

The MEMORY reVITALIZER HOUR

with Dr. William Summers

(CALL-in, 505 -444- 5059)

SAT JUNE 1st , 2024.

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TOPICS: Rattlesnake Museum , Bob Myers , Mj v.EtoH, UCLA , GI
CANCER in YOUNG, Cabbage./ Hacks.

An Investment in Knowledge pays the BEST interest. – Ben Franklin

- Make the LIE big, ...Make the LIE simple,
...KEEP SAYING IT, and eventually they will
Believe it. — Adolph Hitler.
- REMEMBER JOE BIDEN WON THE 2020....ELECTION FAIR &
SQUARE !!!!!

I DO NOT FEAR ARTIFICIAL INTELLIGENCE AS MUCH AS I FEAR
GENUINE STUPIDITY.

IN THESE TROUBLED TIMES REMEMBER,

FEAR IS A REACTION..

.... COURAGE IS A DECISION.

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EDUCATE AND EMPOWER YOU

THE LISTENER

I MAKE THE COMPLEX UNDERSTANDABLE EACH &

EVERY SHOW. -R. Limbaugh

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**THANK YOU FOR LISTENING, CALLING AND TELLING
OTHERS ABOUT THE SHOW**

American International Rattlesnake Museum

Bob Myers, Director of Snakes

— 202 San Felipe St NW, Albuquerque, NM 87104-1442

— 505 - 242- 6569

— Tues - Sat ... 11:30 to 5:30

— The museum is devoted to snakes, particularly rattlesnakes, and is dedicated to rattlesnake education. With the staff that is a participant in regular international viper research events, the museum hosts a diverse collection of living rattlesnakes and an extensive library of study material and educational tools.

— The museum has the largest collection of different species of live rattlesnakes in the world, which are presented in recreated habitats, and claims to host more rattlesnake species than the Bronx Zoo, the Philadelphia Zoo, the National Zoo in Washington, D.C., the Denver Zoo, the San Francisco Zoo, and the San Diego Zoo combined.

Why are the misunderstood? Ben Franklin preferred them at the National Critter over the Eagle.

● . The only efficient treatment for a snakebite is the administration of the specific antivenom, but the variability in venom composition limits the availability and the upscaling of the production of antivenoms.. There are an estimated 2.7 million envenomings each year, which result in >100,000 deaths and leave >400,000 victims with severe and permanent sequelae. . However, the compositional diversity is a rich playground for medicinal chemists, providing a collection of highly specific and bioactive compounds that offer many paths towards developing new therapeutic drugs.

— <https://www.nature.com/articles/s41570-022-00393-7>

● More than 220,000 species, or approximately 15% of all animal diversity on earth, are venomous.

● However, snakes did not always have such negative connotations. The curative capacity of venom has been known since antiquity, also making the snake a

symbol of pharmacy and medicine. Today, there is renewed interest in pursuing snake-venom-based therapies.

- The toxicity of crotoxin limits its medicinal use; hence, scientists took a long while before finding a new way to use the toxin in treating various diseases.
- Now, a team of scientists has found a way to limit its toxicity and enhance its therapeutic effects.
- In the study published in the journal *Toxins*, the scientists found that encapsulating the toxin in nanostructures **SBA-15 SILICA**, which is a material developed for vaccine formulations, can help in delivering the compound into the body, without inducing a poisonous effect.
- Rattlesnake venom may be effective for neuropathic pain, which is caused by structural and functional plasticity in sensory pathways, producing impairments in nociceptive processing.
- Currently, treating the condition remains a challenge in the medical world. The team found that crotoxin is a promising new way to treat the condition for its prolonged anti-inflammatory and antinociceptive effects.
- Snake venoms typically consist of a mixture of 20 to >100 components, of which the majority (>90%) are peptides and proteins⁷, with the dominant bioactivities including neurotoxicity, haemotoxicity and cytotoxicity, depending on the snake species. Venom composition varies widely between species and even within the same species. Other factors, such as environmental conditions, age, sex or type of prey available, can also affect venom composition
- RUSSELL's VIPER venom is so effective at inducing thrombosis, it has been incorporated into an in vitro **DIAGNOSTIC TEST FOR BLOOD CLOTTING** that is widely used in hospital laboratories. This test is often referred to as dilute Russell's viper venom time (dRVVT). The coagulant in the venom directly activates factor X, which turns prothrombin into thrombin in the presence of factor V and phospholipid. The venom is diluted to give a clotting time of 23 to 27

