Reynolds Blue,
Patented Liposomal Formula

ADVANCED TECHNOLOGY

Revolutionary liposomal delivery system containing gold, silver, and silica. Each ½ ml serving carries over 15 quadrillion free electrons for enhanced elimination of Viral threats while simultaneously mopping up ROS and increasing ATP production.

The COVID 19 Outbreak using Reynolds Blue

The company did not originally plan to evaluate Reynolds Blue amid the COVID-19 pandemic, as production capacity was insufficient to address the scale of the outbreak. Data collection began informally with the inventor and associates, extending to their families and acquaintances. Significant resources were allocated to produce small batches of the product, which were distributed to individuals who requested to be volunteers at no cost to them. In all instances, efficacy appeared enhanced when users exposed themselves to sunlight. Natural light appeared to amplify Reynolds Blue's effects, often producing a mild tingling sensation in recipients.

Notable Case Studies

Two compelling accounts involved men in their 50s whose families sought access to Reynolds Blue. Both were unvaccinated and experiencing severe COVID-19 symptoms, with oxygen saturation levels in the low 80s. Upon hospital evaluation, they were advised to require mechanical ventilation but declined, preferring to remain at home with loved ones rather than face isolation in a medical facility.

For respiratory distress during the pandemic, the optimal administration involved nebulizing 0.5-ML of Reynolds Blue diluted in 5-ML of nebulizing saline solution. This method proved consistently effective across all volunteers, with more severe cases showing faster responses. In these two cases, oxygen saturation improved from the low 80s to the low 90s within approximately 30 minutes. Both individuals regained coherence and exhibited positive demeanor. Initial nebulization occurred every few hours or when saturation dropped below 90%, tapering to 2–3 times daily after 24 hours. Remarkably, both men resumed outdoor activities, such as walking their dogs, within three days.

Protocols for Milder Cases

For less severe infections not necessitating nebulization, the recommended regimen turned out to be 0.5-ML, one full dropper, held sublingually for about 10 minutes before swallowing, administered four times daily or as symptoms dictated. Symptoms typically subsided within 30 minutes to an hour but recurred after 4–5 hours, resolving again upon re-administration.

Among younger, healthy individuals under 30, recovery often occurred within 24–48 hours. However, about half experienced symptom relapse 2–4 days after discontinuation, suggesting that Reynolds Blue suppressed viral load to undetectable levels without full immune development, allowing reinfection. Subsequently, users were advised to continue treatment for at least five days, even post-recovery.

In older adults (over 50–60), relief was shorter-lived, with symptoms returning more quickly after administration of Reynolds Blue and full recovery extending up to two weeks via sublingual administration. Nebulization consistently yielded superior results.

Potential Drawbacks

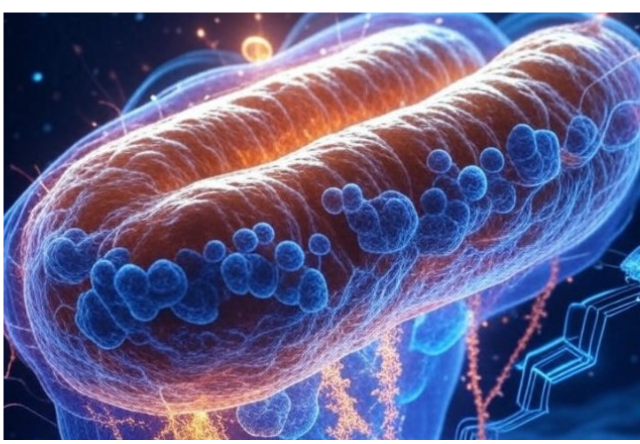
The primary caution provided to all volunteers was Reynolds Blue's propensity to cause permanent staining on surfaces or fabrics. Users were encouraged to administer it outdoors initially, allowing for easy disposal if needed, to avoid damage to household items. This remains the product's sole notable limitation.

