

Miracle Mineral Supplement — An Integrated Therapy —

Acidified sodium chlorite is a powerful antimicrobial that can reverse cases of malaria, blood poisoning and even cancer, but it is best used in conjunction with other natural therapies that strike the correct balance between oxidants and antioxidants.

by Walter Last © April 2009

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Sodium chlorite is presently being promoted as a Miracle Mineral Supplement (MMS) with superior antimicrobial activity. You can appreciate its power from a statement by its discoverer, Jim Humble, that all 75,000 individuals with malaria who had been treated with MMS therapy were cured within a day.¹ This obviously is important not only for self-healing but also for the drug industry and medicine which so far try to ignore or suppress this development. However, there are also considerable problems associated with using MMS. In this article, I suggest how to minimise these problems by integrating MMS with other natural therapies rather than using it as a stand-alone treatment for all conditions.

Conventional Use of Sodium Chlorite

In solution, sodium chlorite (NaClO_2) is very alkaline and stable but when acidified it forms the gas chlorine dioxide (ClO_2), which smells the same as chlorine and probably is the strongest all-round antimicrobial and parasite remedy. While it destroys all anaerobic microbes and parasites, it does not damage the beneficial lactobacteria of our intestinal flora. The only residue left in water, in food or in the body after treatment with MMS is a tiny amount of sodium chloride (NaCl), i.e., table salt.

Acidified sodium chlorite is being used in many countries, including Australia and the USA, as an antimicrobial treatment in the food industry, for water purification and for sterilising hospital and clinic rooms and equipment. In hospitals it has been used as a disinfectant for 100 years and in the US meat industry for about 50 years. Health-conscious countries and municipalities are increasingly replacing the health-damaging chlorine with the harmless chlorine dioxide in treating public water supplies.²

In 2003, the Australia New Zealand Food Standards Code was changed to permit the use of sodium chlorite acidified with citric acid or other food acids for antimicrobial surface treatment of meat, poultry, fish, fruit and vegetables.³ The time between mixing and application is less than five minutes, and chlorine dioxide levels do not exceed three parts per million. The safety assessment report concluded that, if properly used, no residues would be detected in the raw foods following treatment and prior to sale, and therefore there would be no toxicological concerns.

In solid form, sodium chlorite is unstable and commonly mixed with about 20% sodium chloride. In Australia, it is commercially produced and shipped as a 31% solution in water. For end users in the food and agricultural industries, it is available as a 5% solution called Vibrex. In the USA and the UK, it is also available as tablets that release chlorine dioxide. In Germany and Italy, chlorine dioxide is the main treatment chemical for public water supplies.

Even in conventional medicine, well before Jim Humble's discovery, chlorine dioxide has been used to sterilise red blood cells for transfusion. It was found that a solution of 2.8% sodium chlorite activated with 15% lactic

acid at a concentration of 1:100 killed all HIV-1 in red blood cells.⁴ Curiously, stabilised sodium chlorite that does not generate chlorine dioxide has been patented for intravenous use in the treatment of autoimmune diseases, hepatitis and lymph cancers. It supposedly prevents or reduces antigen activity and autoimmune response.⁵

Oral MMS Therapy

The discovery and initial developments of MMS therapy were outlined by Jim Humble in a 2008 NEXUS article.⁶ MMS is activated to release chlorine dioxide by mixing with five drops of acid for every one drop of MMS. Originally lemon juice and vinegar were used; these are now commonly replaced by a 10% solution of citric acid. This is about five times more acidic and releases considerably more chlorine dioxide with a stronger antimicrobial effect.

After waiting for three minutes, add half to one glass of water or juice before drinking the liquid. The juice must not contain vitamin C, i.e., it can be commercial apple or grape juice but not orange juice. Herbal tea may be also be used. The initial strong and somewhat nauseating smell is now greatly reduced as the chlorine dioxide remains dissolved rather than escaping into the air.

Do not take any antioxidant supplements close to taking the MMS solution. If it is too acidic for you, then partly neutralise the liquid with bicarbonate shortly before drinking. Carefully add only small amounts of bicarbonate so that the liquid still tastes slightly acidic when ingesting.

The therapy can be approached in two ways.