seconds and the phospholipid is reduced to make the test extremely sensitive to phospholipid. The dRVVT test is more sensitive than the aPTT test for the detection of lupus anticoagulant (an autoimmune disorder), because it is not influenced by deficiencies in clotting factors VIII, IX or XI.

<https://mail.google.com/mail/u/0/?tab=wm&ogbl#inbox/FMfcgzGxTPGBBwvfJGFKMZdmNRISjwxH>

Daily Marijuana Users Outnumber Daily Drinkers In US, Survey Finds

The AP (5/22, Johnson) reports,

“Millions of people in the U.S. report using marijuana daily or nearly every day, according to an analysis of national survey data, and those people now outnumber those who say they are daily or nearly-daily drinkers of alcohol.” Although “alcohol is still more widely used...2022 was the first time this intensive level of marijuana use overtook daily and near-daily drinking, said the study’s author, Jonathan Caulkins, a cannabis policy researcher at Carnegie Mellon University.” Caulkins said, “A good 40% of current cannabis users are using it daily or near daily, a pattern that is more associated with tobacco use than typical alcohol use.” These findings were published in Addiction.

The Hill (5/22, Nazzaro) reports, “About 17.7 million people in 2022 recorded daily or nearly daily use of marijuana, compared to the 14.7 million who reported the same habits for alcohol, marking the first time in the past 30 years that daily marijuana use exceeded alcohol use, according to an analysis published Wednesday that looks at data from the National Survey on Drug Use and Health.” Additionally, “from 1992 to 2022, there was a 15-fold increase in the rate of daily or near daily use marijuana use, the analysis found.”

*****Very interesting and very frightening. Is everyone in the White House, using MJ? It would explain a lot of their actions

Up To Half Of UCLA Med Students Are Failing Basic Medical Competency Tests, Affirmative Action To Blame

by Ashe Schow May 24, 2024 DailyWire

<https://www.dailywire.com/news/up-to-half-of-ucla-med-students-are-failing-basic-medical-competency-tests-affirmative-action-to-blame>

- The Title says it all.

<https://www.dailymail.co.uk/health/article-13443245/doctor-colon-cancer-young-people-signs-symptoms.html>

May 23, 2024 Daily Mail

● Dr Kimmie Ng, The Boston oncologist has launched one of the the world's first center dedicated to studying an **EXPLOSION OF GI CANCERS IN YOUNG PEOPLE.**

- Approximately 150,000 patients are diagnosed each year with colorectal cancer in the US. About 18,000 of them are under the age of 50, Dr Ng said. these very, very young people are often very healthy,'

- red flag symptoms may include a change in your bowel habits. So new diarrhea, new constipation, a change in the caliber of the stool, including thinner pencil thin stools.'

Forget avocados, olive oil or blueberries. This is the new 'super-food' doctors and chefs are

recommending in 2024

: Why the humble cabbage is one of the superfood greats

by Cassidy Morrison, May 24, 2024, Daily Mail

<https://www.dailymail.co.uk/health/article-13457077/Forget-avocados-olive-oil-blueberries-new-super-food-doctors-chefs-recommending-2024.html?ico=related-replace>