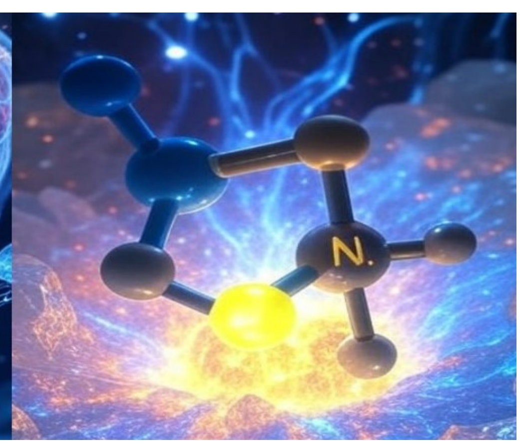
Why Does Methylene Blue Need Electrons?

Methylene Blue acts as an electron carrier, relying on electrons to fulfill its roles effectively. However, a standalone Methylene Blue molecule does not possess any inherent free electrons and must obtain them once it enters the body. In its oxidized form, Methylene Blue appears blue when it accepts electrons, and it becomes colorless when reduced by donating those electrons. Within the body, it functions by accepting electrons from high-energy molecules and transferring them to low-energy sites where they are needed. There are two key limitations to this process: first, it occurs only within a very localized area, as the Methylene Blue molecule serves as a shuttle over distances no larger than the molecule itself; second, the transfer is not always precise—for instance, there might be 100,000 excess high-energy electrons with no immediate destination for the molecule to deliver them to; nothing will happen. All of this unfolds in trillionths of a second.

By contrast, a single 0.5 mL dropper of our patented Reynolds Blue contains over 15 quadrillion free electrons, enabling the Methylene Blue molecules to neutralize viruses and enhance cellular energy production by directing electrons wherever they are needed. For example, if there are 100,000 damaging high-energy electrons present, Reynolds Blue can absorb them in trillionths of a second and store them for later release, potentially to destroy virus particles. Reynolds Blue includes a built-in electron storage mechanism, eliminating the need to source electrons before donating them. It can dynamically drain or replenish its electron reserves based on the body's immediate requirements; again, all this happens in trillionths of seconds.

This groundbreaking technology is called the Bio Capacitor—a cutting-edge structure composed of a silica-based lattice incorporating gold and silver atoms alongside Methylene Blue. This lattice holds the 15 quadrillion electrons per 0.5 mL serving of Reynolds Blue. Besides the added efficiency of the Bio Capacitor, these complexes are all encapsulated in a liposome, which facilitates superior cellular absorption and significantly greater efficiency compared to Methylene Blue alone.

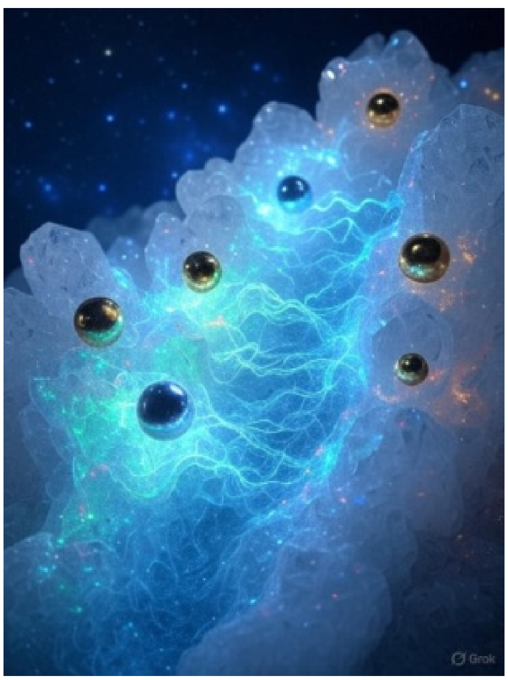




How do the electrons move in the “Bio Capacitor”?

The Bio Capacitor can also leverages plasmonic energy transfer—an advanced mechanism that directly supplies electrons to Methylene Blue. This substantially enhances its efficacy, neutralizing viral threats, scavenging harmful reactive oxygen species (ROS), and revitalizing cellular energy in ways previously unattainable.

