**Grandmother's Remedy Can Abate COVID-19 – Dr. Bradley F. Bale and Dr. Amy L. Doneen**

Many elders remember being told as youngsters to gargle with salt water to avoid getting a cold or sore throat. Well, guess what? Grandma may not have known *why* this was a good idea scientifically, but generations before her spoke of its effectiveness.

Thanks to Dr. Sandeep Ramalingam and colleagues, we now understand the reason *why* saline sprayed in the nose and gargled in the throat can kill the common cold virus.

We also know about the cleaning power of bleach and are using it to wipe down surfaces to kill COVID-19. Have you ever wondered why this works? There is a chemical in the bleach which will kill pathogens, including fungus, bacteria and virus. The chemical is called hypochlorous acid. Obviously, it is not safe to inhale or ingest bleach. However, we do have an easy and safe alternative! When we put salt water (hypertonic saline) in our nose and mouth guess what our cells create? You got it, hypochlorous acid!

With this knowledge, Sandeep and colleagues conducted an experiment. They studied 60 people who had developed a common cold. Interestingly, twenty-five (25%) of these colds were caused by one of the common coronaviruses. Half of the people used salt-water gargles and nasal inhalation and the other half did not. The hypertonic saline users had milder symptoms and the duration of the cold was significantly blunted. More importantly, due to the current rapid spread of Covid-19, saline significantly reduced the spread to others by 35%. This is likely due to much less movement of the virus from the infected person into the environment.

A somewhat similar study was performed in 400 children 6-10 years old who developed colds and influenza. One-third of the children were treated with conventional medications while the other two-third used nasal saline (sea water) spray. These children were followed for 12 weeks. The children who used nasal saline regularly had quicker resolution of infection and less reappearance of illness.

Want even more exciting news!? Another study in 46 adults followed for one year showed using saline nasal rinse daily significantly reduced the incidence of upper respiratory infections.
Our country is taking bold actions to curtail the spread of COVID-19. We should be bold enough to listen to sage advice from our ancestors. Science has shown us *WHY* Grandma's remedy works!

In light of the tremendous transmission rate of COVID-19, it is our recommendation that we follow Grandma's advice and use saline water gargles and nasal irrigation daily. Within two weeks Grandmother may be smiling from heaven observing a dramatic reduction in the spread of COVID-19.

**Homemade hypertonic saline solution:**

**Ingredients:**

- 4 cups of freshly boiled water (rolling boil for 3 minutes to purify)
- 2 Tablespoons (tbs) of sea salt (or table salt) (non-iodized salt preferred but not critical)

**How to make:**

- Wash the hands thoroughly
- Choose a clean container/flask.
- Add the salt. Pour the freshly boiled water into the container and mix thoroughly until salt completely dissolves.
- Close the container with an airtight lid and store in the refrigerator.
- Make a fresh batch every 24 hours.

To make a smaller batch, use 1 cup of water with one tsp of salt.

**How to use:**

Go to website for complete instructions on how to perform nasal irrigation and gargling - http://www.elvisstudy.com/nasal-irrigation-and-gargling.html

**Frequency of use:**

- If you have symptoms or a confirmed case of COVID-19, repeat the usage at least every two hours or sooner, if symptoms return, as long as symptoms are present.
- If you are asymptomatic and do not have known COVID-19, repeat the usage every four to six hours as a preventative measure.
- At this point in time (March 22, 2020), we recommend all people in the USA do this hypertonic saline nasal irrigation and gargle.
- We recommend continuation at least until the CDC no longer considers COVID-19 a serious threat in this country.

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