

VIRIDIS BioPharma

Report Prepared for
American Biotech Laboratory

Selective Inaction of ASAP on Probiotics

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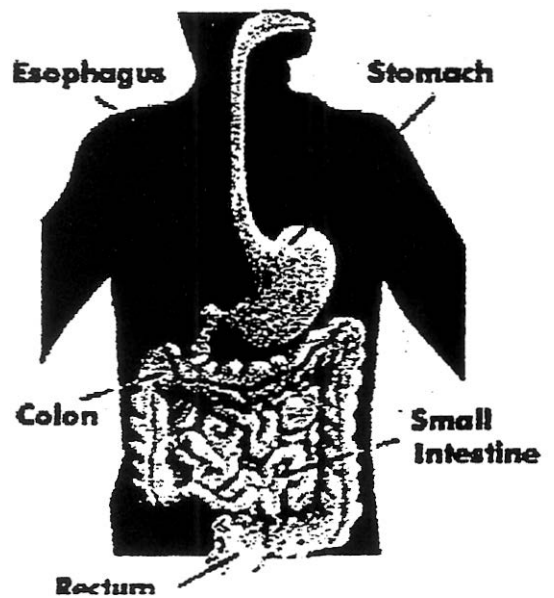
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1. Introduction & Purpose

Since the publication of "Science Digest" March 1978 issue reporting colloidal Silver in the article "Our Mightiest Germ Fighter" silver is emerging as a wonder of modern medicine. Science has traveled a long way in recognizing the fact that an antibiotic kills perhaps a half-dozen different disease organism , but silver kills some 650. Also resistant strains fail to develop against silver. Moreover, silver is virtually nontoxic to humans.

Obviously the question that would come to mind is how to deliver such colloidal silver internally. A standard dose of 10 ppm to 40 ppm aqueous colloidal silver is normally two spoons (~ 10ml) at a time. This brings up the question as to the fate of colloidal silver in the digestive systems as it travels through various zones of **digestive system**. It may undergo conversion in the acidic condition of the stomach. It is absorbed in the duodenum. The remaining silver as it travels further inevitably contacts intestinal flora.



All of us carry in our intestinal tracts a complex ecosystem of microbes. These bacteria are highly important to our health, providing us with protection against intestinal infection, supplying us with additional nutritional value from the food we eat, and contributing to the development of our immune system. In fact repopulation of the gut microflora, after or during antibiotic therapy is accomplished thru OTC or prescription lactobacilli formulations. The flip-side is that disturbances in this ecosystem can leave us more vulnerable to exogenous and endogenous intestinal infections.

Lacto bacilli taken as a probiotic supplementation, may also concurrently be travelling with colloidal silver through the digestive tract. The concept of ingesting live organism for the purpose of improving one's intestinal health and general well being is around as old as curds (yogurt) to capsules of Lacto bacilli.

Question 1. : Does this 'Top Gun' (colloidal silver), that destroys more than 650 microorganisms, spares the “good guys” - intestinal Lacto bacilli flora.?

Question 2. : And if indeed it spares Lacto bacilli then the question arises how does it distinguish between good and the toxic.?

Question 3. : Isn't the mechanism to spare the good bacteria applicable to any other pathogenic bacteria?

This report answers the first question while study is well into answering Questions 2 and 3.

2. Aim

To confirm the hypothesis that ASAP silver solutions are not toxic to Probiotics such as

1. Lactobacillus & Bifidobacterium supplementss.
2. Multistrain Oral Preparations

a. Lactisyn :Mfg. By Laboratories Griffon Pvt. Ltd. India

Composition :

Lactobacillus lactis

Lactobacillus acidophilus

Streptococcus lactis

Streptococcus thermophilus

b. Kyo-Dophilus :Mfg. By Wakunaga Of America Co. Ltd., USA

Marketed by : GNC, USA.

Composition :

Lactobacillus acidophilus

Bifidobacterium bifidum

Bifidobacterium longum

Table – 1 Effect of ASAP on Lactic acid Bacteria

| Name of Product | Medium Used | Diameter of zone of Inhibition (mm) | | | Photographs |
|----------------------------------|-------------|-------------------------------------|--|------------|-------------|
| | | ASAP 10ppm | ASAP 14ppm + H ₂ O ₂ | ASAP 22ppm | |
| <i>Lactobacillus acidophilus</i> | GYEA | NI | 36 | NI | 1 |
| | TA | NI | 30 | NI | |
| <i>Bifidobacterium longum</i> | GYEA | NI | 35 | NI | 2 |
| | TA | NI | 28 | NI | |
| Lactisyn | GYEA | NI | 46 | NI | 3 |
| | TA | NI | 36 | NI | |
| Kyo-Dophilus | GYEA | NI | 48 | NI | 4 |
| | TA | NI | 35 | NI | |

Key NI : No Inhibition

7. Conclusion

ASAP solutions at both 10 & 22 ppm concentrations have not demonstrated anti-probiotic activity. ASAP 14 ppm with 1.5% H₂O₂ shows appreciable killing of all the strains tested presumably due to H₂O₂.

The results bring forth ASAP as an “antibiotic of choice”, natural antibiotic, with firstly no side effects such as diarrhea and infact will not disturb the body’s natural host defense mechanism. It indeed complements therapy by sparing essential host microflora as well as concomittant oral lactobacilli therapy normally given as an adjunct.