- Before you go to the grocery store for Memorial Day cookout essentials, consider adding the season's hottest vegetable to your shopping list: cabbage.
- It contains fiber, half your daily allowance of vitamin K, a third of your allowance of vitamin C, and ten percent of the day's folate. The leafy veggie also contains trace amounts of manganese, vitamin B6, calcium, potassium, vitamin A, iron, and riboflavin.
- When cooked on the grill, cabbage takes on what chefs and dietitians call a meaty texture and charred flavor that can be enhanced with a wide variety of marinades and toppings.
- All of them contain cancer fighting compounds and the power to keep inflammation in check, reducing the risk of heart problems.
- Cabbage can vary in color from green to red and purple, and leaves can be either smooth or crinkled.
- **THE PURPLE CABBAGE TEST** Are you acidic? Are your kidneys getting "old"? Do you have a hidden cancer pouring out Lactic Acid, making you "tired"?
 - 1 > Blend 1/4 purple cabbage in a quart of water overnight,
 - 2 > Drain off the water, leaving a purple liquid.
 - 3 > pour a small amount in your toilet making the water a Very light purple.
 - 4 > observe when urine is added
 - => BLUE is alkaline your Cool!
 - => purple is acidic, eat more leafy vegetables
 - ==> RED or PINK is VERY acidic, think about a cancer work-up if you are losing weight. Consider less red meat

HEALTH HACKS & FACTS – II

- IF YOU ARE A MAJOR CARNIVOR, CONSIDER more veggies
less meat to reduce risks of a] cancer b] heart disease
c] AODM II d] CVA
start with “Veggie Day” once a week, opt for the Tofu
- In India and Okinawa they live longer because 85-90% of their food is plant based. They eat fish and meat less than three meals a week.
 - Zing up your steamed vegetables with a salad vinaigrette
 - Dark chocolate helps regulate the stress hormone cortisol and stabilize your metabolism.
 - The simple act of smelling your morning coffee can help lower stress.

No Deal: W.H.O. Fails to Secure Global Pandemic Treaty

by Simon Kent May 26, 2024, Breitbart News

No deal. That was the message for World Health Organization (W.H.O.) chief Tedros Adhanom Ghebreyesus on Friday after his proposed global pandemic treaty was rejected after two years of closed-door meetings in Geneva, Switzerland.

AP reports Roland Driece, co-chair of W.H.O.’s negotiating board for the agreement, acknowledged countries were unable to deliver an agreed proposal. W.H.O. had hoped a final draft treaty could be agreed on at its yearly meeting of health ministers starting Monday in Geneva.

“We are not where we hoped we would be when we started this process,” he said, adding that finalizing an international agreement on how to respond to a pandemic was critical “for the sake of humanity” even as a host of countries disagreed with

the basic principle that unelected, unaccountable, health bureaucrats could somehow decide major global decisions on government policies.

Addressing a sullen final day of negotiations, the W.H.O. chief insisted, “This is not a failure.”

“We will try everything — believing that anything is possible — and make this happen because the world still needs a pandemic treaty,” Tedros said. “Because many of the challenges that caused a serious impact during COVID-19 still exist.”

Despite the desire of W.H.O. career bureaucrats to push ahead with the scheme, Britain’s department of health had already said it would only agree to an accord if it adhered to British national interest and sovereignty.

Tedros Adhanom Ghebreyesus is an Ethiopian public health official, researcher, diplomat. he earned a Doctor of Philosophy in community health from the University of Nottingham for research on the effects of dams on malaria transmission in the Tigray region

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Earlier this month, U.S. Republican senators wrote to the Biden administration, arguing the draft treaty focused on issues like “shredding intellectual property rights” and “supercharging the WHO.” They urged Biden not to sign off.

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This Natural and Safe Solution Can Effectively Kill Viruses and Germs

BY Yuhong Dong M.D., Ph.D.

https://www.theepochtimes.com/health/this-natural-and-safe-solution-can-effectively-kill-viruses-and-germs-5635614?utm_source=partner&utm_campaign=ZeroHedge&src_src=partner&src_cmp=ZeroHedge

A low-cost, easily made natural solution can produce an antiviral and antibacterial effect that kills a wide range of microorganisms in minutes.

This potent weapon is hypochlorous acid.

Application Is Based on pH

While hypochlorous acid (HOCl) is naturally produced by our white blood cells and is a key part of our innate immune system, it can also be made from electrolyzed saline water, a process invented over a century ago in Russia. Electrolyzed water (EW), also called electrolyzed saline or electrolyzed oxidizing water, can be categorized into different types based on its pH value, each with unique applications.

