



**Avoid Root Canals.  
101 Homeopathic  
Nutrition Remedies  
to Stop Tooth  
Cavities**

*Scott Rauvers*

*Fifth Edition*

**Actions to Take Immediately  
if you Have a Toothache**

**PAGE 135**

**Traditional Chinese Medicine  
Toothache Relief Methods**

**PAGE 142**



This book is dedicated to those who seek unnecessary root canals, so they may avoid unnecessary pain and expense in the future

Published by the Institute for Solar Studies

Copyright 2019 © Scott Rauvers All rights reserved.

**REVISED SPRING 2019**



Avoid Root Canals. 101 Homeopathic Nutrition  
Remedies to Stop Tooth Cavities

**ISBN- 9781090993588**

**Fifth Printing  
March 2019**

Website

[www.mightyz.com](http://www.mightyz.com)

This book is available in Paperback, Nook  
and Kindle Versions.

Just enter the title into any Internet search  
box to locate these versions

Read the first 3 chapters of this  
book **free**. Just visit

**[www.mightyz.com/healthy\\_teeth.html](http://www.mightyz.com/healthy_teeth.html)**

**or**

**<http://www.mightyz.com/faqs.html>**

## **A SPECIAL THANK YOU**

Thank you the reader for being a part of those positively transforming the world of dentistry. This book is dedicated to those seeking how to tap into the power of nutritional wisdom to create healthy teeth and gums.

The sole purpose of this book is to empower those seeking alternatives to the dentist's drill and to help create a feeling of self confidence and comfort, knowing you hold the power to prevent cavities, re-mineralize your teeth and create lasting strong and healthy gums.

Use the wisdom in this book to: Avoid Unnecessary Root Canals, Learn to re-grow New Layers of Dentin on Exposed Enamel, Reverse Gum Disease, Heal Tooth Abscesses, Re-store your Hormones to Healthy Levels and visit a dentist only when absolutely necessary. This book can save you thousands of dollars and avoid wasted time on unnecessary dental procedures.

Scott is also the founder of The Institute For Solar Studies On Behavior and Human Health, which studies non invasive methods of healing, giving people alternatives to painful and sometimes unnecessary surgery. Scott's latest book released in the Spring of 2015 appropriately titled: Avoid Root Canals. 101 Homeopathic Nutrition Remedies to Stop

Tooth Cavities, gives readers painless alternatives to root canals, herbal methods to relieve toothache and herbal remedies and mouth washes for sore, receding or infected gums. In his latest book Scott includes his own experiences of how these non-invasive methods have helped him and the many readers of his website avoid visiting the dentist altogether. This book is a golden gem if you live or spend time in locations you don't have access to a dentist or want to visit them unless absolutely necessary.



**Other great titles published by the Institute for  
Solar Studies on Behavior and Human Health**

- **The Official Guide to Reversing the Aging Process. Rashnya Herbs, Alchemy & Taoist Longevity Secrets**
- **The Vegetarian's Guide to Longevity via Gene Therapy and Raw Foods**
- **How to Make Tinctures, Extracts, Flower Essences and Homeopathic Remedies**
- **A Centurion's Toolbox for Longevity. Living Beyond 120 - 2nd Edition**
- **My Book of Stem Cell Longevity Formulas and Nutraceutical AntiAging Combinations**

You may preview the first 3 chapters of any of these books by visiting:  
[www.mightyz.com/faqs.html](http://www.mightyz.com/faqs.html)

### ***From the author***

I have not needed to visit a dentist for the past 10 years. I share all the very best tips and information anyone needs to avoid unnecessary root canals and the know-how of how to reverse cavities naturally. This book includes full scientific references of the most successful methods that reverse cavities, heal gum disease and the best methods to maintain excellent oral health.



## CHAPTERS

**Introduction - Page 1.....How Mercury Damages the Body.....What is Dental Amalgam?.....Developed Countries that have Banned the Use of Mercury Fillings.....Why You Can Enjoy Better Dental Health Using the Holistic Approach.....Why Your Dentist Won't Share These Secrets with You.....A Special Message to Dentists.....When You, the Reader Should See A Dentist.....A Brief History of Modern Dentistry.....Welcome to the New World of Green Dentistry.....A New Anti-cavity Vaccine is on the Horizon.**