- You may start with a low dose and gradually increase by one drop each day until a slight feeling of nausea develops, then cut down by two drops. After several days, try increasing the drops again and so gradually work your way up to 15 standard drops 1–3 times daily for about one week.

However, many individuals do not get that far because they become sensitised and nausea starts already at low levels without sufficient antimicrobial effect. Nausea can be reduced by taking the remedy after a meal, but this also reduces the antimicrobial effect compared to taking the solution on an empty stomach. It may be best to take MMS just before going to bed. MMS works very rapidly, and people often become sleepy after taking a dose. Also, it is easier to cope with nausea if you can fall asleep.

- An alternative method is to take a very high dose or even a high double dose one hour apart and accept that you will feel nauseous and may vomit for a day or

longer. Nausea or vomiting usually starts two or more hours after ingesting a very high dose, and by then the chlorine dioxide has already been absorbed so that vomiting does not cause any loss in effectiveness. This method has been used in the successful treatment of malaria, blood poisoning and other acute infections. It commonly clears the condition in one hit.

For details of oral MMS therapy, see my Sodium Chlorite article⁷ and also Jim Humble's Standard MMS Protocol.⁸

Other Delivery Options

Because nausea frequently causes individuals to stop using MMS before the infection or cancer is cleared, different ways of using it have been explored. Most common among these is transdermal application. When bypassing the stomach, nausea is not normally a problem.

A given number of drops of MMS are activated with five times more drops of acid; after three minutes, DMSO (dimethyl sulphoxide) is added at the same rate as the acid. After another three-minute wait, the solution is rubbed onto the skin. A variation of this uses 10 drops of MMS and one teaspoon each of acid and DMSO. This method has also been adopted for cancer treatment, including by Jim

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Humble.⁹

While this method does not cause nausea, there is no real evidence that it works. There is even strong theoretical evidence that it *cannot* work. DMSO can act as a mild oxidant, but generally, and especially in the presence of stronger oxidants, it acts as an antioxidant. The main metabolite when DMSO is oxidised is MSM (methylsulphonylmethane), which may also be written as DMSO₂ (dimethyl sulphone). If you search Google for "DMSO + antioxidant", you find expressions like "DMSO—The King Antioxidant" and "It turned out that DMSO was a powerful *antioxidant*..." You just cannot combine the most powerful oxidant with a powerful antioxidant and expect that they do not talk to each other. However, I still regard it as useful to apply activated MMS on the skin for topical treatment of local infections and tumours. While MSM is less effective as a carrier than DMSO, it does improve passage through the skin and is not an antioxidant so it is safe to use with MMS. But absorption will be slow, and therefore it is not suitable for getting chlorine dioxide into the blood. In contrast, absorption through the mucous membranes will be fairly fast and may give better results. Possible absorption areas are the rectum, the vagina and the mouth.

The rectal absorption method is similar to using a coffee enema, which is already firmly established in natural cancer therapy. First you clean the lower bowel with an enema. Then insert a small number of activated drops of MMS in a large glass of water. Hold for 10 to 20 minutes and then expel. Again, use a cleaning enema and then insert a larger number of activated drops in a glass of water. Try to hold for up to 30 minutes. You may be able to move around during this time but preferably just sit or lie down. This will cause much bowel activity for several hours and possibly days afterwards. With cancer and other chronic conditions, you may repeat this once a week with increasing numbers of drops. This will be good with problems in this area, such as rectal or prostate cancer, irritable bowel, and infections, cysts and cancers of the female organs.

Vaginal application is suitable in the case of vaginal thrush to kill the roots and spores of *Candida* that will be embedded in the mucous membrane and may cause flare-ups. Start with one activated drop in a small glass of water and gradually increase the number of drops on subsequent occasions. If the acidity of the solution is a problem, you may nearly neutralise it with bicarbonate several minutes after adding the water.

However, I believe that just swishing acidified and diluted MMS in the mouth may be the best general method to get it quickly into the blood in addition to clearing the head spaces. After using six activated drops this way and keeping the solution in the mouth for about 20 minutes, I now always have a pink tongue on rising in the morning while before it used to be partly coated.

A fragile elderly woman who was afraid to swallow the solution just kept a few activated drops in juice in the mouth for a few minutes and then spat it out. After doing this twice, she had much better mobility. This shows that the chlorine dioxide went quickly into the circulation.