Within the silica matrix, gold and silver atoms are firmly interconnected. Gold exhibits a tendency to donate electrons, whereas silver prefers to accept them. When Methylene Blue interacts with bodily tissues, it can either attract electrons that are initially captured by silver and subsequently transferred to gold within the lattice, or it can release electrons by drawing them from gold. These exchanges are the fastest and transpire in mere quadrillionths of a second. The gold and silver atoms integrated into the silica lattice function as an electron reservoir, allowing Methylene Blue to perform with heightened efficiency.



Scientific Data on Reynolds Blue

Reynolds Blue represents an innovative integration of nanotechnology and redox biology, offering a multifaceted approach to managing respiratory viral threats while energizing host cells.

Reynolds Blue—methylene blue (MB) bound to a silica lattice incorporated with gold (Au) and silver (Ag) atoms, then encapsulated in a liposome—leverages enhanced redox properties, targeted delivery, and synergistic antiviral actions to combat upper respiratory viruses, including COVID-19 (SARS-CoV-2) and influenza (flu), while simultaneously boosting cellular ATP production through optimized electron transfer in mitochondria.

Antiviral Mechanisms Against Upper Respiratory Viruses, SARS-CoV-2, and Flu

Reynolds Blue's design amplifies MB's inherent antiviral capabilities by improving its stability, bioavailability, and interaction with viral targets in the respiratory tract. The silica lattice provides a porous scaffold that securely binds MB near Au and Ag atoms, facilitating rapid electron exchanges that generate controlled reactive oxygen species (ROS) for viral inactivation. Liposomal encapsulation ensures efficient delivery to mucosal surfaces and infected cells in the upper airways, where these viruses primarily replicate, allowing for localized action that disrupts viral entry, replication, and assembly.

Direct Viral Inactivation and Protein Binding

MB binds to viral surface proteins, such as the spike protein on SARS-CoV-2 or hemagglutinin on influenza viruses, preventing attachment to host receptors like ACE2. The Au and Ag atoms in the silica lattice enhance this by catalyzing electron transfers that destabilize these proteins through oxidation. For instance, silver nanoparticles have demonstrated strong inhibitory effects against influenza and respiratory syncytial viruses by disrupting envelope integrity. In Reynolds Blue, this is potentiated as the metals act as electron sinks, pulling electrons through MB to create a more reactive environment that neutralizes free viral particles in respiratory secretions.

Nucleic Acid Damage and Replication Inhibition

Once delivered via liposomes, which fuse with cell membranes for intracellular release, Reynolds Blue targets viral RNA. MB intercalates into the genome of RNA viruses like SARS-CoV-2 and flu, causing oxidative damage through singlet oxygen production. The silica-Au-Ag framework accelerates this photodynamic-like effect—even without external light—by promoting ultrafast electron relay, leading to guanine oxidation and strand breaks. Studies on similar gold-silver-silica nanocomposites show they enhance antiviral potency against SARS-CoV-2-related targets, making the construct particularly effective for upper respiratory infections where rapid viral clearance is crucial.

ROS Modulation for Immune Support

Reynolds Blue generates targeted ROS to inactivate viruses while reducing excess host ROS that could exacerbate inflammation in the lungs. Au and Ag facilitate MB's redox cycling, enabling precise electron push-pull that disrupts viral enzymes (e.g., proteases in SARS-CoV-2) and supports innate immune responses like phagocytosis in respiratory epithelial cells. Liposomal wrapping ensures sustained release, prolonging exposure to viruses in the nasal passages and throat, which is ideal for preventing spread of flu or SARS-CoV-2.

Broad-Spectrum Activity

This setup works synergistically against enveloped viruses like flu and SARS-CoV-2 by combining MB's virucidal properties with the metals' intrinsic antiviral effects, such as silver's ability to inhibit hepatitis B-like mechanisms adaptable to respiratory pathogens. For upper respiratory viruses, Reynolds Blue could be administered via inhalation or nasal sprays, allowing direct access to infection sites for enhanced efficacy.

Enhancement of ATP Production in Cells

Simultaneously, Reynolds Blue promotes ATP synthesis by optimizing MB's role as an alternative electron carrier in mitochondria, bypassing inefficiencies in the electron transport chain (ETC) common during viral infections and other conditions, which often impair cellular energy.