**Chapter 1 - Page 9.....Scientific Studies of the Remineralization of Teeth.....Great Tasting Sweets that are also Good for Your Teeth.....Ice Cream.....A Lollipop that Prevents Cavities.....Dark Chocolate (Cocoa) for the Prevention of Cavities.....Dark Chocolate reduces Cavities by 73 per cent.....Roasted Coffee for Strong and Healthy Teeth.....A Dark Chocolate Rich Diet for the Prevention of Periodontitis.....Some Chocolates and Cocoas may REDUCE the risk for Cavities and Periodontal Disease.....Dark Chocolate contains Less Sugar.....Lozenges.....Honey.....Chewing Gums for Healthy Teeth.....Cranberries.....What is Gingivitis?.....Cheese and Peanuts.....Carob.....Raisins.....Curry Leaf.....Olives.....What is Fusobacterium**

nucleatum?.....Red Wine.....Wintergreen (*Gaultheria procumbens*).....Why Chocolate May not Be a Primary Reason for Cavities.....Dark Chocolate for the Protection against Cavities.....A Natural Dark Chocolate Mouth Wash.....Dark Chocolate reduces the adherence of *Streptococcus mutans*.....Phenolic Substances exhibit Cavity Protection.....Polyphenols for Protection against Cavities.....The Composition of Dark Chocolate.....Dr. Christopher's Herbal Tooth Powder.....Xylitol.....Stevia.....Excessive Stevia Intake and Brain Damage.....Luo Han Kuo fruit extract (*Siraitia grosvenori*).....Yogurt.....Green and Black Tea.....Oolong Tea.....Hydrophobic Substances for defeating Bad Bacteria.....1,288.....Red Wine with Grape Seed Extract.....Plant Extrcts that Exhibit Biofilm Activity.....Good Dental Hygiene Contributes to Longevity.....Dark Chocolate for Diabetics

**Chapter 2 - Page 29**.....Does Fluoridation of Water Prevent Cavities? The Facts.....Fluoridation Cessation Studies.....Why Living near Volcanoes results in Higher Fluoride Intake.....Seasonal Variations of fluoride Levels in the Body.....Seasonal Variations of Cavities.....Seasonal Variation of Dental Cavities.....Seasonal Variability of Gingivitis.....Seasonal Variations of Plaque.....Seasonal Variation of Toothache.

**Chapter 3 - Page 34**.....The Pioneering Work of Dr. Melvin Page.....The Cause of Calculus Deposits.....Gingivitis.....Gum Disease. Types 1 and 2.



Avoid Root Canals. 101 Homeopathic Nutrition Remedies to  
Stop Tooth Cavities

**Chapter 4 - Page 36.....Periodontitis. The Facts and Measures for Prevention.....Periodontal Disease can Contribute to Health Problems.....Prevention Measures for Periodontitis.....Blackberry Extract.....Chronic Periodontitis.....Eliminating the bad bacteria C. albicans.....Auranofin.....Hydrogen Water Heals Periodontitis.....Plant Extracts that Prevent Periodontitis.....Studies of the Effects of Salacia Reticulata on Humans.....Plumbagin for Protection against Periodontitis.....Vitamin C and Cavities.....Chelation Theory and Cavities.....Overtime Hours and Increased Tooth Decay.**

**Chapter 5 - Page 48.....My Personal Story.....Natural Tooth Repair Studies Performed by Dr. Weston Price.....Why Vegetarians get more Cavities.....What is Vitamin K2?.....Foods highest in Vitamins K and D.....Manganese. The often Overlooked Mineral for Tooth Health.....Calcium Bioavailability.....Iron Absorption from Orange Juice.....Citric Acid and Iron Absorption.....How to Temporarily Lower Iron Levels in the Body.....Black Tea, Tannins and Tooth Health.....Supplements for Maximum Absorption of Silica.....The Pioneering Work of Dr. Howard Hawkins.....Chromium Lowers Blood Glucose Levels.**

**Chapter 6 - Page 59.....Simple and Effective Herbal Formulas for Teeth and Gums.....Rosemary Gladstar's Healing Mouthwash.....The Jean Valnet Remedy.....A Peppermint oil Mouthwash.....Jertro**

**Kloss Gum Healer and Mouth Rinse.....A Simple herbal Mouth Rinse Formula.....Remedies for Bleeding Gums.....An Ancient Chinese Herbal Remedy for Toothache.....Michael Moore's Tooth Powder.....Jared's Tooth Powder.....Jakob Lorber's Tooth Remedy Powder.....Ayurvedic Techniques for Healing Toothache.....Time Tested Chinese Herbal Remedies for Toothache.....The Rehmannia Six Combination (Liu wei di huang wan)..... The Niu Huang Jie Du Pian Formula.....Native American Toothache Remedies.....Using Watermelon Rind for Toothache.....How to Make Herbs into Fine Powder.....Essential Oils and Herbs for Relief of Toothache.....The Antimicrobial Power of Oregano.....Kombucha Tea.....Foods highest in Natural Fluoride.....How to use Eucalyptus Oil.....Natural Tea Contains High Amounts of Fluoride.**

