause a secondary reaction in the stomach / React with HCL (Stomach acid)
  - Contain sodium chlorite (with a t)

Protocol C

5mg of each bottle diffused into around 300ml of water twice over two 12 hours

### Steps:

1. Fill sealable jar with 300ml - 350ml of water
2. Mix 5mg of 5% HCL (activator) with 5mg of 22% NaClO (Sodium chlorite) in a shot glass
3. Place shot glass in jar and seal then hide in darkness for 12 hours
4. Repeat step 1-3 again WITH THE SAME WATER AS BEFORE
5. Save the mixture from shot glass into a bottle to use as a disinfectant
6. Save CDS from gas now in water in GLASS bottle and never mix with stainless steel.



# MMS (Master Mineral Solution) NaClO<sub>2</sub>

MMS is drinking the direct 2 drop mix in water