1 Drop Dose of MMS1 Can Equate to 1ml of CDH & 2ml of CDS

- ▶ MMS is a 22.4% solution of 80% sodium chlorite powder or flakes (NaClO2) in water.
- ▶ MMS1 is activated MMS. It is MMS plus an activator; when the two are mixed together they produce chlorine dioxide (ClO2).
- ▶ MMS1, CDH and CDS are Chlorine Dioxide Solutions (CDS) ▶ Drop size based on 24 drops = 1 ml (1 drop=0.042 ml)

1. **Why this paper**? To prevent under-dosing CDH and CDS when using Protocols.
2. **MMS Protocols** were designed for use with MMS1, not CDH or CDS which need different dosing.
3. **Theory**: 1 drop of MMS contains 6.7mg of chlorine dioxide (CLO2) when 24 drops = 1ml. 1 drop=0.042 ml
4. **Fact**: 1 drop of MMS is activated about 7% externally when combined with 50% citric acid 1-to-1 for 20 to 30 seconds. The remaining MMS in MMS1 should fully activate in a stomach with normal gastric acids.
5. **Fact**: Many people have normal gastric acids to activate residual MMS in MMS1 & CDH; older people less.
6. **CDH Recipes** were designed so each milliliter of CDH will be made from 1 drop of MMS. NOTE: only applies to McRae-Lackney recipes, not to any other recipes.
7. **1ml of CDH** and a 1 drop dose of MMS1 are both made from 1 drop of MMS.
8. **1ml of CDH** and a 1 drop dose of MMS1 both have the potential to produce 6.7mg of CLO2 when ingested in a stomach with adequate gastric acid.
9. **CDH4%** is about 50% activated externally and **CDH2%** about 25% activated. Fridge life 2 weeks/2 months.
10. **If there is little or no stomach gastric acid** present, CDH will provide more CLO2 than MMS1.
11. **CDS** is fully activated externally and can not increase nor decrease in CLO2 content when in a stomach.
12. **A recent newsletter** from Jim Humble said the maximum amounts of CDH and CDS to use with Protocol 1000 were 3ml and 6ml respectively. Protocol 1000 limits MMS1 to 3 drops per hour.
13. **Therefore** one can conclude that a 3 drop dose of MMS1, 3ml of CDH & 6ml of CDS can deliver the same amounts of CLO2 if adequate stomach acids are present for MMS1 & CDH. Math & photos prove this.
14. **If no stomach acids are present**, then CDS can provide more CLO2 than MMS1 or CDH.
15. **Between zero and normal stomach acids**, varying amounts of additional CLO2 can be provided by MMS1 and CDH.
16. **MMS Tablets** would be a good choice for someone who has little or no gastric acids as they contain an activator and will fully activate in plain water.
17. **A little math** will be necessary to show how much CLO2 is in 6ml of 3000ppm CDS.
18. **Volume** of SCS (liters) **x** CLO2 **Concentration** (ppm) **= Dose** (mg of CLO2) (0.006 x 3000 = 18)
19. **6ml of CDS** contains 18mg of CLO2.
20. **3 drop dose of MMS1** provides 20.1mg of CLO2 if fully activated. (6.7mg/drop of MMS) (3 x 6.7 = 20.1)
21. **3ml of CDH** provides 20.1mg of CLO2 if fully activated. (6.7mg/drop of MMS used to make each ml of CDH)
22. **It is not possible** to measure the total amount of CLO2 that MMS1 or CDH could produce in a stomach, but the maximum possible amounts of CLO2 in milligrams can be calculated by multiplying 6.7 x MMS drops.
23. **Because** stomach acid availability is unknown when ingesting MMS1 or CDH, the amount of CLO2 that may be produced is unknown. Therefore, knowing the external CLO2 concentration isn't useful information.

1 ml at 3000 ppm
= 3 mg
6 ml = 18 mg, x 8
= 144 mg

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