

Dr. Eric L. Zielinski



Gazing Through the Window of Health

An Evidence-Based Look at Oral Health & Essential Oils

# Gazing Through the Window of Health

*An Evidence-Based Look at Oral Health & Essential Oils*

By Eric L. Zielinski, DC, MPH(c)  
[www.DrEricZ.com](http://www.DrEricZ.com)

Copyright 2015 | DrEricZ.com

Copyright 2015 | DrEricZ.com

All Rights Reserved

No part of this book may be copied, reproduced, republished, or shared in any form without prior written consent of the author.

An eBook is meant to be the sole property of the purchaser. You may share portions of it with a friend, but forwarding the entire book or copying portions of it to a blog or website without permission is a violation of copyright.

The products and statements in this eBook have not been evaluated by the United States Food and Drug Administration (FDA) and are not intended to diagnose, treat, cure or prevent disease. All information provided in this eBook is for informational purposes only and is not intended as a substitute for advice from your physician or other health care professional. You should not use the information in this eBook for diagnosis or treatment of any health problem.

# Contents

Introduction.....	5
Periodontal Disease.....	6
Oral Health – Diabetes - Heart Disease Axis.....	10
Oral Health Treatments Dangerous & Not Effective.....	14
Are Essential Oils the Oral Health Solution? .....	17
Essential Oils & Oral Health Research.....	19
Oil Pulling & Essential Oils.....	23
Essential Oil DIY Recipes.....	27
Conclusion .....	29
About Dr. Z.....	30

# Introduction

Your mouth is the window to your health.

In the last 20-30 years, the connection between oral health and chronic disease has been firmly confirmed, and it really goes back to why doctors always look at your tongue during office visits. Truth is, your mouths doesn't lie!

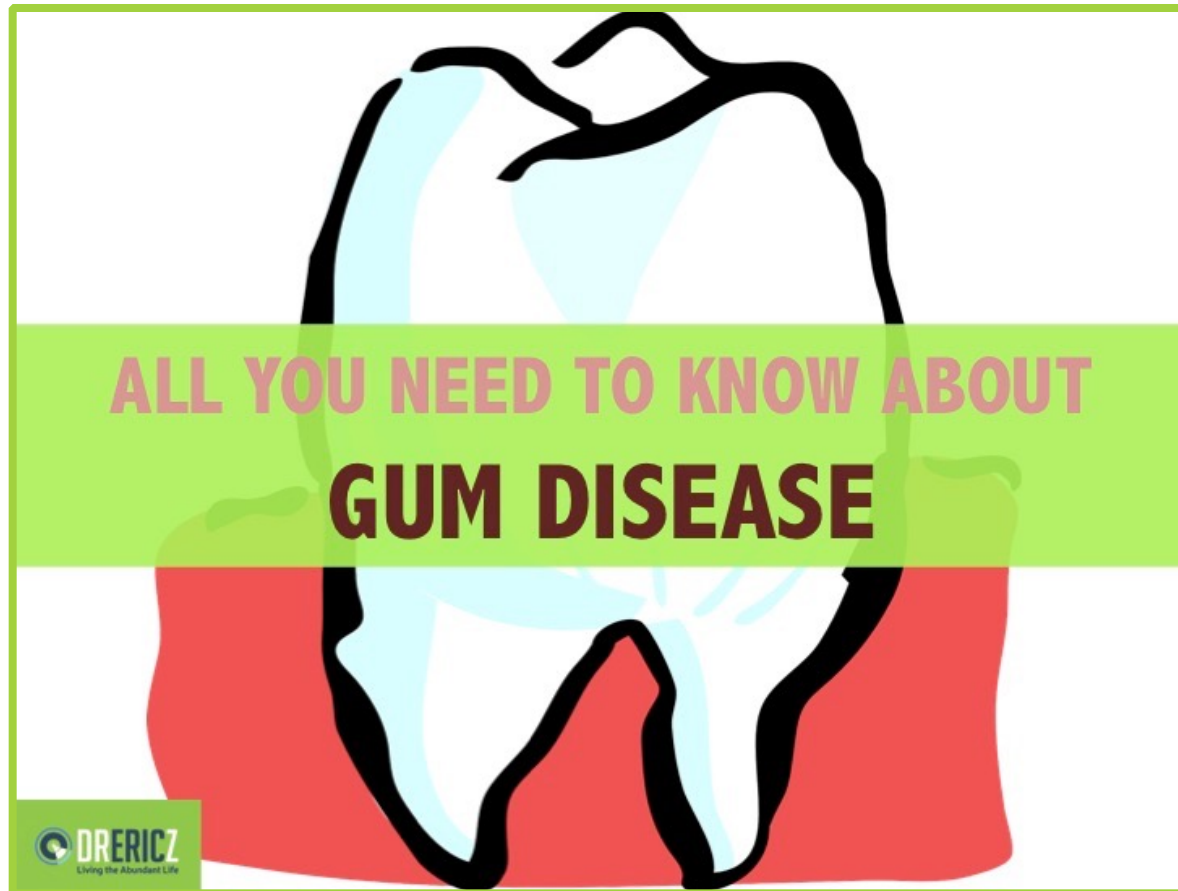
You oral cavity is more than just the thermometer of your health, it's also the thermostat. The oral cavity holds this wonderfully unique ability to help people gage how the rest of their body is functioning, as well as setting the baseline for immune performance.

