

# Miracle Mineral Solution (MMS)

## MMS Purchase Links:

### MMS 2-Part Kit:

<https://kvlab.com/?ldid=e7b437a372916500>

### Sodium Chlorite:

[https://www.amazon.com/Sodium-Chlorite-Salt-Based-Chlorinated-Chemical/dp/B07F6XTQ91/ref=sr\\_1\\_4?keywords=sodium+chlorite&qid=1580756374&sr=8-4](https://www.amazon.com/Sodium-Chlorite-Salt-Based-Chlorinated-Chemical/dp/B07F6XTQ91/ref=sr_1_4?keywords=sodium+chlorite&qid=1580756374&sr=8-4)

It's made of Sodium Chlorite in distilled water. You mix with an activator acid like citric acid. To make yourself, you'll need Sodium Chlorite powder or flakes, Distilled Water, Acid (like 50% Citric Acid, 4% Hydrochloric Acid, Lemon Juice or Vinegar), accurate digital scale with tare function, plastic container for mixing, plastic spoons. Recipe can be found on Jim Humble's website:

<https://jimhumble.co/how-to-make-mms>

<https://jimhumble.co/blog/a-word-on-coronavirus>

## YouTube Links:

### Blessed to Teach YouTube channel:

<https://www.youtube.com/channel/UC3yCYDoc70dMMQGKL364wHQ>

<https://blessed2teach.com/>

Recommended by Gene Cosensi (Provides info about DUMBs)

<https://blessed2teach.com/pineal-gland-health-gene-decode-b2t-show-jan-27-is/>

### Cirstenw YouTube channel:

<https://www.youtube.com/user/cirstenw>

Comment from 1/28/2020 Cirstenw YouTube video:

<https://www.youtube.com/watch?v=3v-wITzzkoc>

[jerry white](#)

[@Gypsynurse Cathy](#) and all others in the quest for truth, justice, and goodwill,

<https://jimhumble.is/> Corona Virus Update 01/27/2020 !!!

TODAY

<https://jimhumble.co/blog/a-word-on-coronavirus>

<https://jimhumble.co/about>

<http://www.health-science-spirit.com/MMS.html>

Message to "Q" and WH US gov admin. Please stop the baseless Misinformation, Censoring, Restrictions and Bans regarding this life saving product by certain government offices and corporate institutions. This product and other similar products, and self-help information should be allowed freely available and made distributable to the public by the public without delay or unnecessary restrictions. WWG1WGA

# SODIUM CHLORITE

## The Miracle Mineral Solution (MMS)

By Walter Last

<http://www.health-science-spirit.com/MMS.html>

Sodium chlorite is presently being promoted as a miracle mineral supplement or MMS with superior antimicrobial activity. You can appreciate its power from a statement by the discoverer of this remedy that all 75,000 individuals with malaria that have been treated were cured within a day, with 98% being cured within 4 hours (1). This obviously has great ramifications not only for self-healing but also for the drug industry and medicine. In the following I want to comment on these issues.

### Conventional Use of Sodium Chlorite

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 sterilizing hospital and clinic rooms and equipment. In hospitals it has been used as a disinfectant for a hundred years and in the US meat industry for about 50 years. Health-conscious countries and municipalities are increasingly replacing the health-damaging chlorine for the harmless chlorine dioxide in treating public water supplies (2).

In solution sodium chlorite ( $\text{NaClO}_2$ ) is very alkaline and stable but when acidified it forms the gas chlorine dioxide ( $\text{ClO}_2$ ) 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, food, or in the body after treatment with MMS is a small amount of table salt or sodium chloride ( $\text{NaCl}$ ).

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 5 minutes, and chlorine dioxide levels do not exceed 3 ppm. 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. Commercially it is produced and shipped in Australia 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 US and the UK, it is also available as tablets that release chlorine dioxide (e.g. releasing 4 ppm per 1 liter or per 30 liter of water).

In Germany and Italy chlorine dioxide is the main treatment chemical for public water supplies.

Curiously, stabilized 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 responses (4).

## **The Discovery of MMS, the Miracle Mineral Supplement**

Jim Humble, a chemist and metallurgist accidentally discovered the MMS by using a whole bottle of Stabilized Electrolytes of Oxygen (S.E.O.) to immediately cure a companion of malaria during a jungle expedition. S.E.O. contains about 3 % sodium chlorite.