**Chapter 7 - Page 75.....Keeping the Gums Healthy.....Black or Green Tea for Healthy Gums.....Herbal Remedies for Healthy Gums.....Natural Methods That Tighten Gums.....Natural Cranberry Mouthwash is equally effective as Chlorhexidine.....An Extremely Powerful and Natural Alternative to Chlorhexidine.....Foods rich in CQ10.....Curry Leaf.....Methods that Defeat the Production of Biofilm Accumulation.....Reduction of biofilm by *Salvadora Persica*.**

**Chapter 8 - Page 84.....Probiotics Contribute to Strong, Healthy Teeth.....*L.casei* 37.....Eating Yogurt for Strong Teeth.....HN019.....The Yogurt Mix**

Avoid Root Canals. 101 Homeopathic Nutrition Remedies to  
Stop Tooth Cavities

**Formula.....Black Cumin Seed.....Probiotics and the  
Prevention of Cavities.....Combining Probiotics with  
Fluoride.....Bifidobacterium.....Long Term Cheese  
Consumption and Cavity Reduction.....Cavity  
Prevention in Infants.....Lactobacillus rhamnosus GG.**

**Chapter 9 - Page 95.....Herbs to Build Strong  
Teeth.....Resveratrol and Silymarin for Bone  
Strength.....Foods Combinations for Strong  
Teeth.....Natural Non-Invasive Methods that  
Strengthen Teeth.....Foods highest in Vitamin  
D3.....The Best Tree Bark for Strong Teeth.....Using  
Parsley For Re-Strengthening Loose Teeth.....The Best  
Teas for Healthy Teeth and Gums.....Natural Herbs for  
Oral Hygiene and Healthy Teeth.....Pepper-  
Rosmarin.....Using Coconut Oil to Dissolve  
Plaque.....Using Coconut Oil for Oil Pulling. Results of  
a Research Study.....15 Research Studies Looking at  
Herbs That Are Good for the Teeth.**

**Chapter 10 - Page 105.....How Diet and Sugar  
Relate to Dental Health.....The Main Types of  
Sugars.....Enzymes that help the body Dissolve  
Sugar.....Stress and Sugar.....Naringin - The Rapid Way  
to Remove the Damage Caused by Sugar.....Rosemary  
contains Naringin.....A Simple Sugar Detox Plan.....My  
Experience of Abstaining From Sugar.....Dealing with  
Addictions to Sugar.....Why You Crave  
Sugar.....Methods that Help Eliminate Sugar Cravings.**

**Chapter 11 - Page 113.....The Importance of Vitamins A, D and K.....Enhancing the Bioavailability of Calcium into the Teeth.....White Gourd. A Good Souce of Bioavailable Calcium.....The Miracle of Vitamin K.....The Best Sources of Vitamin K2.....A list of Mineral Waters Containing Highly Bio-available Calcium.....Vitamin C Enhances Calcium Absorption.**

**Chapter 12 - Page 119.....The Cause of Toothaches.....Prescribed Antibiotics and Toothache.....How to Locate the Foods In Your Diet That Are Contributing To Ill Health.....Foods and Lifestyles that Contribute to Toothaches.**

**Chapter 13 - Page 123.....Weather and Toothaches.....Solar Activity and Toothaches.....Local Weather and Toothaches.....A Dropping Dew Point Leads to Better Health.**

**Chapter 14 - Page 128.....Personal Experiences of 9 Years of Natural Healing of Toothaches.....Probiotics Enhance Bone Strength.....Effect of Probiotics Supplementation on Bone Mineral Content and Bone Mass Density.**

**Chapter 15 - Page 131.....How to Properly Perform Oil Pulling.....Scientific Confirmation of the Validity of Oil Pulling.....An Oil Pulling Survey.....The miracle of the sunflower and how it restores hormone levels naturally.....Oil Pulling using Ormus.**