With environmental and drug-resistant threats at an all-time high, we've all heard this it is critical to maintain a balanced microbiome throughout the gut, right? One thing you probably haven't heard is that starts in your mouth! With the foods that we eat and liquids that we drink, our first line of defense is our oral cavity. And, like the gut, taking a holistic approach to microbial balance is absolutely vital.

The answer is, YES!, your mouth requires probiotics like your gut does! Couple this with proper hygiene, and Abundant Life health is not a distant fantasy. If you can see it through the window, it's obtainable!

Keep in mind that achieving Abundant Life health is always accomplished by focusing on root cause triggers, taking proactive prevention measures and choosing natural solutions when disease settles in. This book is a great start to this journey and, remember, it all starts in your mouth!

## Periodontal Disease





We literally have an epidemic on our hands - an oral health epidemic! According to the CDC, one out of every two American adults aged 30 and over has periodontal (“gum”) disease. A 2010 study published in the *Journal of Dental Research*, estimates that 47.2%, or 64.7 million American adults, have mild, moderate or severe periodontitis, the more advanced form of periodontal disease. In adults 65 and older, prevalence rates increase to 70.1%. (1)

### Connection With Chronic Disease

Poor oral health has been linked to **cardiovascular disease (CVD)**, **poor glycemic control in diabetics**, **low birth-weight pre-term babies**, and a number of other conditions, including **rheumatoid arthritis** and **osteoporosis**. (2, 3, 4) Oral infections are also recognized as a problem for individuals suffering from a range of chronic conditions, including **cancer** and infection with **HIV**, as well as patients with ventilator-associated **pneumonia**! (2)

### Understanding Gum Disease

Periodontal disease is a chronic inflammatory disease that affects the gum tissue and bone supporting the teeth and, if left untreated, can lead to tooth loss and chronic disease. **The key public health concern is that it is largely preventable:**

- Periodontal disease is typically the result of poor oral hygiene.
- Brushing at least twice a day, flossing daily and getting regular holistic dental checkups can greatly reduce your chance of developing periodontitis.

According to the Centers for Disease Control & Prevention (CDC): (3)

### Causes

Bacteria in the mouth infect tissue surrounding the tooth, causing inflammation around the tooth leading to periodontal disease. When bacteria stay on the teeth long enough, they form a film called plaque, which eventually hardens to tartar, also called calculus. Tartar build-up can spread below the gum line, which makes the teeth harder to clean. Then, only a dental health professional can remove the tartar and stop the periodontal disease process.

