
TODAY'S NEWS

WE ARE EVALUATING THE NEW TESTS AND TREATMENTS FOR DENTAL DISEASE



Optimal Oral Health Reduces Degenerative Diseases

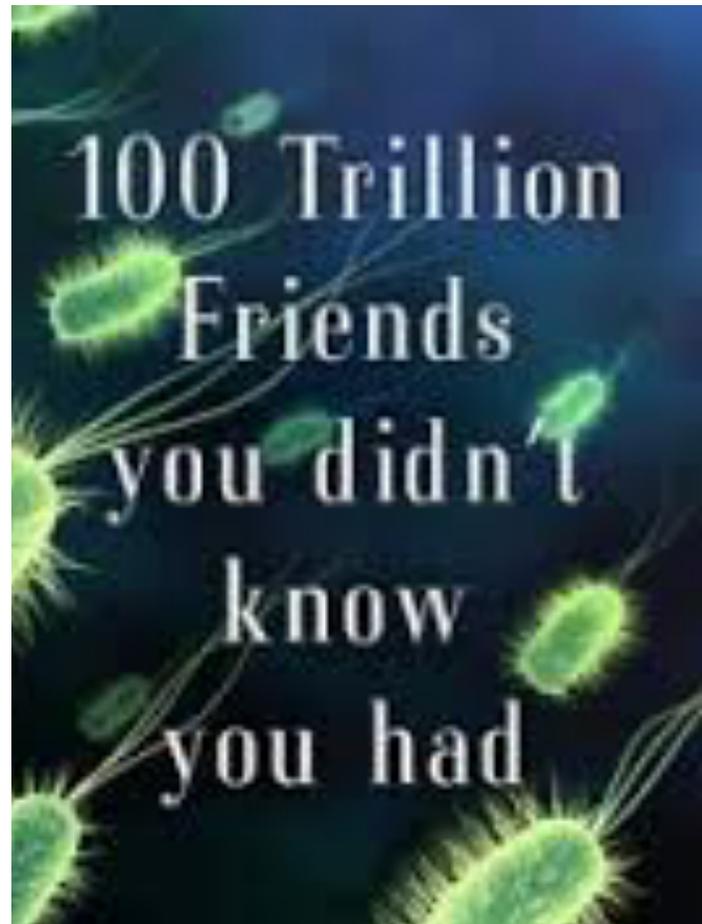
Folks are swallowing probiotics by the gross around the world on a daily basis. My own gut has been a mess for

years thanks to the generous use of antibiotics for everything. We dentists are just as guilty as the medical crowd. This dentist has prescribed more antibiotics than you can shake a stick at. That being said, this Naturopath/Dentist is also prescribing probiotics during, and/or after antibiotics and he is looking for less harmful antibiotic substitutes that are cost effective. Not an easy chore!

So for gum disease we are down to a few probiotic products that have years and years of research.

COOL STUFF, I'D SAY....

So what's up with this probiotic stuff anyway? This I'm going to approach from the dental side of the house and say we have known for decades that bacteria causes cavities and gum disease. I have thought for years that if you could encourage more of the good bacteria, they would control the bad bacteria and the teeth and gums would be happy campers.



Dr. Madson has two doctorates a DMD in Medical Dentistry and an NMD in Naturopathic Medicine and he is adjunctive faculty at The Dental College of Georgia in the General Practice Residency where he teaches and lectures and has done so for a decade. He is also certified in the ND YAG Laser, stem cells, biologic dentistry, and is also Board Certified in Botox and Facial Fillers. He is also Board Certified in Biologic Dentistry.

To be straight up, we have had this capability for some time now and I have just been watching it to see which way the wind blows. So why now? It appears that the oral bacterial testing is now reliable, repeatable, and I'm checking on the cost. So here's what I am thinking: (hang with me here)

First, we know that commercial mouth rinses and prescription mouth rinses kill bacterial. The trouble is they are not target focused and they kill all the bacteria good and bad. That's not what we want, what we want is to kill the bad guys, not the good guys. So for years and years and years I have used *Tooth and Gums* products, the NDYag laser, ozone, and nutraceuticals along with a three month recare because it works. We kill mostly the bad guys. The ozone gets a few good guys, but not so many that it's problematic.

Second, folks have been working on oral bacterial testing for about a decade and there appears to be a new kid on the block that may actually have this down pat....affordability remains to be seen?

So how does this fit together?

The answer is, it's still up for grabs. Not what you were looking for I know but new stuff requires some figuring out. That, combined with each patient's unique biochemistry, there is no one protocol fits all. So it becomes a patient by patient case by case sort of affair.

Next, we need to determine who needs testing because testing everyone is nuts. If you have a normal clinical exam, or what we have been doing is working, then testing is a waist of your money. If your clinical exam is not normal then how is it not normal? You see not every gum problem needs the big guns, some things have simple solutions and that's where my four decades of experience simply cannot be replaced. For conversation sake, let's say you're new to us

and have significant gum disease. Let's test the bacteria and see what bad guys you have lurking in your mouth and get sensitivity tests to see what we can use that's target focused to kill the bad guys.