Keeping the solution in the mouth is not too unpleasant, and the tastebuds soon stop complaining. However, it is advisable to nearly neutralise the solution with bicarbonate to protect the teeth. This should not reduce the effectiveness very much because the chlorine dioxide that produces the peak systemic effect will have been released in the first three minutes. After diluting it you may still wait for 10 to 20 minutes for further saturation of the solution before neutralising it.

If using 100 to 125 mL or half a large glassful, initially neutralise only half of the liquid and keep it in the mouth for 10 to 30 minutes. Then neutralise the remainder and keep this in the mouth. As most of the chlorine dioxide will be absorbed through the mucous membranes, it may not matter any more if afterwards you swallow it or spit it out.

Intravenous MMS Therapy

MMS commonly has been used intravenously without acid activation. Jim Humble has had this treatment many times, and also has used up to two times 30 acidified drops orally without getting a reaction. But recently he had one acidified drop intravenously, and that resulted in a Herxheimer reaction (caused by the waste material of a large number of microbes being killed suddenly). Next day, he had another drop intravenously and this did not cause a reaction, but the next day he had two drops which again caused a reaction. The same happened with further increased drops. Humble believes that acid activation increases chlorine dioxide release by up to 300 times.¹⁰

The effectiveness of antimicrobial therapy can often be judged by its ability to trigger a Herxheimer reaction. This consists of extreme fatigue, chills, diarrhoea, muscle and joint pains, and other flu-like symptoms for several hours or days. During a reaction, you should stop the antimicrobial therapy and instead have a high intake of good-quality water, juice and herbal tea.

The question now is: what kind of microbes resisted an extremely high double dose of 30 oral drops but then readily died from one acidified intravenous drop? The oral doses would have cleared these microbes from the blood and lymph systems and probably from most tissues and organs. I can think of only one explanation, that these were so-called nanobacteria. They attach to blood vessel walls and protect themselves with a calcified shell; in the process, they also calcify the tissue, thereby causing arteriosclerosis and related symptoms.¹¹ Even one drop of acidified MMS would have caused a high peak concentration of chlorine dioxide in the blood vessels, apparently enough to penetrate the calcified barrier of some nanobacteria.

Few individuals in western countries will have the opportunity to use intravenous MMS therapy. However, I regard this method as a rather inefficient way of

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dealing with tissue calcification. There are better ways, such as preventing the formation of nanobacteria in the first place, and then dissolving existing calcifications with magnesium chloride and lemon juice or cider vinegar. Deprived of their calcium protection, the nanobacteria can then be easily dealt with by the immune system.

An Integrated Therapy

Some individuals often find it difficult to continue with the MMS program because of frequent nausea. This is especially a problem with advanced cancer and other long-term conditions. Therefore, I generally recommend a program of intestinal sanitation and antimicrobial therapy with milder agents before starting MMS therapy. This will remove most of the toxic load with less discomfort than by starting immediately with MMS. As part of this preliminary program, I recommend a period of intestinal sanitation with garlic, psyllium, sodium bicarbonate and probiotics followed by a three-week course of Lugol's iodine solution.¹²

In the case of cardiovascular diseases and arteriosclerosis, it has been suggested that, with MMS therapy, cholesterol deposits may be removed too quickly and lead to a weakening of the affected blood vessels. To avoid or minimise problems, it has been recommended that one should take high amounts of vitamin C, up to 10 grams daily in divided doses, for several weeks before starting MMS therapy. This is to strengthen the blood vessels and make them more elastic. Some other nutrients to improve elasticity are lemon juice, green juices, copper salicylate, magnesium chloride, MSM and N-acetylglucosamine.

In the case of cancer, I believe that MMS treatment as a primary therapy has shown good results only with lymph, blood and skin cancers. It will be much more effective to integrate MMS therapy into an holistic program as outlined in my article "The Holistic Solution to Overcoming Cancer".¹³

With colds, chlorine dioxide kills the virus but does not stop the beneficial mucus release. This can be stopped with the Sugar Cure. Keep a teaspoon of fine sugar in the mouth until it is dissolved, then spit it out and take another teaspoonful. Continue with this for one or two hours and repeat on subsequent days as required. The sugar draws mucus combined with lymph fluid from the lymph glands and so gradually clears the head spaces.