### **Warning Signs**

The following are warning signs of periodontal disease:

1. Bad breath or bad taste that won't go away
2. Red or swollen gums
3. Tender or bleeding gums
4. Painful chewing
5. Loose teeth
6. Sensitive teeth
7. Gums that have pulled away from your teeth
8. Any change in the way your teeth fit together when you bite
9. Any change in the fit of partial dentures

### **Risk Factors**

Certain factors increase the risk for periodontal disease:

- Smoking
- Diabetes
- Poor oral hygiene



- Stress
- Heredity
- Crooked teeth
- Underlying immuno-deficiencies—e.g., AIDS
- Fillings that have become defective
- Taking medications that cause dry mouth
- Bridges that no longer fit properly
- Female hormonal changes, such as with pregnancy or the use of oral contraceptives

When you include natural therapies like essential oils, however, a dramatic shift towards health happens.

### **Preventing Gum Disease is Easy!**

The easiest way to prevent periodontal disease is to focus on preventing the triggers above, being are to follow these 4 easy steps:

1. Brush after every meal
2. Floss daily
3. See a holistic dentist regularly
4. And most importantly, make your own products!

Most store-bought oral health products are chock-full of dangerous fillers and preservatives. Even the “natural” stuff! The only way to make sure that you and your family are safe is to do it yourself!

## Oral Health – Diabetes - Heart Disease Axis



The research regarding the **oral health – diabetes - heart disease axis** is absolutely shocking. All three public health concerns are so intricately intertwined, yet just recently discovered, that few people have missed the forest for the trees and are missing the obvious connection!

Let me help connect the dots...

### **Oral Infections Cause Atherosclerosis**

Yet again busting the myth that cholesterol causes arterial occlusion like sewage clogs drainpipes, scientists have discovered that **oral infections can be a contributing cause of atherosclerosis!** A 2010 groundbreaking study published in the journal *Circulation*, was the first to prove the definitive link of increased carotid artery wall thickness and periodontal bacteria in more than 600 seniors with no history of CVD. (1)

According to a 2000 article in *Clinical Microbiology Reviews*, there are 3 possible pathways to explain how oral infections can cause heart disease and other systemic disorders. (2)

- 1. Metastatic infection** – the harmful bacteria in the oral cavity enter the blood stream and circulate throughout the entire body.
- 2. Metastatic injury** – the harmful bacteria in the oral cavity product exotoxins (i.e. diffusible proteins) that, according to researchers, Have specific pharmacological actions and are considered the most powerful and lethal poisons known.”
- 3. Metastatic inflammation** – an inflammatory response, which is arguably the #1 cause of heart disease, is triggered by oral microorganisms.

### **Oral Infections Causes Diabetes**

These pathways also help us understand how periodontitis and diabetes are connected in a two-way relationship. School of Dental Medicine researchers out of the State University of New York at Buffalo have been sounding this alarm since the 1990s!

***“Severe periodontal disease often coexists with severe diabetes mellitus. Diabetes is a risk factor for severe periodontal disease. A model is presented whereby severe periodontal disease increases the severity of diabetes mellitus and complicates metabolic control...In this model, the combination of these 2 pathways, infection and AGE-mediated cytokine up-regulation, helps explain the increase in tissue destruction seen in diabetic periodontitis, and how periodontal infection may complicate the severity of diabetes and the degree of metabolic control, resulting in a 2-way relationship between diabetes mellitus and periodontal disease/infection. This proposed dual pathway of tissue destruction suggests that control of chronic periodontal infection is essential for achieving long-term control of diabetes mellitus.” (3)***

### **Making the Oral Health – Diabetes – Heart Disease Connection**

When you consider the indelible link between CVD and diabetes, the pieces of America’s chronic disease crisis seems to fall in place. (4) In the words of the American Heart Association (AHA): (4)

The following statistics speak loud and clear that there is a strong correlation between cardiovascular disease (CVD) and diabetes:

1. Heart diseases and stroke are the No. 1 causes of death and disability among people with type 2 diabetes.
2. In fact, at least 65% of people with diabetes die from some form of heart disease or stroke.

3. Adults with diabetes are two to four times more likely to have heart disease or a stroke than adults without diabetes.

*Why?* Because, according to the AHA,

“Individuals with insulin resistance or diabetes in combination with one or more...risk factors are more likely to fall victim to heart disease or stroke. However, by controlling these risk factors, diabetes patients may avoid or delay the development of heart and blood vessel disease.” (4)

Essentially, regardless if glucose levels are under control in a diabetic, diabetes puts people at a greater risk for several CVD risk factors such as:

- Abnormal fat and cholesterol levels
- Abnormal glucose levels
- Hypertension
- Inactivity
- Obesity

This is why the AHA considers diabetes to be one of the seven major preventable risk factors for cardiovascular disease. And at the center of it all is ORAL health!