Among the various types of EW, neutral electrolyzed salt water (NEW) and slightly acid-electrolyzed water (SAEW) are particularly interesting due to their neutral or near-neutral pH levels. These types of EW are relatively safe to use on our skin, nasal and oral mucosa, and wound tissues. They are widely used across the food, agriculture, and medical industries for disinfecting and cleaning purposes. This includes treating drinking water, wastewater, food, utensils, and hard surfaces

Hypochlorous acid is the key active ingredient of NEW and SAEW, and pH plays a critical role. A pH greater than 7 will produce more hypochlorite (OCl⁻) in the solution, whereas a strongly acidic pH, will produce toxic chlorine (Cl₂). The concentration of hypochlorous acid is most dominant when the pH is close to neutral or slightly acidic.

Ming-Yih Chang, a senior lecturer in the Department of Biomechatronics at Yilan University in Taiwan, told The Epoch Times in an email, “Many factors impact the precise amount of HOCl. For example, according to a critical review in 2008, the relative distribution of the main aqueous chlorine species is produced per the graph below where the temperature and the chloride concentration are provided.”

Different From Bleach

Hypochlorite (OCl⁻), a key ingredient of liquid bleach, is similar to hypochlorous acid—both can kill viruses and germs. However, they are different chemicals with different properties and applications.

OCl⁻ is an ion commonly associated with sodium and calcium salts. When the pH is greater than 8, it's often labeled as liquid bleach. As a strong oxidizer, it can cause corrosion, resulting in skin burns or eye damage, and can be harmful when inhaled.

HOCl is a weak, nonirritating acid that is much safer than hypochlorite. When prepared correctly, it can be used safely and widely for many clinical applications

in multiple industries. As a disinfectant, HOCl is 80 to 200 times more effective than bleach, yet is nontoxic to humans.

Effective Against COVID-19

HOCl gained attention during the COVID-19 pandemic. The U.S. Environmental Protection Agency now recommends HOCl as a safe and effective disinfectant against COVID-19.

A randomized controlled trial, still in preprint and not yet peer-reviewed, was conducted in Mexico City among 170 frontline medical staff to investigate the effectiveness of a type of neutral electrolyzed water in reducing COVID-19 risk. All trial subjects wore adequate professional protection equipment, as required by standard COVID-19 safety protocols. Participants were divided equally into a control group and a prophylactic group.

The prophylactic group participants followed a protocol using a NEW solution in the form of a nasal spray and mouth rinse three times a day for four weeks. This group had a significantly decreased incidence of COVID-19 infections with only 1.2 percent infected compared to 18.8 percent in the control group.

Of particular note is that no individual using NEW reported any side effects, as the solution is nonirritating.

Skin irritation is a particular problem resulting from alcohol-based hand sanitizers used daily in medical offices. These can cause hand dermatitis and damage the skin barrier, compromising the first line of defense. The World Health Organization recognizes that a major challenge to hand hygiene in health care is the need for safer care.

Curious scientists have conducted tests on HOCl to determine its potential benefits for COVID-19 patients.

A clinical trial was conducted with 214 ambulatory COVID-19 patients from multiple hospitals. The study involved 104 patients who were given only usual medical care. The remaining 110 patients were given both usual medical care and NEW via nebulization and/or intravenous administration.

The NEW was provided four times a day for 10 days with successive dose increases using a diluted version of electrolyzed saline with a neutral pH (6.0 to 7.5).

In addition, when COVID 19 symptoms of nausea, vomiting, and/or diarrhea

occurred, 30 milliliters of oral electrolyzed saline was added four times a day for as long as the gastrointestinal symptoms lasted, and for two more days after the symptoms disappeared.

Overall, the NEW treatment decreased the risk of hospitalization by 89 percent and the risk of death by 96 percent.

Patient symptoms improved rapidly after 24 hours, including fatigue, headache, sore throat, eye pain, myalgia, fever, and oxygen saturation. Inflammatory markers were also reduced.

On the fifth day, the group who received the NEW treatment had an 18-fold greater chance of achieving an acceptable symptom state than the group who received only usual medical care.