Humble gradually realized that S.E.O. is too weak and that it does not work by releasing oxygen but rather that it must be acidified to release chlorine dioxide as the active ingredient. This is also how it has been used as a hospital disinfectant. The problem was to find a safe dose and procedure that allowed this most effective antimicrobial to be used for people. Humble ended up using a nominally 28% solution which, because of a nearly 20% sodium chloride content, actually contains only 22.4% sodium chlorite. Because of its miraculous effect in supporting the immune system against invading microbes and parasites Humble called his sodium chlorite the Miracle Mineral Supplement. However, I prefer to call it Miracle Mineral Solution, as supplements require the approval of health authorities, while a solution for treating water does not need to be registered.

Using this at a maximum dose of up to 3 x 15 drops he writes: "MMS is producing some of the quickest results that I have seen with people's health, including cancer, diabetes, arthritis, shingles, warts going hard and dropping off, and many more." Also AIDS patients in debilitated conditions went back to work without any further signs of disease (1).

Basically, all diseases associated with microbes and immune reactions respond very well, and that includes not only infections and autoimmune diseases but most of our diseases. Chlorine dioxide was used to kill Anthrax during the 2001 Anthrax attack. Even most diseases that are not known to be associated with microbes and the immune system reportedly have improved (1).

As an example of the unexpected results of using MMS, Humble relates the following incident: a teenage girl, overweight with depression and failure to develop breasts, was given MMS. The next day her breasts started to grow. After another dose 4 days later, she had the first period after 6-months, her breasts were fully developed, her

depression lifted, and she started losing weight (1). My interpretation of this is that all her problems were caused by Candida.

Because of its strong oxidizing ability, chlorine dioxide seems to inactivate many poisons, may help with toothache, and makes stored heavy metals soluble so that they can more easily be expelled. Another advantage of chlorine dioxide as compared to chlorine is that it does not react with organic matter, such as food, body cells or even our “good” intestinal bacteria, but is specific in destroying pathogenic microbes. However, it does react with vitamin C and possibly other reactive antioxidants.

If this treatment option would become widely known and used by the general population that would be devastating for the medical-pharmaceutical complex. The FDA has a long history of jailing and otherwise neutralizing inventors of effective natural remedies and therapies that harm the drug industry, and Humble, as an American, tries to protect himself by remaining in hiding in Africa or Central America.

## **Usage Instructions**

In many countries, to be legally correct, MMS should not be used to treat people but rather to purify water. We can then drink the purified water and receive a boost to our immune system as a consequence. Jim Humble has now devised a wide range of treatment recommendations (see [www.jimhumble.biz](http://www.jimhumble.biz)). The original instructions were to start with 1 or 2 drops of MMS and gradually increase up to 15 drops three times a day. Mix the MMS with an acid activator. Most recommended is a 10% solution of citric acid in water which you may make yourself by dissolving 1 spoonful of citric acid crystals in 9 parts of water. Citric acid tends to be available from supermarkets as an ingredient for baking. Acid activation releases chlorine dioxide. Three minutes after adding the acid dilute with half a glass of water, herb tea, or juice as explained below.

Lemon juice, lime juice or vinegar have been used as activator before it was found that 10% citric acid is much more effective. Cider vinegar may aggravate fungal problems but white vinegar is suitable. The usual recommendation is to add 5 times more acid than MMS. Drops from a standard glass eye dropper should be multiplied by 1.5 to equal the number of drops from the standard MMS bottle. However, different types of eye droppers, pipettes and bottle tops have different drop sizes, and you may standardize your dropper by counting how many drops from the MMS bottle and how many from your eye dropper are needed to fill a teaspoon or another suitable measure. One millilitre or ml of MMS contains 17 standard drops. A level teaspoon of MMS, lemon juice or 10% citric acid solution has about 80 drops. So a quarter teaspoon has about 20 drops.

Therefore, for easier use the drops of the acid do not need to be counted, provided you make sure that you take more rather than less acid. When taking 15 drops of

MMS you can mix it with a full teaspoon of acid, when taking 6 or 7 drops of MMS mix with half a teaspoon of acid, and generally take more or less acid according to the amount of MMS. Furthermore, 10% citric acid is about 5 times stronger than the other acids. To achieve the same results, you may use more of the other acids compared to citric acid.

The stronger the acid, the more chlorine dioxide is released within a short period. Therefore, the chlorine dioxide smell is much stronger after acidifying with 10% citric acid, and equally the destructive effect on microbes and parasites is much higher. Difficult conditions, such as Lyme disease (caused by a virus transmitted by ticks) responded to 15 drops of MMS acidified with 10% citric acid but not if the other acids had been used. An even stronger effect is achieved by mixing equal numbers of drops of MMS and 50% citric acid. In this case dilute with water or juice 20 seconds after mixing. You make 50% citric acid by dissolving a level spoonful of citric acid crystals in a spoonful of water. Humble now recommends using the 50% citric acid as his preferred method.