Electron Transfer Boost

MB donates and accepts electrons, shuttling them from NADH to cytochrome C, stimulating substrate-level phosphorylation and increasing ATP output by 30-40%. The Au-Ag-silica lattice amplifies this by acting as catalytic hubs for electron flow, accelerating MB's redox cycling and restoring NAD+ levels to fuel glycolysis and the Krebs cycle.

Mitochondrial Respiration Support

Liposomal delivery targets Reynolds Blue to infected cells, where it enters mitochondria to enhance respiration under stress from viruses like flu or SARS-CoV-2. This direct electron facilitation increases membrane potential and Ca2+ uptake, leading to higher ATP yields and sustained cellular function.

Integrated Benefits During Infection

By fighting viruses and boosting ATP concurrently, Reynolds Blue supports energy-demanding immune processes in respiratory cells, ensuring robust antiviral defenses without compromising cellular vitality.

Scientific Data on the “Bio Capacitor”

The Bio Capacitor is contained inside Reynolds Blue and uses the gold (Au) and silver (Ag) atoms embedded within the silica lattice acting as a central, efficient site for speeding up chemical reactions, specifically, the transfer of electrons.

Au and Ag are metals known for their catalytic properties in redox (reduction-oxidation) processes. The silica lattice positions these metals in a structured way, making them a "hub" that draws in and relays electrons more effectively.

In Reynolds Blue, this “Bio Capacitor” or in general terms a “Catalytic Hub” enhances methylene blue's ability to "push and pull" electrons, which helps in generating controlled reactive oxygen species (ROS) to damage viruses and boosting electron flow in cell mitochondria to produce more ATP.

This design draws from nanotechnology principles, where metal nanoparticles in a supportive matrix (like silica) create hotspots for faster, more targeted reactions, improving the overall efficiency of the product.

Detailed Scientific Breakdown of the "Bio Capicator" or “Catalyic Hub”:

Reynolds Blue, a formulation where methylene blue (MB) is bound to a silica lattice embedded with gold (Au) and silver (Ag) atoms or nanoparticles, then encapsulated in a liposome where the Au-Ag-silica matrix acts as a centralized, multifunctional nanoscale platform that accelerates electron transfer reactions. This hub enhances MB's redox cycling (i.e., its ability to alternate between oxidized and reduced states), enabling more efficient generation of reactive oxygen species (ROS) for antiviral effects and improved electron shuttling in mitochondria for ATP production.

1. Conceptual Foundation: What Is a Catalytic Hub in Nanocomposites?

A catalytic hub in nanomaterials refers to a structured assembly where metallic nanoparticles (e.g., Au and Ag) serve as active sites for accelerating chemical reactions, particularly redox processes involving electron transfer. In Reynolds Blue, the silica (SiO_2) lattice acts as a porous scaffold that immobilizes and spatially organizes Au and Ag atoms/nanoparticles, creating a "hub" where electrons can be efficiently donated, accepted, or relayed. This is analogous to enzyme active sites in biology but engineered at the nanoscale for synthetic applications.

- **Why Metals Like Au and Ag?** These noble metals are excellent catalysts due to their high electrical conductivity, surface plasmon resonance (SPR), and ability to lower activation energies for redox reactions. Au nanoparticles, for instance, facilitate electron transfer by acting as electron reservoirs or sinks, while Ag enhances oxidative processes through its affinity for oxygen adsorption. Bimetallic Au-Ag systems exhibit synergistic effects, where the interface between the two metals creates electronic perturbations (e.g., shifts in d-band centers) that optimize catalytic performance.
- **Role of Silica Lattice**: Mesoporous silica provides a high-surface-area framework (often >500 m^2/g) with tunable pores (2-50 nm) that anchor Au and Ag via electrostatic or covalent bonds, preventing aggregation and enabling controlled release of MB. This lattice not only stabilizes the metals but also facilitates mass transport of reactants (e.g., electrons, oxygen, or viral components) to the catalytic sites, turning the structure into a hub for multi-step reactions.