The dose-dependent response to the NEW treatment suggests a causal relationship.

The pH of the NEW solution used in the study ranged from 6.0 to 7.5, and the concentration of active chlorine and oxygen species used in these experiments was no more than 20 parts per million (ppm).

Antiviral Function

HOCl has demonstrated the ability to quickly inactivate several viruses, including the SARS-CoV-2, hepatitis B (HBV), human immunodeficiency virus (HIV), and norovirus.

The effective chloride concentration in the HBV and HIV studies was 4.2 ppm, and SARS-CoV-2 ranged from 66 to 109 ppm.

HOCl is naturally produced by our immune cells to fight infections. Our neutrophils and white blood cells release a mixture of chemicals, including HOCl, to kill germs and viruses.

Neutrally-charged HOCl easily penetrates the cell walls of pathogens to kill them from the inside out. However, bleach is negatively charged, making it rather difficult to penetrate viruses or germs. This is one major advantage of HOCl compared to bleach.

Huiwen Ji, who holds a doctorate in chemistry from Princeton University and is an assistant professor of materials science and engineering at the University of Utah,

explained the disinfecting mechanism of HOCl.

“When saline water is electrolyzed, external electric energy is transferred to the chloride ion in the solution. As a result, the chloride anions are oxidized to HOCl with chlorine now in a relatively unstable +1 oxidation state.”

“Thus, HOCl is an oxidizing agent that tends to grab electrons from other molecules. This process can break the chemical bonds in the target molecules,” she said.

When the structure of these biomolecules is destroyed, their proteins can no longer function. Without adequately functioning proteins, viruses and germs cannot survive throughout their life cycles.

HOCl can also break the DNA or RNA of viruses and germs, rendering them harmless and unable to replicate.

When exposed to viruses like SARS-CoV-2, the timing of using an HOCl nasal spray is critical to mitigating the risk of infection.

In December 2022, scientists from Stanford University identified the nasal cavity as the main entry point for the COVID-19 virus and specified the time window for prevention.

The surface of our nasal mucosa is covered by a tightly-linked thin layer of epithelial cells that forms a complete barrier. On top of the cells is a thick and elastic three-dimensional chain-link fence composed of mucin, a sticky molecule that can trap all the debris of viruses and germs. Additionally, hundreds of spaghetti-like appendages, known as cilia, move slowly like a river to clear away all the harmful substances from the mucus layer.

Researchers found that the virus takes at least 24 hours to penetrate the surface mucus layer before it can enter deeply into the cells. Accordingly, using an HOCl nasal spray as quickly as possible within this 24-hour window could effectively disinfect the nasal passages and potentially prevent the virus from establishing an infection.

Broad Use

HOCl has been extensively used in multiple fields, including the health care

industry.

A study in the *Journal of Microbiology* found that HOCl significantly reduced bacteria on toothbrushes. The concentration of HOCl was estimated to be 1 ppm to 30 ppm.

HOCl is often used to treat blepharitis (eyelid inflammation) by reducing the bacterial load on the surface of the periocular skin. Twenty minutes after applying a saline hygiene solution containing HOCl at 100 ppm, a greater than 99 percent reduction in the staphylococcal load was achieved.

HOCl is an effective agent for use in wound care. In a comparative study in patients with open wounds, hypochlorous acid used in a commercial solution significantly lowered the bacterial count by 10,000 to 1 million times without a rebound effect in the comparative saline group. Postoperative closure failure occurred in more than 80 percent of patients in the saline group versus 25 percent of those in the HOCl group. One of the main reasons for the failure of postoperative closure is infection.

Microorganisms can grow on the surfaces of biomaterials, such as dentures or dialysis equipment. These surface-bound microorganisms, known as biofilms, have unique characteristics with respect to gene expression and growth rate.

HOCl is effective for cleaning biofilm-contaminated dental implant surfaces.

Compared to two other disinfecting substances—sodium hypochlorite and chlorhexidine—HOCl at 180 ppm reduced the lipopolysaccharide, a harmful substance produced by *Porphyromonas gingivalis*, a pathogenic bacterium associated with periodontal disease. The use of HOCl in the mouth did not result in any adverse effects.