Obviously, these are major public health concerns, which is why it is so shocking that more people are not aware of these issues!

## Oral Health Treatments Dangerous & Not Effective



The underlying problem to the public health periodontitis epidemic is that the conventional medical approach is not only ineffective, it can also be VERY harmful!

The perfect example is the ubiquitous recommendation that people should regularly use antiseptic mouthwash products as a preventative anti-cavity, gum disease solution. Essentially, rinsing your mouth out with these products every day is like taking a broad spectrum antibiotic everyday because you're trying to prevent getting sick! It literally destroys the entire microbial balance in your mouth. And, as we've all heard at this point regarding the gut, probiotics (good bacteria) are necessary for good health.

It's no wonder people are so confused. A large number of clinical studies have supposedly established the clinical efficacy of topical antimicrobial agents, e.g., **chlorhexidine** (which is an antiseptic antibacterial agent) and **triclosan** (an antimicrobial agent that has been a registered pesticide since the 1960s), in the prevention and control of oral disease, especially gingivitis and dental plaque. (1) Thankfully, a recent **MedicalDaily.com headline has ripped this veil in two:** (2)

***Antiseptic Mouthwash Raises Heart Attack Risk, Blood Pressure:  
Chlorhexidine Kills Off 'Good' Bacteria That Helps Blood Vessels Relax!***

**Here's the quick run-down of the article:**

- Antiseptic mouthwash products are commonly used to refresh and clean the mouth.
- According to a recent study published in the journal *Free Radical Biology and Medicine*, using this type of mouthwash may actually increase blood pressure up to 3.5 millimeters of mercury (mmHg), raising your heart attack risk significantly!
- A total of 19 participants were recruited for the study where part of the group used antiseptic mouthwash, and another group did not.
- Measuring the oral nitrate-reducing capacity and nitrite levels to determine effectiveness, the researchers discovered that Cordosyl use retracts oral bacterial conversion from nitrate to nitrate,



which ultimately reduces the blood nitrate levels that are known to increase blood pressure.

- Using mouthwash caused the participants' blood pressure to rise between 2 to 3.5 mmHg, **“with a noticeable effect found within one day of using the mouthwash twice.”**
- According to the study authors, killing off “good” oral bacteria plays a vital role in determining the plasma nitrate levels, and the bodily control of blood pressure.
- “Killing off all these bugs each day is a disaster, when small rises in blood pressure have significant impact on morbidity and mortality from heart disease and stroke.”

Of course, Big Pharma disagrees.

*“According to GlaxoSmithKline, Corsodyl manufacturers, the antiseptic mouthwash contains 0.2 percent by volume of chlorhexidine. Corsodyl is recommended for patients with bleeding gums, irritated gums, mouth ulcers and infections, including post-surgery to promote healing, reads the website. The company also makes Corsodyl Daily, which contains 0.06 percent chlorhexidine for everyday use.”* ([2](#))

You be the judge.

Does it make sense to take a broad-spectrum antibiotic approach – which is essentially like using a nuclear bomb to kill microbes – or a more targeted, sniper-rifle approach? The answer is glaringly obvious when put in this light, but so few people are ever educated on the risks to mouthwash!

The bottom line is that harmful chemicals that are registered pesticides should NEVER enter our mouths, not to mention be swished around every day so that it gets absorbed into our bloodstream! Natural solutions abound and are always a better option to cleansing your oral cavity.

## Are Essential Oils the Oral Health Solution?



So, are essential oils the key to solving oral health problems? According to the research, they truly may be!

It is quite fascinating to learn how essential oils can address virtually every complication related to oral health and gum disease.

In 2009, for example, a study uncovered that essential oils in the verbena family are as effective as chlorhexidine in reducing microbial plaque and gingival inflammation. (1) And the best part? Like most natural solutions, there are no side effects!