Generally, you do not need to be too concerned with the mentioned numbers and sizes of drops. The general idea is to keep slowly increasing the amount of MMS until you have overcome your immune-related problem.

Three minutes after mixing with the 10% citric acid, or 20 seconds when using the 50% acid, dilute with half a glass of water, additional herb tea, or juice without added vitamin C, e.g. apple or grape juice but not orange juice. Also, cinnamon, on its own or with some honey stirred into the water, helps to disguise any unpleasant taste of the solution. The initial strong smell is now reduced as the chlorine dioxide remains dissolved in water rather than escaping into the air. Do not take any antioxidant supplements close to MMS. If it tastes too acid for you, then neutralize the liquid with sodium bicarbonate shortly before drinking.

Drink the diluted MMS all at once or possibly spaced out in sips over an hour or two to minimize nausea. It acts best on an empty stomach but that also easily causes nausea. If that happens temporarily reduce the dose or have some food in the stomach. Alternatively, you may take a dose, say 6 drops, and another 6 drops an hour later. Such a double dose seems to be more effective than a single dose two or three times during the day. The highest double dose would be with two times 15 drops, but few will be able to take this without vomiting.

It may be best to take MMS just before going to bed. MMS works very fast, and people often become sleepy after taking a dose of MMS. Also, it is easier to cope with nausea if you can fall asleep. If you take MMS twice a day, take one of the doses in the evening before going to bed. However, some individuals experience the opposite effect and have difficulty falling asleep after taking MMS.

An alternative method for intensifying the antimicrobial program or for overcoming an infection is by taking 3 to 4 drops of acidified and diluted MMS every hour and a half

for several days. Temporarily reduce the dose if any nausea should occur. You may do this by swallowing the MMS or with oral absorption or a combination of both.

Humble believes it is safe to give children MMS as needed for infections. The maximum dose for children, underweight or overweight individuals, is stated as 3 drops per 11.4 kg or 25 pounds of body weight. I would instead use 2-3 drops per 12 kg as a maximum dose.

For most conditions, Humble regards the intensive MMS treatment as completed after taking 15 drops two or three times daily for one week. If you cannot reach this level then just remain somewhat longer at the highest dose that you can use. Following this Humble recommends a maintenance intake for older individuals of 6 drops daily and for younger individuals of 6 drops twice weekly.

My own preference is only for an initial antimicrobial cleanse lasting a few weeks, and then for a relatively high intake only when indicated by a developing infection, and not using it for the rest of the time. For chronic conditions, such as root canal fillings, bio-films on surgical implants or other microbe factories that cannot be immediately sanitized, and especially cancer and all autoimmune diseases then I would recommend periodically taking 5 to 10 drops of non-acidified MMS daily as explained in the [Ultimate Cleanse](#).

## **Different Conditions**

With serious acute infections or poisonings, such as with malaria Humble recommends giving immediately 15 drops followed an hour later by another 15 drops. While most conditions tend to improve with a medium-dose taken over a long period, some parasitic and viral conditions seem to require at least one high double dose to get results. It seems that with life-threatening acute conditions a high double dose can be more easily handled than with chronic conditions.

For chronic or long-standing conditions always increase the number of drops slowly over a period of one or two weeks. Increase by 1 or 2 drops each day until you feel some nausea. Then drop back by 2 drops and stay at this level for several days until increasing again. In this way you gradually work your way higher, reducing and then increasing again to keep nausea under control. You may reduce problems by dividing the daily dose into a morning and a bedtime portion, but after some time always try to edge higher until you start feeling the nausea. If you continue to encounter nausea whenever you raise the dose then switch over to non-acidified MMS as explained below.

With an acute infection you may start with 3 or 4 drops and increase quite rapidly, even if this means nausea, vomiting and diarrhea. With severe parasite problems, such as malaria attack, or if one had taken a poison, or has food poisoning, or with snake bites, a high double dose of MMS will often help.

For abscessed teeth, infected gums, and pyorrhea use 6 drops of acidified and diluted MMS and rinse for several minutes, for a sore throat gargle frequently. Finally, you can add more water, tea or juice and drink it; experiment to find the dose that works for you.

With sinus infections you may mix a drop with acid and several times sniff up the chlorine dioxide, first through one nostril and then through the other. However, this can be rather irritating to the mucous membranes. Therefore, do this only very carefully.