Fogging with HOCl can disinfect large spaces such as medical and dental offices. Recent research on mice found that applying a topical application of HOCl on the skin can prevent the development of tumors and inflammation that are caused by UV rays. This discovery suggests that HOCl may have the potential to prevent skin cancer in humans caused by sun exposure.

HOCl has also been used to disinfect drinking water and recreational fresh water. Spraying with HOCl at 100 to 200 ppm decreased the avian influenza virus (bird flu) to an undetectable level within five seconds, suggesting that HOCl can be used in a spray to inactivate the virus at the farm level. An emerging issue in the United States is the highly pathogenic bird flu threat. HOCl spray offers a viable solution to help control the spread of this disease.

Make It Yourself

Everyone can make HOCl at home. You'll need a 1-liter hypochlorous acid solution generator, which you can easily find online for around \$100. Depending on the type of device used, the concentration of HOCl generated will typically be between 50 to 200 ppm, a commonly used concentration for daily use applications.

Ms. Ji said, "Prepare a 0.9% NaCl solution and dilute it between a few and dozens of times, then put it into an electrolyzer. White vinegar containing acetic acid (CH₃COOH) may be added to adjust the pH value to facilitate the formation of HOCl."

According to Ms. Ji, "You must adhere to the guidelines provided by the instrument manufacturer because each machine operates with its unique formula and parameter. Typically, the process is straightforward and involves pressing a button and waiting a few minutes for the reaction to produce a desired amount of HOCl."

For example, one particular protocol says to add 1 gram of non-iodized salt, 1 liter of water, and one teaspoon of white vinegar to the 1-liter hypochlorous acid generator, press the button and wait 8 minutes. The 1 liter of HOCl will be ready for immediate use.

Vinegar is essential to adjusting the pH to the proper value to produce the right amount of HOCl.

Parts per million (ppm) indicates the concentration of a substance in a solution. This is calculated by dividing the substance's mass or volume by the solution's total mass or volume and then multiplying the result by 1 million.

Using ppm is a more convenient unit of measure for describing the concentration of tiny substances in a solution. You can convert one ppm to a percentage by dividing it by 10,000. For instance, 100 ppm of HOCl is equivalent to 0.01 percent of HOCl. If you need help with the calculation, you can use this useful tool.

When choosing a device to produce electrolyzed water, Mr. Chang says, "There are many more influencing factors, such as the quality of the electrode. Better ones include platinum, iridium, and rhodium. The electricity's duration and current size can also impact the outcome."

At a concentration of 200 ppm, HOCl was shown to effectively decontaminate inert surfaces carrying the norovirus and other enteric viruses in one minute. At 20 ppm, it was still effective in disinfecting viruses within 10 minutes. One study has shown that 200 ppm of available chlorine can inactivate 25 different viruses in just 10 minutes. Low concentrations, like 25 ppm, can quickly kill mycoplasma and vegetative bacteria.

Safety and Limitations

Following the U.S. Environmental Protection Agency's acute four-hour inhalation toxicity protocol, rats inhaled a mist containing 52 ppm of HOCl for four hours. Researchers observed no adverse effects in behavior or appearance.

HOCl is generally considered safe due to the low chloride concentration in the HOCl solution. The commonly used concentrations for health care or life care are between 50 and 200 ppm for skin disinfection, 50 to 100 ppm for mouthwash, and 50 to 200 ppm for surface cleaning, with higher concentrations for wound care and food contact surfaces.

Remember, these concentrations are approximate guidelines and can vary depending on the specific application and manufacturer's recommendations. Always follow instructions carefully, and when in doubt, consult with a health care professional or relevant authority for specific advice.

The long-term potential toxicity of a low chloride concentration is still uncertain, and further studies assessing chronic exposure to HOCl are needed.