For influenza, I recommend taking several high doses of MMS for only one or two days and then, instead, taking high amounts of antioxidants, especially sodium ascorbate, i.e., half a teaspoon in liquid (e.g., fresh citrus juice), every two hours until recovered.

Some individuals, especially with advanced degenerative diseases, may become very weak on prolonged MMS therapy in a way that's seemingly unrelated to die-back reactions. Also, their eyesight may rapidly deteriorate. I believe that this is mainly due to antioxidant deficiency and especially to lack of glutathione and superoxide dismutase.

This again raises the question of the appropriate use of MMS therapy. In my article "How to Overcome Autoimmune Diseases",¹⁴ I show that most chronic degenerative diseases are associated with nanobacteria and pleomorphic microbes that appear to arise from the inside, out of diseased body cells, rather than from outside the body.

The main cause of this microbial uprising is seen as the accumulation of toxic metabolic residues inside the cells, especially affecting the energy-producing mitochondria.

Experience shows that it is definitely beneficial to eliminate the higher bacterial and fungal forms of this microbial overgrowth, and MMS is an effective part of an integrated antimicrobial therapy. But it is generally not possible even with MMS to eliminate the lower forms of nanobacteria and endogenous viral particles.

Even if one continues with a long-term MMS maintenance therapy, these microbes will continue to rise up and the accumulating toxic residues will in time cause increasing health problems in other ways.

Therefore, the rational solution is to remove these toxic residues by the time-honoured method of raw-food cleansing *combined* with an effective antimicrobial therapy.

While some viral infections can be effectively treated with MMS, others such as hepatitis C, Lyme disease and even HIV, while often showing improvement, are overall much more resistant. On the other hand, there is good evidence that high antioxidant therapy is very effective against viral conditions. For instance, there are countless publications in the orthomolecular medicine literature (see <http://www.orthomolecular.org>) about the quick and effective treatment of serious viral infections with very high amounts of vitamin C. Also, hepatitis C can be effectively treated with high amounts of various antioxidants.¹⁵

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Therefore, I believe that it is much more effective to use both treatments in an integrated way. With a serious or resistant viral disease, I would alternate a short-term high-dose MMS treatment with a longer-term period of high amounts of a wide range of different antioxidants.

Oxidants versus Antioxidants

Besides nausea, inflammations also may arise as a side effect of MMS therapy. To understand this effect, we need to look at the function of inflammation and the role of oxidants and antioxidants in this process. Inflammations increase blood and nutrient supply to an area and are essential for the immune system to work and for healing of damaged organs and tissues to occur. If the immune system is not strong enough to eliminate invading microbes and diseased body cells, originally healing immune inflammations become destructive chronic inflammations—symptomatic of our present epidemic of chronic diseases.

Oxidants support the immune system by killing microbes outright and by giving the immune system more firepower. This results in increased inflammation and body acidity when using strong oxidants such as chlorine dioxide. Therefore, as during any real health improvement, various healing reactions including temporary inflammations may develop during MMS treatment.

These are beneficial for healing in the long term, even if uncomfortable in the short term. For a more detailed explanation of this process, called a "healing crisis" or a "healing reaction", see the web page <http://www.health-science-spirit.com/healingcrisis.html>.

Antioxidants have the opposite role to oxidants. They protect our body cells and functions from being oxidised. Oxidation needs to take place only in well-established and protected pathways to generate energy or to eliminate invaders and harmful agents.

If we step up the intake of oxidants, we also need to increase the intake of antioxidants otherwise we may get unnecessary inflammations due to irritation of tissues and other degenerative changes. An example of this is deteriorating eyesight that may occur when using high doses of MMS for more than a few days.

Jim Humble's position is that antioxidants are not necessary with MMS therapy. He states: "You don't have to protect the body from the small quantities [of] ClO₂ generated by MMS. It simply does not oxidize any beneficial bacteria or body cells. No side effects have been reported in hundreds of thousands of clinical trials and tests."¹⁶ I find this statement surprising, as even from a small number of users I have received several

communications that I interpret as reporting damage due to antioxidant deficiency. Therefore, I strongly disagree with Jim Humble's position in regard to antioxidants.