For inflammatory and infective skin conditions you may bathe or wash the affected area with suitably diluted acidified MMS. I have been told of a case where psoriasis went away after a few weeks of topical treatment. I would also use it topically for other autoimmune skin diseases, such as scleroderma, leukoderma/vitiligo and alopecia or autoimmune-related baldness. At the same time, you may use MMS internally in the non-acidified form.

For burns Humble advises to squirt the MMS full strength straight out of the bottle all over the burn. Do not use the acid in this case. Very lightly with the tips of the fingers spread it completely over the burn. Let it remain there for only 30 seconds to a minute. The acidic chemical in the burn is neutralized by the alkaline solution of the MMS. The pain stops immediately, within seconds. Wash the MMS off with water. You absolutely must wash it off or the burn will become worse. If you do this correctly, the burn will heal in about ¼ the usual time for a similar untreated burn. For sunburns he advises leaving the MMS on for 15 to 30 seconds and then rinse off with water.

To reduce nausea, but also with bowel cancer or inflammatory bowel conditions you may try using it activated in half a liter of water as a retention enema. Use another enema beforehand to clean the bowels, or use a laxative to clean out. With cancer of the uterus/cervix/ovaries you may also try inserting the activated solution in a non-irritating concentration.

With colds the MMS 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 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 headspaces, see [Instant Cure of the Common Cold](#).

With Influenza I recommend taking several high doses of MMS for only one or two days and then taking instead high amounts of sodium ascorbate, e.g. half a teaspoon in liquid (e.g. fresh citrus juice) every 2 hours until recovered.

## **Non-Acidified MMS:**



Medical-type patents describe the use of stabilized sodium chlorite in oral, topical and intravenous applications for treating autoimmune diseases and chronic infections, also hepatitis and lymphoma, and for neutralizing the neuro-toxic effects of acetaldehyde produced by Candida and other fungi. In these cases, the solution is not acidified! This is also suitable for kidney and bladder infections.

The main beneficial effect with autoimmune diseases may be due to an ability of sodium chlorite to control the pleomorphic microbes which are not only a root cause of autoimmune diseases but also of cancer. Therefore, after a short period of using acidified MMS, autoimmune diseases as well as cancer may be treated periodically with non-acidified MMS. This is much less damaging to antioxidants in the body than prolonged use of acidified MMS, and the incidence of nausea will be greatly reduced.

As an average dose try 5 to 10 drops (or half a ml) of MMS once a day after the evening meal or at bedtime in a drink. In this way you may use vitamin C and other antioxidants until mid-afternoon without interfering with the action of MMS. However, non-acidified sodium chlorite, just like acidified MMS, does react with and reduce the glutathione in body cells. Therefore, use it only for limited periods, e.g. for one week every other week, and limit this program to 6 to 10 weeks (3 to 5 cycles) before a longer break of one or more months. Alternatively use it 5 days a week for 3 to 5 weeks. During breaks use higher amounts of other antimicrobials instead, such as Olive Leaf Extract or Lugol's solution.

## **Side Effects and Problems**

Individuals may 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 3-week course of Lugol's solution or a less concentrated form of aqueous iodine, and finally a course of MMS. For instructions see the Ultimate Cleanse at [www.health-science-spirit.com/ultimatecleanse.html](http://www.health-science-spirit.com/ultimatecleanse.html).

Some individuals with advanced degenerative diseases become very weak on MMS seemingly unrelated to die-back reactions. I believe that this is due to antioxidant deficiency, and especially to lack of glutathione. In this case take 1 gram of N-Acetyl Cysteine daily to stimulate glutathione production. This also helps to expel toxic minerals.

Commonly nausea, vomiting and diarrhea will occur sooner or later and are beneficial for cleaning out. Sometimes also other reactions, such as inflammations may temporarily occur. To stop nausea, you may take 1000 mg or more of vitamin C, but



this also stops the antimicrobial activity. Other methods that may help against nausea are vitamin B6, ginger, pressing 2-3 cm below the wrist in the middle of the underarm, and also reflexology: pressing the foot reflex for the stomach - just below the joint of the big toes, press against a pointed stone/rock, step or corner of some furniture.

Furthermore, I found that much of the nausea can be relieved by cleaning out the bowels before taking the drops or immediately when nausea starts. This may be done with an enema or colonic, or by taking a suitable laxative before the nausea starts. In addition, with bowel cancer or inflammatory bowel conditions you may try using activated MMS in half a liter of water as a retention enema. Use another enema beforehand to clean the bowels, or use a laxative to clean out. With cancer of the uterus/cervix/ovaries you may also try inserting non-acidified MMS solution in a non-irritating concentration. In the case of cancer also see [OVERCOMING CANCER](#).