Another example is how easily clove and chamomile replaces conventional, OTC teething remedies. Oddly enough, even the FDA advises against using OTCs numbing agents, but parents keep buying them! (2) In spite of their popularity, the FDA continues to recommend that parents do not use benzocaine products for children younger than 2 years, except under the advice and supervision of a health care professional. Benzocaine, like viscous lidocaine, is a local anesthetic and can be found in such OTC products as Anbesol, Hurricaine, Orajel, Baby Orajel, and Orabase.

If your child's gums are swollen and tender, try these age-old tricks:

1. Gently rub or massage the gums with your finger, and
2. Give your child a cool teething ring or a clean, wet, cool washcloth to chew on.

**An important note:** Like the FDA says, “Because teething happens during a time of much change in a baby's life, it is often wrongly blamed **for sleep disturbances, decreased appetite, congestion, coughing, vomiting, diarrhea and fever.**” (3) This is where applying heavily diluted **peppermint** and **orange** essential oils on your child's feet and spine can really help!

## Essential Oils & Oral Health Research



One common misconception is that essential oils kill all the oral flora like antiseptic mouthwashes do. Thankfully, this is not the case. As with most substances in nature, essential oils work toward harmony in the body, and generally do not create imbalance.

As essential oil expert Robert Tisserand explains with gut bacteria, “Whether [essential oil] constituents might then negatively affect the bowel flora is pure speculation.” Similarly, there is no reason to believe that therapeutic grade essential oils will kill all of the microbes in your mouth. By taking a selective approach to eradicating bacteria that cause gum disease.

### Essential Oils Proven to Help Promote Oral Health

There are several studies that point out the safety of using therapeutic grade essential oils for oral health concerns.

The *Journal of International Oral Health*, for example, published a wonderful article in 2014 titled “**Possible Use of Essential Oils in Dentistry**,” which is like a 7-course meal of information evidence-based natural health enthusiasts should feast on! (1) To sum it up for you, there are 5 key areas that essential oils can help in dentistry:

1. **Oral Hygiene Support**- Essential oil rinses are found to be equally effective in inhibiting plaque as fluoride. Also, as chlorhexidine causes staining of teeth on long term use, essential oils can be used as an alternative to **chlorhexidine** rinse. Essential oils have shown to possess antimicrobial activity against subgingival periopathogens as well.
2. **Anxiolytic (Anti-Anxiety)** - Aroma of **lavender** essential oils is capable of altering emotional states and reducing mild anxiety. It has been reported to be useful in reducing anxiety in dental patients when used in waiting area. It also reduce the pain of needle insertion. Use of aromatherapy with natural essential oil of **orange** has been shown to reduce salivary cortisol and pulse rate due to child anxiety state.

3. **Wound Dressing** - According to one study, better therapeutic effects can be achieved from wound dressings containing essential oils like **clove** to prevent infection.
4. **Dental Implants - Lavender, Melissa** and other essential oils have been shown to possess antibiofilm activity. They can be used with dental implants. Treatment of dental implant material surfaces with essential oils has shown to inhibit biofilm production.
5. **Natural Preservative** - Essentials oils have the ability to kill microorganism strains than extracts and **methylparaben** in cosmetic emulsions. Similarly, they can be used to replace methylparaben altogether, which is used as preservative in various dental products.

### Interesting Essential Oil Uses for Oral Health

There are also some other interesting facts about essential oils you may find interesting:

- The go-to antimicrobial oil is **clove**. (2)
- A blend of **geranium, lavender, tea tree**, and **peppermint** helps improve the oral health status of hospice patients with terminal cancer. (3)
- Because brushing is not recommended for people with mouth ulcers, fever, indigestion – as well as for patients with the tendency to asthma, cough, thirst and vomiting – **oil pulling with essential oils** can clean the oral cavity and treat halitosis (bad breath) and gingivitis. (4, 5, 6)

So, what are the best oils to use for oral health?