## **Chapter 16 - Page 135.....Actions to Take**

**Immediately if you Have a**

**Toothache.....Spilanthese.....Silica.....In Case of Severe**

**Tooth Pain.....Why Cinnamon is More Effective than**

**Clove in Reducing or Eliminating Toothache. The**

**Scientific Evidence.....Quercetin, Inflammation and**

**Lovage Extract.....The Natural Numbing Herb**

**Spilanthese.....A Quick Reference Guide of Foods that**

**Rapidly Reduce Toothache Infection.....Traditional**

**Chinese Medicine Methods to Take if you Have**

**Toothache.....The Removal of Damp.....Draining**

**Damp.....Foods that Drain Dampness Quickly.....A**

**Rapid Damp Removal Routine.....Exercise Removes**

**Damp and Restores Circulation.....Phytic Acids.....A**

**General Toothache Repair Meal Plan.....Foods to Avoid**

**that Increase Damp.....Foods that Drain Fire.....Foods**

**to avoid that Cause Fire.....Bitter Foods for Draining**

**Damp.....Foods with the highest Amounts of Vitamin**

**K.....Herbs and Compresses for Immediate Pain**

**Relief.....Prickly Ash.....Using Ormus to help Relieve a**

**Toothache.....Intention and Healing. How Essential**

**Oils Magnify Intent.....Additional Instant Toothache**

**Relief Methods.....Syrian Rue.....Azithromycin and**

**Grape Seed Extract.....Toothache Elimination**

**Routine.....Additional Remedies for Resistance against**

**Tooth Decay.....Extracts and Mouthrinses for Cavity**

**Prevention and the Healing of Cavities.....The Power of**

**Red Sage.....Chlorhexidine**

**Mouthrinse.....Chlorhexidine Synergy.**

Scott Rauvers

**Chapter 17 - Page 159.....Using Hydrogen Peroxide for Dental Hygiene and Health.....Herbs for Mouth Rinses.....How to Make Your Own Natural Breath Freshener.**

**Chapter 18 - Page 162.....Proven Techniques and Methods that Heal Dental Abscesses.....Inhibiting Mycobacterium Bacteria.....How Gum Disease Increases Your Chances of a Stroke.....How to use Niacin (vitamin B3) to heal an Abscess.....Propolis, the miracle maker.....Propolis Synergy.....Using a Ginger and Mustard Foot bath for Pain Relief.....Asafoetida.....Edible Bentonite Clay and Mineral Rich French Green Clay.....The Tea Bag Poultice.....Rapid Toxin Removal.....A Closer Examination at The Bacteria Responsible For Cavities.....Streptococcus mutans.....General Substances to Inhibit the Growth of Bad Oral Bacteria.....Essential Oils for Inhibiting Negative Oral Bacteria.....Eliminating Staphylococcus Aureas.....White Birch, Pine and Potato.....Dihydromyricetin.....Plant Extracts that Inhibit Streptococcus mutans.....Nutmeg - One of Nature's Most Powerful Destroyers of Streptococcus mutans.....Folk Remedies for Good Dental Health and Hygiene.**

**Chapter 19 - Page 182.....Methods to Fight Infection and Boost the Immune System while Alleviating Toothache.....Immune System Health.**

Avoid Root Canals. 101 Homeopathic Nutrition Remedies to  
Stop Tooth Cavities

**Chapter 20 - Page 184.....Foods for Healthy  
Teeth.**

**Chapter 21 - Page 185.....Cell Salts for relief of  
Relieve Toothache.....Instructions for preparing Cell  
Salt Solutions.**

**Chapter 22 - Page 187.....Using Visualization to  
Relieve Pain.....Herbs that Strengthen the Skelton and  
Joints are Good for Teeth.....The Connection between  
Stress and Toothaches.....Stress can contribute to  
Toothache.**

**Chapter 23 - Page 190.....Natural Herbs for  
Gums with Inflammation and Bleeding Gums.....Use  
Vitamin C in Grapefruit to Stop Bleeding Gums.....3  
Herbs for Healthy Gums.....Quick Methods that Stop  
Bleeding Gums.....Herbs for Relief of Periodontal  
Disease.....Benzylamine for Dental Inflammation.**

**Chapter 24 - Page 193.....The Complete Master  
Herbal List for Alleviating Toothaches.**

**Chapter 25 - Page 200.....Understanding How  
Teeth Re-mineralize Themselves.....Manganese and  
the Healing of Bones.....Chitosan and  
Demineralization.....Athletes and Tooth Decay.**

**Chapter 26 - Page 205.....Non-Invasive Natural  
Cavity Repair Simply Explained.....The Dental**

**Tubules.....Curcumin Enhances the Strength of Tooth Enamel.....A Lollipop that Prevents Cavities.....A Remedy for Cavities from Thailand.....Using Dyes to Prevent Cavities.....Mango and Neem Extracts for the Prevention against Tooth Cavities.....How Amino Acids Help Reverse Cavities. The Overnight RejuvenEssence Formula.....The Miracle of Carnosine.**

**Chapter 27 - Page 214.....Reviews of the best Toothpastes that Strengthen Tooth Enamel and Re-mineralize Teeth.....Miswak Chewing Sticks For Protection against Plaque.**