In the case of cardiovascular diseases and arteriosclerosis it has been suggested that with MMS therapy cholesterol deposits may be removed too fast and lead to a weakening of the affected blood vessels. To avoid or minimize problems Dr Matthias Rath recommends taking high amounts of vitamin C, up to 10 g 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.

## **Oxidants versus Antioxidants**

Besides nausea also inflammations may arise as a side effect of MMS therapy. To understand this effect, we need to have a 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 tissue 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, and this is a symptom 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 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. This is 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 healing reaction see

[www.health-science-spirit.com/healingcrisis.html](http://www.health-science-spirit.com/healingcrisis.html).

The reverse of this process, the suppression of inflammation, can be seen in the conventional medical approach of using anti-inflammatory steroids in the treatment of autoimmune diseases. It is my experience that such diseases may be overcome within weeks or months using natural approaches, but when steroidal drugs are used at the same time, it is much more difficult to make headway. In this case any increased immune activity that results in increased inflammation is blocked by steroidal drugs. However, it is not advisable to greatly reduce any anti-inflammatory drugs until the intestines and infected teeth have been sanitized, and until after antimicrobial therapy.

Antioxidants have the opposite role to oxidants. They protect our body cells and functions from being oxidized. 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.

Antioxidant deficiency is common with chronic diseases and advancing age. High intake or prolonged use of MMS will make this situation worse. Therefore, it is important to increase antioxidant intake when using MMS. However, oxidants and antioxidants should be separated during the day or they may neutralize each other. For instance, you may be using MMS before breakfast and at bedtime and antioxidants from mid-morning to the evening meal.

This does not only apply to antioxidants in supplement form, such as vitamin C and E, B-complex, coenzyme Q10 or grapeseed extract, 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 1 gram or more when on a high dose of MMS for more than a few days to protect oxidation-sensitive structures, such as heart, brain and eyes.

### **Overdose of sodium chlorite:**

Anyone who has consumed more than ½ teaspoon of the miracle mineral solution should immediately begin drinking water, as much as possible. It is best to add ½ teaspoon each of bicarbonate of soda and sodium ascorbate to each glass of water or whichever is available. After drinking plenty of water you may also try to induce vomiting.

The main danger after a high dose of MMS is from low blood pressure and hypoglycemic shock due to fluid loss after vomiting and diarrhea. If this should happen take immediately a high dose of vitamin C to stop the reaction, lie down, and

drink lots of lightly salted and sweetened water. A general recommendation for rehydrating after vomiting and diarrhea is a fluid made with 6 level teaspoons of sugar and 1/2 level teaspoon of salt dissolved in 1 liter of water, or alternatively use salted rice water. Also. Individuals with G6PD deficiency, an enzyme deficiency with a tendency to haemolytic anemia, must avoid MMS and other oxidizing substances.

Presently MMS is still available over the Internet. There are 2 types with slightly different composition. The product used by Global Light (<http://www.globallight.net>) and its distributors is made from technical sodium chlorite flakes containing 20% sodium chloride, while the MMS from StrideintoHealth ([www.strideintohealth.com](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.

Keep MMS protected from direct sunlight. Also see the more recent article [MIRACLE MINERAL SUPPLEMENT - An Integrated MMS Therapy](#), and check for new protocols at [www.jimhumble.biz](http://www.jimhumble.biz).

## REFERENCES

- (1) <http://miraclemineral.org>
- (2) [www.epa.gov/safewater/mdbp/pdf/alter/chapt\\_4.pdf](http://www.epa.gov/safewater/mdbp/pdf/alter/chapt_4.pdf)
- (3) FINAL ASSESSMENT REPORT APPLICATION A476 (12/03: 8 October 2003) [www.foodstandards.gov.au/srcfiles/A476 Chlorite Final Assessment Report.pdf](http://www.foodstandards.gov.au/srcfiles/A476_Chlorite_Final_Assessment_Report.pdf)
- (4) USE OF A CHEMICALLY-STABILIZED CHLORITE SOLUTION FOR INHIBITING AN ANTIGEN-SPECIFIC IMMUNE RESPONSE (WO/1999/017787) <http://www.wipo.int/pctdb/en/wo.jsp?wo=1999017787&IA=WO1999017787&DISPLAY=DESC>

# MIRACLE MINERAL SUPPLEMENT

## An Integrated MMS Therapy

By Walter Last

<http://www.health-science-spirit.com/miracle.htm>

Sodium chlorite is presently being promoted as a miracle mineral supplement or 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 that have been treated 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 the following I suggest to minimize 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 ( $\text{NaClO}_2$ ) is very alkaline and stable but when acidified it forms the gas chlorine dioxide ( $\text{ClO}_2$ ) 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, food, or in the body after treatment with MMS is a tiny amount of table salt or sodium chloride ( $\text{NaCl}$ ).