While the samples are at the lab being processed and cultured, we need to get the junk off your roots that the gums don't like and start some products that we know can help. Then, when the tests come back shift to target focused rinses and creams for a bit. Yes, here they come, TA-DA! The PROBIOTICS for long term maintenance with three month recare and retesting to see if the probiotics are keeping the bacteria in balance.

Further, let's suppose you have been coming for a long time and your exams are not normal but we have you at the place of stable disease. Perhaps we should consider testing to find out what bugs we are not controlling and go after those in a target focused manner then roll up the probiotics for long term maintenance along with three month recare and retest to make sure we are controlling the bugs.

Next, we have a brief article and a website for you to explore and an article written back yonder that is helpful. As you read know that we here are working on the logistics and evaluation of these companies and we will be putting them in our protocols assuming they pass muster.

God Bless,

Dale C. Madson, DMD, NMD, IBDM

Microbial Sampling & Analysis

Sampling requires only two minutes during a dental hygiene or new patient diagnostic appointment.

Using the sampling package supplied by **Biofilm Diagnostics™**, your clinician takes biofilm samples by swabbing the base and top of the tongue and between the teeth in each oral quadrant. The clinician places the samples on a glass slide, into a plastic slide protector and then mails the entire prepaid diagnostics package to our lab.

Our microbiologists evaluate the samples and prepare a detailed oral microbia report. We email the evaluation report to you within three business days after receiving the slides. The report provides information regarding types and numbers of streptococci and other periodontal pathogens including amoebae and yeast as well as inflammatory response.

This informative report provides you with comprehensive information to select the most appropriate treatment protocol for your patient.

Along with successfully treating gingivitis, mild to moderate periodontal disease and breath odour, when used prior to restorative procedures microbial analysis can assist in halting the development of disease as well as preventing recurrence.

The most important part of any treatment is the initial diagnosis. Clearly, treatment can only be as accurate as the diagnostic information it is based on. The Oravital® System is uniquely successful in treating oral infection because our innovative diagnostic protocol uses uniquely accurate methods.

Since oral infections like gum disease and halitosis are caused by microscopic bacteria, it is best to examine these causes using the services of a highly trained microbiologist. That is why Oravital® treatment starts with microbiology samples of a patient's oral biofilm.

Studies have shown that oral diseases are caused by shifts in the balance of the resident microflora. Bacteria that are usually found in small numbers become predominant due to a change in their environment, causing periodontal disease to occur. Gram stain is one of the most useful staining procedures because it classifies bacteria into two large groups according to whether their cells are Gram-positive or Gram-negative, and whether they are rod, coccal or spiral shaped. Since bacteria that are active in periodontal disease and bad breath are predominantly gram-negative anaerobic bacteria, the clinician can determine the most appropriate treatment and develop preventive strategies. Microbiology sampling, Samples are taken from the base of the tongue, the top of the tongue and between the teeth, and placed on three separate sections of a glass slide. Slides are sent to the Oravital® Microbiology Lab to be stained with Gram stain and examined for bacteria, yeast and white blood cells. A detailed report is prepared on the types and numbers of oral microbia found in the samples, and this information is sent to the dental office. These reports form a component of a comprehensive diagnosis for each client, enabling the clinician to select an appropriate treatment based on the presence of types of bacteria.

NOTE: We are still evaluating this company and the final decision has not been made.

If you have an opinion send it to us there's a place on our web site to drop us a note and we read all notes. www.statesborodental.com

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By Julius Goepp, MD



Despite regular brushing, flossing, and professional cleaning, it is challenging to *optimally* **suppress plaque buildup**.

In an intriguing development, researchers have discovered two unique **strains of bacteria** that can *prevent* the buildup of **plaque** and biofilm on our teeth.

As we have come to learn, plaque-induced gum disease causes more than just **halitosis** (bad breath). Chronically inflamed gums lead to a host of degenerative disorders including atherosclerosis, diabetes, and cancer.

After years of study, a new **oral probiotic lozenge** may change how millions can achieve optimal oral health.

Poor Oral Health Increases Disease Risk

The human mouth is teeming with all kinds of bacteria. Many of those bacteria are harmless or even beneficial, but a sizable handful can cause diseases such as dental caries (cavities) and the much more serious gingivitis and *periodontitis*.



These conditions tend to be chronic and produce a steady elevation of inflammation in a part of the body that receives a very high blood flow (the mouth). The result of this bacterial “seeding” is the promotion of a host of destructive cytokines.¹ These circulating cytokines produce inflammatory responses in tissues far distant from the mouth, including the vascular lining known as the *endothelium*, and dramatically increase the risk of atherosclerosis, heart attack, and stroke.^{2,3} Sadly, there is strong evidence that gum disease can also increase the risk of pre-term births and low birth weight.⁴ Periodontitis has also been linked with diabetes,^{2,5,6} and periodontal treatment may improve blood sugar control in diabetic patients.⁷ In short, the mouth is a dangerous place if not kept clean through meticulous hygiene.