2. Electron Transfer Mechanisms at the Catalytic Hub

The hub's primary function is to mediate electron transfer, which is crucial for MB's redox activity. MB ($C_{16}H_{18}ClN_3S$) cycles between its oxidized form (MB^+, blue) and reduced form (leucomethylene blue, colorless) via single-electron transfers, acting as a redox mediator. The Au-Ag-silica hub amplifies this by:

- **Plasmonic Enhancement**: Au and Ag nanoparticles exhibit localized surface plasmon resonance (LSPR), where incident light (or even ambient energy) excites collective oscillations of surface electrons. This generates "hot electrons" with high kinetic energy, which can inject into MB or surrounding molecules, accelerating reduction-oxidation cycles. For example, in Au-Ag core-shell structures, the LSPR of Ag shells couples with Au cores to extend electron lifetimes, enabling efficient transfer to MB for ROS production (e.g., singlet oxygen, $^1O_2$).
- **Direct Redox Catalysis**: The metals lower the energy barrier for electron transfer via adsorption-desorption mechanisms. Ag, with its partially filled d-orbitals, readily adsorbs oxygen and facilitates its reduction to ROS, while Au promotes MB's reduction by borohydride or NADH-like donors. In bimetallic systems, charge separation at the Au-Ag interface creates a Schottky barrier, directing electron flow unidirectionally—e.g., from Au (electron donor) to Ag (acceptor)—enhancing MB's ability to shuttle electrons. Studies on Au-Ag nanocomposites show they catalyze MB degradation (a model redox reaction) with rate constants up to 10-fold higher than monometallic counterparts.
- **Interfacial Electron Relay**: The silica lattice positions MB in proximity to the metals, allowing for ultrafast electron tunneling (on femtosecond scales). This is evidenced in nanoparticle-protein superstructures where Au nanoparticles nucleate redox cycling with molecular reductants, similar to how the hub would relay electrons from cellular NADH to MB in mitochondria. Quantum mechanical tunneling and Marcus theory explain this: the hub reduces the reorganization energy for electron transfer, making reactions more favorable.

3. Application to Antiviral Effects

For fighting viruses like SARS-CoV-2 or influenza, the catalytic hub enables MB to generate targeted ROS via photo-redox or dark catalysis:

- **ROS Generation**: MB, upon electron acceptance from the hub, can transfer energy to ground-state oxygen ($^3O_2$) to form $^1O_2$, which oxidizes viral lipids, proteins, and nucleic acids. The Au-Ag hub catalyzes this by providing electrons for MB reduction, then reoxidizing it via oxygen adsorption. In enveloped viruses, this disrupts spike proteins through lipid peroxidation.
- **Viral Inactivation Kinetics**: The hub's efficiency is seen in catalytic dye degradation models (e.g., MB reduction by $NaBH_4$), where Au-Ag-silica composites achieve complete inactivation in minutes, far faster than free MB.

4. Application to ATP Production Enhancement

In cellular mitochondria, the hub supports MB's role as an alternative electron carrier in the electron transport chain (ETC):

- **Mitochondrial Electron Shuttling**: MB bypasses impaired ETC complexes (e.g., during viral infection or other conditions) by accepting electrons from NADH and donating them to cytochrome c. The Au-Ag hub acts as a co-catalyst, accelerating this via metal-mediated electron hopping, increasing proton pumping and ATP synthase activity. This can boost ATP yield by 30-40%, as MB restores NAD^+/NADH ratios.
- **Bioenergetic Efficiency**: The silica lattice ensures targeted delivery (via liposomes), while the hub's plasmonic effects could even respond to cellular light or heat for on-demand catalysis.

In summary, the "Bio Capacitor" or "Catalytic Hub" in Reynolds Blue represents a sophisticated nanoscale engineering feat, leveraging plasmonics, interfacial catalysis, and scaffold stabilization to amplify MB's redox potential. The data accumulated during the COVID Outbreak of 2020 has proven that Reynolds Blue and its "Bio Capacitor" or "Catalytic Hub" enhanced both antiviral potency and cellular energy many fold as compared to methylene blue alone.