**Chapter 28 - Page 220.....Nine 100% All Natural Sugar Substitutes.**

**Chapter 29 - Page 223.....A Simple Diet Plan for Dental Health.....An Overall Summary of the Nutrients that Create Strong and Healthy Teeth.....How to use Grape Seed Extract.**

**Chapter 30 - Page 226.....Herbal Mouth Ulcer and Canker Sore Remedies.....A Remedy for Canker Sores and a Dry Mouth.....A Simple Mouth Ulcer Salve.**

**Chapter 31 - Page 228.....Jakob Lorber's Second Sun Remedy.....A Summary of Jakob's writing.....The Magical Healing Power of the Adzuki Bean.....Cinnamon Oil for Healthy Gums.....Excessive Coffee Intake Contributes to Severe Periodontitis.....Chicory for Remineralization and as a**

Avoid Root Canals. 101 Homeopathic Nutrition Remedies to  
Stop Tooth Cavities

**Coffee Substitute.....Grape Seed Extract's Effects on  
Rebuilding Dentin.....Beta Emitters and Calcium  
Absorption.....Magnets, Inflammation and Cayenne  
Pepper.....A Lemon Egg Recipe.....Eggshell Power as a  
Bio-available Source of Calcium.....How to Make  
Eggshell Calcium.**

**Chapter 32 - Page 240.....Meta Data Analysis  
Studies of Tooth Remineralization and Dental  
Health.....Green Dentistry Meta-data Analysis  
Study.....Herbal Antimicrobials Meta-Data Analysis  
Study.....Prevention and Treatment of Oral Diseases  
Meta-Data Analysis Study.....Extracts Stronger than  
Clove for Good Dental Health.....Alternatives to  
Propolis.....Protection against Food  
Poisoning.....Antimicrobial Essential Oils Meta-Data  
Analysis Study.....Black Cumin Seed.....Caffeic  
acid.....Red wine and Grape Seed  
Extracts.....Resveratrol and Tooth Health.....Vitamin D  
Meta-Data Analysis Studies.....Sunlight, Vitamin D,  
Region and Cavity Risk.....Temperature Has an Effect  
on Fluoride Absorption.....Scientific Evidence of  
Vitamin D and Calcification of Teeth.....Fluoridation of  
Water and Geographic Region.....Effects of Too Much  
fluoride.....Meta-Data Analysis Study of Natural  
Methods for Healthy Teeth and Gums.....Scientific  
Confirmation of the Validity of Oil  
Pulling.....Regeneration of Tooth Regions.....Neem  
Chewing Sticks.....Vata Dosha, Kapha Dosha and Pitta  
Dosha Types and Redommended Tooth  
Repair.....Mango Leaves.....Side Effects of Using**

Scott Rauvers

**Chlorhexidine.....Sugar Meta-Data Analysis Study.....Do Sugar Substitutes Contribute to Tooth Decay?.....Earthing Meta-Data Analysis Study.....How to Apply Grounding Energy to the Body.....Cocoa improves the health of people with Diabetes as well as prolongs lifespan**

**Chapter 33 - Page 268.....The Calcium to Phosphorus Ratio of Vegetables.**

**Chapter 34 - Page 270.....The Calcium to Phosphorous Ratios of Fruits.**

**Chapter 35 - Page 271.....The Oxalic acid Levels of Foods.**

**Chapter 36 - Page 272.....The Calcium Levels of Vegetables.**

**Chapter 37 - Page 274.....The Calcium Levels of Fruit.**

**Chapter 38 - Page 275.....Levels of Vitamin C per 100 grams in Vegetables.**

**Chapter 39 - Page 277.....Vitamin C Levels per 100 grams in Fruit.**



Avoid Root Canals. 101 Homeopathic Nutrition Remedies to  
Stop Tooth Cavities

**Chapter 40 - Page 279.....How to Make Your Own  
Zeolite Deotx Formula.**

**Page 282.....Quoted Scientific References**

**Page 293.....Index**



Scott Rauvers

## Introduction

**H**aven't you ever wished you could have all the very best Ayurvedic, European and Traditional Chinese herbal remedies and scientifically proven tooth and gum healing remedies all in a convenient book?

You are holding in your hands the result of 5 years of research and writing, including feedback from readers of my website, the best natural remedies for healing toothache, gum disease and tooth abscesses.

This dream is now a reality. You won't find any other book that covers such a broad range of healing methods including herbal mouth rinses and proven techniques to keep your teeth and gums free of pain and decay.