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 sterilizing hospital and clinic rooms and equipment. In hospitals it has been used as a disinfectant for a hundred years and in the US meat industry for about 50 years. Health-conscious countries and municipalities are increasingly replacing the health-damaging chlorine for 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 5 minutes, and chlorine dioxide levels do not exceed 3 ppm. 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. Commercially it is produced and shipped in Australia 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 US 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 chlorine dioxide has been shown to sterilize 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 in the red blood cells (4). Furthermore, low concentrations of chlorine dioxide are also effective against the influenza virus (4a).

Curiously, stabilized chlorite, commonly called Stabilized Chlorine Dioxide or SCD, 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 responses (5).

A weak solution of SCD is approved by the FDA and available in many countries as mouthwash; it is also in some toothpastes. The idea is that colonies of bacteria in the mouth produce acids that release chlorine dioxide locally to kill these bacteria.

SCD has a pH of about 7.5 to 8.5 and is in effect a weak solution of sodium chlorite stabilized with sodium bicarbonate, and sometimes also with additional hydrogen peroxide.

The Wikipedia mentions for [sodium chlorite](#) that a weak acid can be added to SCD to "activate" it and make chlorine dioxide in-situ. SCD is used as a broad spectrum disinfectant and anti-microbial, it is currently being used against bacterial and viral outbreaks including [MRSA](#), [Legionella](#), and [Norovirus](#). Therefore, if MMS is not available a suitable mouthwash may be used in about a 10 times larger volume or about 1 ml of mouthwash for 2 drops of MMS.

## **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 5 drops of acid for every 1 drop of MMS. Originally lemon juice and vinegar were used which are now commonly replaced by a 10% solution of citric acid. This is about 5 times more acid and releases considerably more chlorine dioxide with a stronger antimicrobial effect. After waiting for 3 minutes half to one glass of water or juice is added and one may then drink it.

You may add herb tea or juice without vitamin C, e.g. commercial apple or grape juice but not orange juice. The initial strong and somewhat nauseating smell is now greatly reduced as the chlorine dioxide remains dissolved in water rather than

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

Therapy can be approached in two ways. Jim Humbles recommendation is to start with a low dose and gradually increase by 1 drop each day until a slight feeling of nausea develops and then cut down by 2 drops. After several days you try increasing again, and so gradually work your way up to 15 standard drops 1 to 3 times daily for about one week. But many individuals do not get that far because they become sensitized, 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 it on an empty stomach. It may be best to take MMS just before going to bed. MMS works very fast, and people often become sleepy after taking a dose of MMS. Also, it is easier to cope with nausea if you can fall asleep.

An alternative method with acute infections 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 2 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 article (7) and also Jim Humble's Standard MMS Protocol (8).

An alternative method for intensifying the antimicrobial program or for overcoming an infection is by taking 3 to 4 drops of acidified and diluted MMS every hour and a half for several days. Temporarily reduce the dose if any nausea should occur. You may do this by swallowing the MMS or with oral absorption or a combination of both.

To quickly stop nausea, you may take 1000 mg or more of vitamin C, but this also stops the antimicrobial activity. To avoid or minimize oxidative damage I recommend taking MMS only in the morning and evening or only once a day and use a combination of antioxidants, including vitamin C, at lunchtime or several hours away from the MMS. To minimize unpleasant side effects, try to alkalize the body before going on a course of MMS.

The main danger after a high dose of MMS is from low blood pressure and hypoglycemic shock due to fluid loss after vomiting and diarrhea. If this should happen take immediately a high dose of vitamin C to stop the reaction, lie down, and drink lots of lightly salted and sweetened water. A general recommendation for rehydrating after vomiting and diarrhea, is a fluid made with 6 level teaspoons of sugar and 1/2 level teaspoon of salt dissolved in 1 liter of water, or alternatively use

salted rice water. Also. Individuals with G6PD deficiency, an enzyme deficiency with a tendency to haemolytic anaemia, must avoid MMS and other oxidizing substances.

If this MMS program causes problems or is too difficult then you may try instead oral or rectal absorption. If used for more than a few weeks, especially for cancer and autoimmune diseases, then I recommend non-acidified MMS as explained below.