Regarding the safety of HOCl, Ms. Ji advised, "When used within the suggested concentration range, HOCl proves to be relatively safe for household applications. Once reacted with bacteria and viruses, HOCl reverts to a highly stable chloride form, akin to other electrolyte salts in the human body. But remember that using HOCl at concentrations higher than recommended by the manufacturer can be very corrosive and mixing it with other household detergents may lead to hazardous side reactions."

"When used at home, please always follow the precise instructions and do not exceed the recommended usage," she added.

According to Mr. Chang, "One side effect is that [HOCl] may corrode metals, such

as those in cow and pig houses, after application of the HOCl solution sprays at 200ppm for a long time. But 200 ppm does not harm the skin. Furthermore, a low concentration of several dozen ppm is enough for general household use.”

HOCl is less stable when exposed to UV radiation, sunlight, air, or higher temperatures (greater than 25 degrees Celsius or 77 degrees Fahrenheit). Therefore, HOCl solutions should be tightly sealed and stored in a cool, dark place.

It's important to avoid mixing HOCl with other detergents or solutions. When the pH value changes, HOCl may change to Cl⁻ or OCl⁻, which is either toxic or can cause irritation.

Direct exposure to chloride (in the form of Cl⁻ or OCl⁻) at low concentrations of one to 10 ppm, can cause skin and eye irritation, and inhaling it can irritate the respiratory tract.

The shelf life of HOCl is relatively short; it is **EFFECTIVE FOR UP TO TWO WEEKS WHEN STORED PROPERLY**

There are many **NATURAL REMEDIES** on Earth to cure or prevent diseases that people may not be fully aware of.

Ivermectin, derived from a microorganism in soil, has remarkable antiparasitic, antiviral, and anti-inflammatory properties and has helped many patients effectively treat COVID-19.

Another example is **interferon**, which our bodies produce to stop viral replication. The pharmaceutical industry has developed interferon to treat hepatitis B and C and COVID-19.

Nature is a bountiful source of healing for humans, generously providing numerous benefits at no cost. It is an endless source of undiscovered benefits, waiting to be explored by those willing to embrace its wonders. With its abundant resources, nature offers us infinite possibilities to improve our health and well-being.

THESE TOP 4 ESSENTIAL OILS FOR ADRENAL FATIGUE.* Pay attention to which ones make you feel the best. Two of the oils have stimulating and regenerative properties, which is good if you're feeling weak and fatigued.

The other two oils have soothing and calming effects. You may have anxiety and sleep disturbances and appreciate these particular oils, and how they help you to relax.

Make a blend that uses one or more of these oils. Put your blend or a single oil in a diffuser, or mix with a carrier oil and apply to the skin after a shower or throughout the day. Alternatively, put the oil in an essential oil inhaler and carry it with you in your pocket or purse. Inhale as needed.

These are the top 4 essential oils for adrenal fatigue:

WHOLLY BASIL essential oil can help wake you up in the morning. It has energizing and regenerating properties.* Dab a few drops on the soles of your feet in the morning. Or, diffuse in the air while you're getting ready to start your day.

GERANIUM essential oil has a pleasant floral aroma with stimulating properties, like Basil.* Geranium also helps stabilize your mood and balance hormones.* Therefore, since adrenal dysfunction is about imbalances in certain hormones, Geranium is useful in healing adrenal dysfunction symptoms.*

CHAMOMILE helps you achieve restful sleep when adrenal fatigue results in anxiety, tiredness, and sleep disturbances.* Diffuse in your bedroom to help you sleep or dab a few drops on your blanket or pillow.

LAVENDER has relaxing properties, similar to Chamomile.* Use a few drops in a bath before bed or rub it on your skin, mixed with a carrier oil.

AT HOME SUNBURN Rx include:

aloe vera	apple cider vinegar
coconut oil	milk
black tea	oatmeal
baking soda	yogurt

Six Essential Oils to Help Relieve Sunburn

1. Peppermint Essential Oil

Peppermint (*Mentha piperita*) essential oil contains several active ingredients with known health benefits to help relieve sunburn, the most powerful by far is menthol.