Although several make the list, **clove, orange** and **peppermint** usually top the charts. Specifically, folk remedies oftentimes use these essential oils to combat the following threats:

- **Blood blisters** = lavender
- **Canker sores** = clove and lavender.
- **Halitosis** = peppermint



- **Plaque** = virtually any can be used because they are all antimicrobial
- **Sensitive teeth** = clove and orange
- **Whitening** = clove, orange, rosemary, cinnamon, eucalyptus



# Oil Pulling with Essential Oils



It has taken long enough, but oil pulling has finally gained some popularity in the U.S. In fact, I believe that it's one of the lost keys to abundant life health!

Used primarily in Ayurvedic medicine, oil pulling is a fantastic oral detoxification procedure that is simply done by swishing a tablespoon of oil in your mouth for 10-20 minutes. This unbelievably effective procedure has been used for centuries as a traditional Indian folk remedy to cure and prevent bad breath, bleeding gums, cracked lips, throat dryness and tooth decay in addition to strengthening gums, jaws and teeth. In fact, oil pulling is mentioned in the Ayurvedic text *Charaka Samhita* where it is claimed to cure about 30 systemic diseases ranging from headaches and migraine to diabetes and asthma.

## The Research

As stated by one study,

“The myth that the effect of oil-pulling therapy on oral health was just a placebo effect has been broken and there are clear indications of possible saponification and emulsification process, which enhances its mechanical cleaning action.” (1)

In other words, oil pulling works by cleaning (detoxifying) the oral cavity in a similar way that soap cleans dirty dishes. It literally sucks out the fat-soluble toxins out of your mouth and creates a clean, antiseptic oral environment that contributes to the proper flow of dental liquid that is needed to prevent cavities and disease.

Here are 3 studies substantiating the efficacy of this ancient oral health procedure.

1. In 2008, the *Journal of Indian Society of Pedodontics and Preventative Dentistry* published a triple-blind random control trial that evaluated the effects oil pulling with sesame oil has on *Streptococcus mutans* bacterial count in plaque and saliva. Twenty boys were recruited to be part of two groups; one

in which 10 practiced oil pulling and another that used chlorhexidine mouthwash, the active ingredient in most anti-cavity mouthwash, for 10 minutes every day in the morning. After collecting samples for 2 weeks, it was discovered that, even though chlorhexidine was more effective in reducing the bacteria, oil pulling was significantly effective in killing *S. mutans*, one of the primary causes of cavities. (2)

2. In 2011, the same journal shared the results of a similar study that evaluated the effects oil pulling has on halitosis (bad breath) and microorganisms that cause bad breath. Again, taking 20 young volunteers, the results of this study were even more in favor of oil pulling than the one above. According to the authors, “Oil pulling therapy has been equally effective like chlorhexidine on halitosis and organisms, associated with halitosis.” Additionally, the researchers discovered that oil pulling also has statistically significant effects on reducing the gingival index, a marker that determines the severity for gingivitis. (3)
3. Dr. Abhinav Singh – Department of Public Health Dentistry, People’s College of Dental Sciences and Research Centre, Bhopal, India – wrote an article in *The Indian Journal of Dental Research* that describes how “brushing is contra indicated in the cases of mouth ulcer, fever, indigestion, those who have tendency to vomit, asthma, cough, thirst.” Consequently, many people who suffer from these conditions are left with no other alternative, but to oil pull to clean their oral cavity. As has been seen for centuries, oil pulling therapy is preventative, as well as curative, and can be used to avoid many surgeries and medications. (4)

Other oil therapies are suggested by researchers to foster oral health, as well. According to Singh, “Ayurveda advises *oil gargling* to purify the entire system; as it holds that each section of the tongue is connected to different organ such as to the kidneys, lungs, liver, heart, small intestines, stomach, colon, and spine, similarly to reflexology.”

### **The Best Way To Oil Pull**

To help detox and keep your smile bright and shining, mix EO with unrefined, organic coconut oil. Here are

some tips:

- Like most other detoxification procedures, the best time to oil pull is first thing in the morning right after you get out of bed.
- All you do is swish between 1 – 2 tablespoons of coconut or sesame oil in your mouth for 20 minutes. Easy peesy!
- Don't worry, you won't even notice 20 minutes have gone by if you do this during your normal morning routine (i.e. while you shower, put your clothes on and prep for the day).
- Immediately afterwards, rinse your mouth out with warm water. Use salt water for added antimicrobial properties.
- Don't be shocked if the oil/saliva mixture you spit out is milky white or yellow.
- Finally, brush your teeth as normal.
- I recommend oil pulling 3-4x per week.