## Other Delivery Options

Because frequently nausea 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 5 times more drops of acid, after 3 minutes DMSO is added at the same rate as the acid. After another 3 minutes, wait the solution is rubbed into the skin. A variation of this uses 10 drops of MMS and 1 tsp each of acid and DMSO. This method has also been adopted for cancer treatment, including by Jim 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 oxidized is MSM, which may also be written as DMSO<sub>2</sub>. 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 tumors. While MSM is less effective as a carrier than DMSO, it does improve passage through the skin, and it 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.

**Rectal absorption** is similar to using coffee enemas 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, expel, use again 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. Protect the anus with some fat, cream, or Vaseline. You may make the solution less acid by adding some bicarbonate as explained for oral application.

Afterwards you may feel weak for a while and have much bowel activity for several hours, and possibly longer. 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 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 1 activated drop in a small glass of water and gradually increase on subsequent occasions. If the acidity of the solution is a problem you may nearly neutralize it with bicarbonate several minutes after adding the water. Also try using the mouthwash solution.

**Oral absorption** is my preferred method. 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 6 activated drops this way and keeping it 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 it 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 it in the mouth is not too unpleasant, and the taste buds soon stop complaining. However, it is advisable to nearly neutralize 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 3 minutes. Furthermore, after diluting it one may still wait for several minutes for further saturation of the solution before neutralizing it.

To 1 part of MMS add 5 parts of 10% citric acid and after 3 minutes dilute with 30 ml or a big mouthful of water. Finally add up to 8 parts of a 10% sodium bicarbonate solution to protect the teeth from acid attack. This gives a pH of about 5 to 6, and one can keep it in the mouth for 5 to 20 minutes before spitting it out. You make the 10% sodium bicarbonate solution by dissolving one level spoonful of bicarb in 9 spoonfuls of water. Instead of plain water you may also use herb tea or flavor with some fruit juice, or sweeten with Xylitol or Stevia.

**Mouthwash:** I also recommend that you make yourself a mouthwash by diluting a teaspoon of MMS in 500 ml of water. This is only slightly alkaline and tends to release small amounts of chlorine dioxide in contact with acid-forming bacteria. It is also commercially promoted as the most effective method of removing bad breath or halitosis. It does this by oxidizing smelly Sulphur compounds in the mouth to non-odorous sulphates. Swish a mouthful around for a short time, gargle, and spit it out. You may also flavor the solution or make it weaker. Some people claim that regular use has protected them from 'catching' infections.

Even more important is the observation that the combination of occasional oral absorption of chlorine dioxide and regular use of MMS mouthwash tends to eliminate pathogenic microbes and inflammations in the mouth. Such microbes and inflammations, be they from root canals, deep tooth pockets or gum inflammations and other periodontal diseases, are strongly implicated in the causation of arteriosclerosis, heart attacks and other heart diseases as well as rheumatoid arthritis, diabetes, prostate cancer and other cancers.

You may also combine the stronger antimicrobial effect of oral absorption with the convenience of a mouthwash: add a drop or two of lemon juice or citric acid to a teaspoonful of mouthwash solution and immediately start swishing this in the mouth for a minute or two before spitting it out. This has a relatively mild effect on the taste buds. One teaspoonful of mouthwash contains about one drop of MMS.

**Non-Acidified MMS:** Medical-type patents describe the use of stabilized sodium chlorite in oral, topical and intravenous applications for treating autoimmune diseases and chronic infections, also hepatitis and lymphoma, and for neutralizing the neurotoxic effects of acetaldehyde produced by Candida and other fungi. In these cases, the solution is not acidified! This is also suitable for kidney and bladder infections.

The main beneficial effect with autoimmune diseases may be due to an ability of sodium chlorite to control the pleomorphic microbes which are not only a root cause of autoimmune diseases but also of cancer. Therefore, after a short period of using acidified MMS, autoimmune diseases as well as cancer may be treated periodically with non-acidified MMS. This is much less damaging to antioxidants in the body than prolonged use of acidified MMS, and the incidence of nausea will be greatly reduced.

As an average dose try 5 to 10 drops (or half a ml) of MMS once a day after the evening meal or at bedtime in a drink. In this way you may use vitamin C and other antioxidants until mid-afternoon without interfering with the action of MMS. However, non-acidified sodium chlorite, just like acidified MMS, does react with and reduce the glutathione in body cells. Therefore, use it only for limited periods, e.g. for one week every other week, and limit this program to 6 to 10 weeks (3 to 5 cycles) before a longer break of one or more months. Alternatively use it 5 days a week for 3 to 5

weeks. During breaks use higher amounts of other antimicrobials instead, such as Olive Leaf Extract or Lugol's solution.

## **Intravenous MMS**

Intravenously MMS commonly has been used without acid activation. Jim Humble has had it many times, and also used up to 2 times 30 acidified drops orally without getting a reaction.