Health benefits of menthol in peppermint essential oil include:

anti-inflammatory

antibacterial

antifungal

antiseptic (able to kill or discourage the growth of infectious agents)

vasoconstrictor, narrowing inflamed blood vessels

In addition to sunburn this oil is used to relieve pain from a toothache, aching feet, neuralgia, rheumatism, and muscular pains.*

Peppermint Essential Oil Safety Tips

Do not use if using ventricular fibrillation, or if diagnosed with GERD (Gastroesophageal reflux disease).

Maximum skin use level 5.4%

Do not apply to face or near the face of infants or children.

Should not be used during pregnancy or if epileptic.

Should be kept away from the eyes, and is likely to irritate skin and mucous membranes.

For external use only. See our Safety Information page for further details when using essential oils.

2. Lavender Essential Oil

Extracts from the lavender plant (*Lavandula officinalis*) have at least seven active ingredients known to promote skin regeneration, help relieve sunburn and boost

the immune function.

Lavender essential oil is also known to have properties that are:

antibacterial

anti-inflammatory

antifungal

Lavender helps reduce symptoms of pain, redness, and swelling while also lowering the risk of infection sometimes associated with sunburn. Lavender essential oil is also helpful for and aids in inflammation, cuts, wounds, eczema, dermatitis, fainting, headaches, influenza, insomnia, hysteria, migraine, nausea, nervous tension, infections, bacterial conditions, sores, ulcers, acne, boils, asthma, rheumatism, and arthritis.

FRENCH LAVENDER Essential Oil Safety Tips

French Lavender is non-toxic, making it safe for all skin types.

For external use only. See our Safety Information page for further details when using essential oils.

3. TEA TREE Essential Oil

Extract from the needle-like leaves of the tea tree (*Melaleuca alternifolia*) plant has been used as an herbal remedy for a variety of health problems including most skin conditions. The medicinal properties of tea tree essential oil are credited to the high content of terpinen oils. The oil contains 80 different terpinen oils that have been shown to be active in controlling bacterial spread by preventing bacteria from reproducing.*

The active ingredients in Tea Tree essential oil give it properties that are:

anti-inflammatory immune boosting

antibacterial antifungal

antiviral

This lovely essential oil is renowned for assisting the issues and supporting the body to help relieve sunburn, help fungal infections, viral infections, bacterial infections, colds, influenza, cold sores, warts, inflammation, acne, burns, candida, shock, and hysteria.*

Tea Tree Essential Oil Safety Tips

Tea tree essential oil is non-toxic but should be avoided if you have allergy prone or sensitive skin. Maximum skin use level is 15%. Oxidized tea tree oil can be a skin sensitizer.

Tea tree essential oil *spoils quickly. It can last up to 6 months in room temperature or one year refrigerated.* For external use only.

4. **GERANIUM** Essential Oil

Steam distilled extracts from geranium leaves and flowers (Pelargonium graveolens) contains at least 12 active ingredients that have properties that are:

antibacterial anti-microbial
anti-inflammatory

Geranium essential oil is an important oil known for its calming properties and ability to help relieve sunburn and heal skin. Its use encourages beautiful, radiant skin. The ancient Egyptians used Geranium essential oil to treat cancerous tumors, skin diseases and as a calming agent.

GERANIUM ESSENTIAL OIL SAFETY TIPS

May interfere with diabetes medications. Can affect certain hormone secretions.

It is not recommended to use the oil if pregnant. For external use only.

5. **ROMAN CHAMOMILE** Essential Oil

Roman chamomile (Anthemis nobilis) has been used for centuries, potentially even thousands of years, as a multi-use herbal remedy because of its soothing and calming properties. The ‘noble’ chamomile plant was used going as far back as the Egyptians. They devoted it to their gods because of its healing properties, predominantly when it was used for the acute fever also known as Ague.

With more than 10 active ingredients that have known health benefits, Roman chamomile oil has established anti-inflammatory properties. It has also been shown to promote or increase wound healing.

Roman chamomile essential oil has many documented properties as:

antibacterial antifungal
anti-inflammatory antiseptic

The mind is deeply influenced by Roman chamomile oil as it helps calm a racing mind, reduces stress, anxiety, and promotes a restful sleep.