Best of all you no longer have to believe what your authoritarian dentist tells you. Unlike some books that fail to cite references backing up their claims, this book lists full references and the original scientifically published papers behind each claim made, allowing you, the reader to look up and confirm the validity of the information in this book for yourself.

### How Mercury Damages the Body

There are many people who have concerns about having mercury used as a part of their fillings. The mercury used in dental fillings is composed of dental amalgam.

### What is Dental Amalgam?

Dental amalgam is composed of a 50/50 mixture of liquid mercury which is mixed with a powdered metal alloy of silver, copper and tin. When it is mixed, it starts to form a pliable putty-like substance that will eventually harden.

In December 2010, the U.S. Food and Drug Administration warned against the use of using amalgam in vulnerable populations (the very old, very young and the

pregnant). Pediatric Neurologist Dr. Suresh Kotagal testified at the FDA hearing "*there is no place for mercury in children.*" (1)

### **Developed Countries that have Banned the Use of Mercury Fillings**

The European Union recently passed a resolution for all nations under the European Union to "start restricting or prohibiting the use of amalgams as dental fillings." (2) (2a)

In 1987 the Public Health Office of Germany recommended against using amalgam in pregnant women, children and people with kidney disease. On July 1st, 1995 Sweden ceased allowing amalgam to be used in patients under the age of twenty and banned it altogether in 1997.

In 1996, the Canadian Department of Health directed its dentists to cease using amalgam fillings altogether in children, pregnant women and people with impaired kidney function (3). Early exposure to even low doses of mercury in women who are pregnant and breastfeeding have shown it causes an increased risk in having children with a lower intelligence (4). This is because amalgam crosses the placenta and accumulates in unborn babies.

### **Why You Can Enjoy Better Dental Health Using the Holistic Approach**

Conventional dental treatments avoid the holistic approach altogether because it is not standard curriculum for students studying dentistry. This gem of a book has already sorted through all the confusion and misinformation, choosing only the best tried and proven holistic methods that work. The end result is a simple reference that can be accessed at your convenience. This is a book you'll want to hand down to your grandkids generation after generation. The beauty of this book is all 3 mainstream holistic treatments, Ayurvedic, Traditional Chinese and European are all brought together in one convenient easy



## Avoid Root Canals. 101 Homeopathic Nutrition Remedies to Stop Tooth Cavities

to use reference.

This book includes the pioneering research done by Dr. Weston Price and Melvin Page, presenting the facts and methods proven to work, obtained from their research and scientific studies.

Prevention of cavities and treatment is so much more less painful and much less expensive than waiting until extensive tooth decay causes unsightly damaged teeth. Bad eating habits and digestion increases your chance of cavities, from unwanted plaque build-up on your teeth. If you have adequate amounts of stomach acid to digest the food you are eating, your plaque build-up will be substantially reduced.

Simple and quick protocols are presented in a clear straightforward manner for preventing cavities and re-mineralizing teeth. The beneficial side effects of using these proven holistic methods includes increased vitality and vibrancy due to restored hormone levels and the fresh intake of vitamins and minerals.

You may be surprised to learn that many of the most effective foods and spices that relieve toothache may already be in your kitchen cupboard. Clove for example is a powerful natural pain killer for toothache, and hydrogen peroxide mixed with water between 3% and 4% concentration is a powerful way to kill bad bacteria in the mouth that causes toothache.

### **FAST FACT**

**Healthy teeth and gums reduces one's  
chance of contracting pneumonia**

(Aspiration pneumonia; dental and oral risk factors in an older veteran population. Terpenning MS et al. 2001).

**Further**

Dental caries: a treatable infection. Springfield: Charles C Thomas Publisher. Loesche WJ. 1982.

**Reading**

Antibacterial effect of taurolidine (2%) on established dental plaque biofilm. Arweiler NB, Ausschill TM, Sculean A. Clin Oral Investig. 2012;16(2):499–504.

**Why Your Dentist Won't Share These Secrets with You**

Many of these methods to highly educated people seem unorthodox and “messy”. The fact is the further technology in medicine

advances, the more science will reach the conclusion

that nature provides the core principal ingredients needed for healing. I

highly respect

the Dental industry as they are very professional and can do amazing things with teeth and gums. They are miracle workers at taking care of the short term problem. However, when it comes to long term dental health such as prevention, which includes the diet, I believe that many of them ignore this area altogether, as Dental School never taught them the long term prevention techniques and foods that prevent cavities or the proper foods and procedures that re-mineralize teeth. This information is then passed on down to their patients, making the insurance companies very happy. Also cavities are healed with machines and mechanical devices and some companies making these machines do a pretty good business from selling



them to dentists. Personally, I prefer the holistic organic methods any day.