But recently he had one acidified drop intravenously and that caused a Herxheimer reaction. He believes that acid activation increases chlorine dioxide release by up to 300 times. Next day another drop did not cause a reaction but 2 drops the following day reacted again. The same happened with further increased drops (10).

The effectiveness of antimicrobial therapy can often be judged by its ability to trigger a Herxheimer reaction. This is caused by the waste material of a large number of microbes being killed suddenly. It consists of extreme fatigue, chills, diarrhea, muscle and joint pains, and other flu-like symptoms for several hours or days. During a reaction you stop the antimicrobial therapy and instead have a high intake of good quality water, juices and herb teas.

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 IV drop? The oral doses would have cleared these microbes from the blood and lymph system, and probably from most tissue 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, and in the process 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 IV MMS therapy, and I also regard this as a rather inefficient way of 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 immune system can then easily deal with the nanobacteria.

## **Integrating Therapies**

Often individuals 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 3-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 fast and lead to a weakening of the affected blood vessels. To avoid or minimize problems it has been recommended to take high amounts of vitamin C, up to 10 g 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.

For 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 a 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 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 headspaces, see [Instant Cure of the Common Cold](#).

With Influenza I recommend taking several high doses of MMS for only one or two days and then taking instead high amounts of antioxidants and especially sodium ascorbate, e.g. half a teaspoon in liquid (e.g. fresh citrus juice) every 2 hours until recovered.

Some individuals, especially with advanced degenerative diseases, may become very weak on prolonged MMS therapy seemingly unrelated to die-back reactions. Also, the 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 of 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-honored 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 literature of Orthomolecular Medicine (<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).

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 high-dose MMS treatment with a longer period using high amounts of a wide range of different antioxidants.

## **Oxidants versus Antioxidants**

Besides nausea also inflammations may arise as a side effect of MMS therapy. To understand this effect, we need to have a 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 tissue 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, and this is a symptom 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. This is 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 healing reaction see [www.health-science-spirit.com/healingcrisis.html](http://www.health-science-spirit.com/healingcrisis.html).

Antioxidants have the opposite role to oxidants. They protect our body cells and functions from being oxidized. 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 CIO<sub>2</sub> 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 received several communications that I interpret as damage due to antioxidant deficiency. Therefore, I strongly disagree with the position of Jim Humble in regard to antioxidants.

My view is supported by Dr Thomas Lee Hesselink (17). In an exhaustive literature search he shows that chlorine dioxide kills the malaria parasite by oxidizing its vital antioxidants, including glutathione, alpha lipoic acid, and coenzyme A. He writes: "... no amount of intraplasmodial glutathione (GSH) could ever resist exposure to a sufficient dose of chlorine dioxide (CIO<sub>2</sub>). Note that each molecule of CIO<sub>2</sub> can disable 5 molecules of glutathione." 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 with advancing age are highly likely to be antioxidant deficient. Any of these conditions will be made worse by having persistent exposure to oxidants, be it from chlorinated water, polluted air, fried food, or from a strong oxidant such as chlorine dioxide.

The problem is not in chlorine dioxide oxidizing beneficial bacteria or body cells but rather that it 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 oxidized waste products and protein debris inside cells that lead to chronic degenerative diseases and the uprising of nanobacteria and pleomorphic microbes (14).

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 neutralize each other. Jim Humble recommends a 3-hour period of separation, and I agree with that. For instance, you may use MMS before breakfast and at bedtime and antioxidants from mid-morning to mid-afternoon. However, my preference for long-term antimicrobial therapy is alternating MMS, mainly in non-acidified form, with other antimicrobials as outlined in the [Ultimate Cleanse](#).

This does not only apply to antioxidants in supplement form, such as vitamin C and E, B-complex, coenzyme Q10 or grapeseed extract, Beta 1,3D 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 1 gram or more when on a high dose of MMS for more than a few days to protect oxidation-sensitive structures, such as heart, brain and eyes.

## **Conclusion**

The discovery of antibiotics was hailed as the greatest advance in modern medical history. I believe 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 profit the treatment of serious infections may just require one intravenous infusion of acidified MMS. Until then we have a variety of other methods to choose from.

I believe 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 6 drops followed by another 6 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 centered.

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 starting on 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 2 types with slightly different composition. The product used by Global Light (<http://www.globallight.net>) and its distributors is made from technical-grade sodium chlorite flakes containing 20% sodium chloride, while the MMS from Stride into Health ([www.strideintohealth.com](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. Also check for new protocols at [www.jimhumble.biz](http://www.jimhumble.biz).

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