The cardiovascular health impact of periodontitis is particularly troubling; people with chronic periodontitis may face an increased risk of heart attacks⁸ as well as kidney dysfunction related to atherosclerosis.⁹ Disturbingly, there is direct evidence that some pathogenic oral microbes make it into the bloodstream of people with gum inflammation, and even wind up forming part of the atherosclerotic plaque that causes vascular disease.¹⁰⁻¹² Other mouth germs make platelets more sensitive to factors that increase the risk for abnormal blood clot formation.¹³ The good news is that we may be able to prevent or at least control the growth of those dangerous microorganisms in the first place through the use of a probiotic *lozenge* in the oral cavity.

Scientists have recently discovered two complementary probiotics that are producing dramatic benefits for oral and periodontal health. By optimizing the health of the oral cavity, these new oral probiotics may provide protection against a broad spectrum of disease issues, ranging from cardiovascular disease to diabetes.

Traditional Oral Health Care: Flossing, Brushing, and Rinsing

Dentists despair that most people fail to engage in the proper daily oral hygiene practices such as brushing, flossing, and mouth rinsing that are currently recommended for the prevention of so many conditions.^{14,15} Thanks to the work of pioneering scientists, probiotics can now make the mouth itself a contributor to health rather than disease.¹⁶⁻²¹

Probiotics Fight Plaque, Gingivitis

Probiotics have been defined as *“living microorganisms which upon ingestion in certain numbers exert health benefits beyond inherent general nutrition.”*²² Scientists have been interested in the makeup of the microbes that live in the mouth (the “oral flora”) for decades, seeking to identify factors that promote the growth of healthy organisms and reduce the growth of those implicated in disease and inflammation.²³⁻²⁶ Probiotics not only improve oral health but can help to change the stubborn composition of *dental biofilm and plaque*.^{27,28} While reducing the total amount of plaque through tooth brushing is always a desirable goal, its complete elimination is not possible. Therefore, changing the actual composition of plaque from an inflammatory cytokine-rich environment into a more benign

environment dominated by neutral or even helpful organisms can contribute to overall systemic health.²⁹⁻³¹



It was a leap of scientific imagination that allowed researchers to realize that the simple use of pro-biotics could make a significant difference in protecting oral health. A powerful demonstration of probiotics' oral benefits came in 2001, with the publication of a study on tooth decay in children aged one to six.³² The

researchers supplemented the children's milk with a common probiotic bacterium, comparing their rate of cavities with those of kids given normal milk. Researchers examined the children's oral health status at the beginning and end of a seven-month period. The probiotic group had *fewer cavities* and lower counts of a hostile bacterium implicated in dental cavities, compared with the control subjects.

In a more compelling study, Swedish scientists showed in 2006 that they could *reverse* symptoms of gingivitis through the use of another probiotic species in adults with moderate-to-severe inflammation.³³ After just two weeks, subjects who received pro-biotics demonstrated a reduced amount of **plaque and inflammation**, compared with the placebo group.

Numerous clinical and laboratory studies have confirmed and clarified the ways in which probiotic organisms contribute to a reduction in plaque and hostile organism colonization.³⁴⁻³⁸

- Poor oral hygiene leads to tooth decay and chronic inflammation of the gums, in turn drastically elevating the risk of chronic, inflammation-driven diseases including atherosclerosis and diabetes.

- Bacteria in the mouth not only contribute to inflammation, but some have been found to be directly present in atherosclerotic plaque—thus, improving oral health may lower cardiovascular risk.
- Most people do not practice the rigorous oral hygiene required to cut cardiovascular risk by eradicating disease-causing germs.
- Probiotics—helpful organisms that block disease-causing bacteria—have been shown to help protect against gum disease and its body-wide consequences.
- Through the pioneering work of experts, new strains of oral probiotic bacteria have been produced that have maximal health-promoting potential through simple applications.
- These new strains also reduce the risk of strep throat and other acute infections, while clearing up bad breath in many individuals.
- These probiotics down-regulate system-wide inflammatory responses through powerful mechanisms now becoming clear to scientists.

Optimal Oral Health Reduces Degenerative Diseases

Summary

We live in a new era of living in harmony with our environment. The use of probiotics—living bacteria that have beneficial, not harmful, characteristics—is the perfect metaphor for this new, integrative approach. Rather than aggressively seeking to eradicate all germs in the mouth, incorporation of a probiotic regimen allows us to capitalize on nature’s bounty, creating a healthier oral environment and promoting overall health and longevity. Oral probiotics, combined with vigorous and attentive oral hygiene (and of course, regular

checkups), show promise for reducing not only dental cavities, halitosis, and upper respiratory infections, but also for modulating the burden of chronic inflammation that can lead to atherosclerosis, the metabolic syndrome, and cancer. Through the groundbreaking work of Dr. John Tagg and the growing numbers of oral health experts who are joining in his campaign, there is renewed hope that we may further triumph over many of the chronic threats to our health that have plagued us since time immemorial.