**Note:** This should be a relatively relaxing process, so don't think that you need to swish your mouth with oil for the entire time or else you're bound to wear out your jaw muscles. Simply move the oil in your mouth and through your teeth without swallowing any of it.

## Adding Essential Oils

I'm one of those of *"if 1 is good, then 10 must be better"* kind of guys, and I'm always trying to find ways to enhance and maximize the things that I do. When it comes to oil pulling it dawned on me pretty early on: If I'm swishing coconut oil in my mouth for 10-20 minutes, then why not add some antimicrobial essential oils to the mix?!?

At the end of the day, you have nothing to lose, but everything to gain from oil pulling. There are relatively no known side effects and, as we've seen in the research, the list of benefits is quite remarkable. Try it today and make it a part of your natural hygiene routine!

## Essential Oil DIY Recipes

Essential oils carry some of the most potent antibacterial and anti-fungal properties on the planet, so they can only help, right? Plus, as the essential oils get absorbed by the oral mucosa, the body will enjoy their antioxidant and medicinal powers. Plus, because the oil pulling oil acts as a carrier oil, I haven't experienced any harmful effects of using some of the more potent oils like clove.

Here are a few of my favorite ways to use essential oils during my morning **oil pulling routine**:

- Add 1 drop each of clove, orange, lemon and peppermint with 1 – 2 tablespoon of coconut oil.
- If you're battling an infection or something, I would change it up and mix clove with oregano and tea tree as a homeopathic remedy.
- Oils from herbs such as cilantro, basil and thyme are also very pleasant. Frankincense and myrrh is a sacred mixture.

Two other recipes you'll want to try are:

### DIY Remineralizing Tooth Powder for Kids

- 1/3 cup of Bentonite Clay– this comes from pure sources of undisturbed deposits in the ground. What is special about bentonite clay is that it draws toxins out of the body.
- 1/4 cup boiling water
- 1 1/2 teaspoons of Stevia powder
- 1/4 teaspoon of pink Himalayan sea salt
- 1 tablespoon coconut oil
- 20-30 Drops of EOs of your choice

### Sample mixtures:

- Lime, lemon, grapefruit
- Orange, clove, peppermint
- Cinnamon, clove, orange
- Chamomile and wintergreen  
Frankincense & myrrh

### **Mouthwash:**

- 10 drops of the essential oil(s) of your choice into a glass bottle.
- Add 2 cups of distilled filtered water.
- Voila!

## Conclusion

*The thief comes to steal, kill and destroy. I have come that they may have life and have it abundantly!*

*~ John 10:10*

I hope you have enjoyed this journey down the road of evidence-based essential oil uses. If you haven't tried them yourself, I strongly encourage you to give them a try. As God's Medicine, you won't be disappointed if you give your medicine cabinet a makeover!

Essential oils are a wonderful way to take charge of your own health and learn about natural solutions and remedies to everyday problems. If you would like to know more, please don't hesitate to shoot me an email. My wife Sabrina and I would love to help you and your family experience the same Abundant Life blessings from oils as we have!

***Shalom!***

***~ Dr Z***

**Email: [Info@DrEricZ.com](mailto:Info@DrEricZ.com)**

**Website: [www.DrEricZ.com](http://www.DrEricZ.com)**



## About Dr. Z



*Eric L. Zielinski, DC, MPH (c) has devoted his life to natural health and wellness for over a decade. Inspired by the timeless principles in the Bible, Dr. Z's mission is to provide people with simple, evidenced-based tools that they need to achieve the Abundant Life. Formally trained as a chiropractor and public health researcher, Dr. Z's primary interests are in natural health care and empowering life strategies. He and his wife Sabrina live in Atlanta, GA with their three children Esther, Isaiah, and Elijah.*

### **DrEricZ.com around the Web:**

<https://www.facebook.com/drericz>

<http://www.pinterest.com/drericz/>

<https://twitter.com/DrEricZielinski>