An interesting note, as you may have seen so far, or will see later in this book, is that foods and herbs that contribute to perfect dental health also have significant anti-aging and cancer prevention traits. Maltitol, for example, which re-mineralizes teeth, has been shown to be one of the most powerful foods for fly longevity experiments. Fruit Fly experiments showed 100 percent of the fruit flies surviving 18 days when fed Maltitol (4a).

Longevity nutrition is hardly something clinically industrialized medicine today wants to promote. Re-calcification of severe cavities is not only possible, but becoming more commonplace as more and more of this knowledge is revealed. Awareness of these non-painful methods will continue to grow, as people become more aware that using unnecessary resources only continues to destroy our planet and its health.

### **A Special Message to Dentists**

From my experience over the years of talking to you, the dentist, in person, I have found many of you open to the methods that I have mentioned in this book. However, when it comes to long term dental health, I believe that many of you are uneducated, as Dental School never taught you the long term prevention foods, techniques and methods that help prevent cavities, or can suppress a toothache or are even aware of the natural methods proven to re-mineralize cavities. I believe a lot of this confusion comes from the insurance companies, who are happy keeping your patients in the dark about alternative methods of dental health and prevention.

### **When You, the Reader Should See A Dentist**

A continuing toothache is the sign of something much more serious. So you should get to a dentist as soon as possible. However before you do, use the tips and techniques shown in Chapter 11 titled "**Actions to Take Immediately if you Have a Toothache**" Chapter 11 **PAGE 73** or "**Traditional Chinese**

**Medicine Methods to Take if you Have Toothache**“ ON **PAGE 80** and you may just save a trip to the dentist. Pay particular attention to the section on abscesses as there are some great methods to help immediately reduce the pain from them.

### **A Brief History of Modern Dentistry**

The first dentist was Hesy-Re from ancient Egypt. The time period between 1650 and 1800 saw French Physician, Pierre Fauchard emerge as “*The Father of Modern Dentistry*”. Further efforts by Chapin Harris and Horace Hayden in 1840 saw the establishment of the very first dental school, **The Baltimore College of Dental Surgery (Oral sciences: History and future research. Divya Mehrotra. Aug 2014).**

### **Welcome to the New World of Green Dentistry**

Many decades ago Dr. Winston Price healed numerous people of cavities using specific minerals and substances. Back then the mechanism responsible for such healing was unknown. As of 2019, numerous researchers have found the actual reasons why he was able to reverse cavities. This book includes those studies, giving an overall picture of how cavities can be reversed, prevented, including the avoidance of root canals. This publication includes scientific references and studies, all made into an easy-to-understand format so anyone can learn to avoid the dentist at all costs, and only visit the dentist if absolutely necessary. Many detailed studies and scientific breakthroughs regarding dental health have occurred just within the last three years, including an upcoming cavity vaccine.

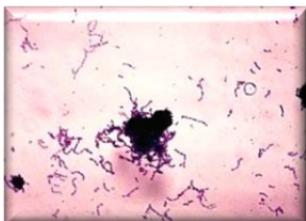
In this book you will find many plant extracts and substances that are good for the teeth and gums and in some cases may even reverse cavities. The important thing to remember that any substance exhibits a dose dependent reaction in the body. This is because the substance behaves according to a person's state of health, their diet and whether the extract is fresh or old. Also some extracts are naturally more potent than others, so you may need to use less or more

## Avoid Root Canals. 101 Homeopathic Nutrition Remedies to Stop Tooth Cavities

respectively. The best rule of thumb to follow is to "test" an extract as a mouthrise or as an oral cavity prevention agent for a number of times over a period of days and when you feel you have obtained the correct amount, then continue on using that dosage for as long as you feel comfortable. It is also important to note that the more potent a substance is, the less is needed and in some cases the span of time required to use it should be less.

### **What Exactly Causes Cavities?**

Cavities, commonly called caries in the dental profession, are caused by cariogenic bacteria such as *Streptococcus mutans* and *Staphylococcus aureus* (*pictured in the following image*). These bacteria convert dietary sugars into acids that rapidly dissolve the minerals our teeth. Killing these types of cariogenic bacteria is the most effective way to prevent tooth decay.



**A New Anti-cavity Vaccine is on the Horizon**  
Chinese research scientists combined *S. mutans* with proteins in order to create a vaccine that wards off bacteria responsible for cavities. The vaccine is similar in principle to developing a flu shot. Tests conducted on mice found that mice without cavities exhibited a 64.2% prevention rate in cavities. Mice with cavities exhibited an astounding 53.9% healing rate. The vaccine needs to be tested in humans to test for inflammatory responses, particularly in the liver, kidney, cardiovascular system and lungs (**Second-generation Flagellin-rPac Fusion Protein, KFD2-rPac, Shows High Protective Efficacy against Dental Caries with Low Potential Side Effects.** Jingyi Yang et al.