My view is supported by Dr Thomas Lee Hesselink. From an exhaustive literature search, he showed that chlorine dioxide kills the malaria parasite by oxidising its vital antioxidants, including glutathione, alpha-lipoic acid and coenzyme A. He writes: "...no amount of intraplasmoidal glutathione (GSH) could ever resist exposure to a sufficient dose of chlorine dioxide (ClO₂). Note that each molecule of ClO₂ can disable 1 to 5 molecules of glutathione..."¹⁷ If parasites are being killed by disabling their glutathione and other essential antioxidants, then the glutathione and antioxidant systems in our body will be just as vulnerable.

I believe that all those who live on a conventional diet, or who have an infection or a chronic disease, or who smoke, or who are advancing in age are highly likely to be antioxidant deficient. Any of these conditions will be made worse by having persistent exposure to oxidants, whether from chlorinated water, polluted air, fried food or a strong oxidant such as chlorine dioxide.

The problem is not in chlorine dioxide's oxidising beneficial bacteria or body cells but, rather, that chlorine dioxide

reacts strongly with a wide variety of antioxidants and so makes an antioxidant-deficient body even more deficient.

There is evidence that antioxidant deficiency is a main cause of the accumulation of oxidised waste products and protein debris inside cells that leads to chronic degenerative diseases and the uprising of nanobacteria and pleomorphic microbes.¹⁸

Therefore, I regard long-term MMS therapy without antioxidant protection as contributing to the development of chronic diseases.

It is important to increase antioxidant intake when using MMS. However, oxidants and antioxidants should be separated during the day or they may neutralise each other. Jim Humble recommends a three-hour period of separation, and I agree with that. For instance, you may use MMS before breakfast and at bedtime and then take antioxidants from mid-morning to mid-afternoon.

This applies not only to antioxidants in supplement form, such as vitamins C, E and B-complex, coenzyme Q10, grapeseed extract, beta-1,3-D glucan and immune stimulants, but also to food high in antioxidants, such as purple berries and juices, fresh fruit, polyunsaturated oils, turmeric, black or green tea, cocoa and others. Because chlorine dioxide reacts especially well with vitamin C, it is advisable to take one gram or more when

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on a high dose of MMS for more than a few days to protect oxidation-sensitive structures such as the heart, brain and eyes.

Conclusion

The discovery of antibiotics was hailed as the greatest advance in modern medical history. I believe that the internal use of MMS is even more important.

But just as antibiotics have a darker side by causing dysbiosis and candidiasis if improperly used without a fungicide, so MMS carries the danger of causing health deterioration if used without antioxidant protection.

In a more enlightened future when the medical system refocuses on healing rather than on profit, the treatment of serious infections may just require one intravenous infusion of acidified MMS. Until then, we have a variety of other methods from which to choose.

I believe that the most effective approach for a serious, acute infection is a high dose of 15 drops or a high double dose of 10 to 15 drops, and just accept that you will vomit for a day or two.

If the problem is less serious, then a double dose of six drops followed by another six drops an hour later has been shown to be very effective. Even this may cause nausea and some vomiting.

Alternatively, you may experiment with absorbing a

high dose through the mucous membranes of the mouth or the rectum, depending somewhat on where the infection is centred.

With a chronic degenerative disease, I would alternate short periods of high MMS intake with longer periods of high antioxidant intake from foods and supplements. In addition, I would use other therapies such as cleansing to remove the basic cause of the disease.

I would also apply activated MMS to infected areas close to the skin.

When commencing a health program, I would first attempt intestinal sanitation and reduction of any microbial load with milder agents such as Lugol's iodine solution before starting with a gradually increasing dose of MMS as in the standard program.

Presently, MMS is still available over the Internet. There are two types, with slightly different composition.

The product used by Global Light (www.globallight.net) and its distributors is made from sodium chlorite flakes containing 20% sodium chloride, while the MMS from Stride into Health (<http://www.strideintohealth.com>) is a pure sodium chlorite solution as used in the food industry.

Nominally, MMS is a 28% solution of the flakes but, because of its high sodium chloride content, the effective concentration of sodium chlorite is 22.4%, which is the same in both products. ∞

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Endnotes

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