Sept 2017).

**Further**

**Reading**

A DNA Vaccine Encoding a Cell-surface Protein Antigen of Streptococcus mutans Protects Gnotobiotic Rats from Caries. Show all authors. M.W. Fan<sup>1</sup> et al. Nov 2002.

Serum and salivary antibody responses in rats orally immunized with Streptococcus mutans carbohydrate protein conjugate associated with liposomes. Wachsmann D et al. May 1986.

Flagellin-PAc Fusion Protein is a High-efficacy Anti-caries Mucosal Vaccine Y. Sun. et al. Aug 2012.

Salivary IgA enhancement strategy for development of a nasal-spray anti-caries mucosal vaccine. HuiMin Ya. May 2013

Prospects in Caries Vaccine Development. D.J. Smith. Oct 2011.

A therapeutic anti-Streptococcus mutans monoclonal antibody used in human passive protection trials influences the adaptive immune response. Robinette, R. A. et al. June 2011.

Comparison of an adherence domain and a structural region of Streptococcus mutans antigen I/II in protective immunity against dental caries in rats after intranasal immunization. 1998.

# Chapter 1

## Scientific Studies of the Remineralization of Teeth

### Gallic Acid

**S**tudies have found that gallic acid remineralized tooth enamel (**Effect of gallic acid on the wear behavior of early carious enamel. Gao SS et al. Jun 2009**).

According to phenol-explorer.eu, gallic acid is found in abundance in the following foods: Walnut Liquor, Chicory, Red Wine, Black Tea and Sage. Extremely high amounts are present in Sage and Clove.

### Galla

### Chinensis

The Chinese herb *Galla chinensis* contains an abundance of gallic acid and studies have found it effective in remineralization of teeth (**Effect of enamel organic matrix on the potential of *Galla chinensis* to promote the remineralization of initial enamel carious lesions in vitro. Linglin Zhang et al. Jun 2009**), (***Galla chinensis* Compounds Remineralize Enamel Caries Lesions in a Rat Model. Zhang TT et al. 2016**). (**Effect of *Galla chinensis* on the in vitro remineralization of advanced enamel lesions. Cheng L and ten Cate JM. Mar 2010**).

### Further Reading

White tea (Effect of Green and White Tea Pretreatment on Remineralization of Demineralized Dentin by CPP-ACFP-An In vitro Microhardness Analysis Poornima Jose et al. Apr 2016).

Felszeghy S, Holló K, Módos L, Lammi MJ. Type X collagen in human enamel development: A possible role in mineralization. *Acta Odontol Scand.* 2000;58:171-6.

Cheng L, Li J, Hao Y, Zhou X. Effect of compounds of *Galla Chinensis* on remineralization of enamel surface in vitro. *Arch Oral Biol.* 2010;55:435-40.

Burwell AK, Litkowski L, Greenspan D. Calcium sodium phosphosilicate: Remineralization potential. *Adv Dent Res.* 2009;21:83-6.

Cheng L, Li J, Hao Y, Zhou X. Effect of compounds of *Galla Chinensis* on remineralization of enamel surface in vitro. *Arch Oral Biol.* 2010;55:435-40.

Reynolds EC. Calcium phosphate-based remineralization systems: Scientific evidence? *Aust Dent J.* 2008;53:268-73.

Burwell AK, Litkowski LJ, Greenspan DC. Calcium sodium phosphosilicate (NovaMin): Remineralization potential. *Adv Dent Res.* 2009;21:35-9.

### **Great Tasting Sweets that are also good for Your Teeth**

It can be easy to assume that foods that prevent / heal cavities have to taste bad or bland. This is a false belief. For example, warm sunshine creates vitamin D in our bodies, one of the best vitamins that ward off cavities and strengthen teeth and studies have found that dark chocolate plays a role in the prevention of cavities.

Many of us were brought up to believe that sweet foods are bad for our teeth. This is true for some foods, however did you know that there are some foods that taste sweet and are good for your teeth? This short chapter is devoted to foods that not only taste good, but also keep the teeth free of cavities, or in some cases reverse cavities and avoid a root canal altogether. I wish I had these when I had my root canal.

## Ice



## Cream

A study using ice-cream to deliver probiotics to 40 adolescents (Bifidobacterium lactis Bb-12 and Lactobacillus acidophilus La-5) discovered Significant reduction in their salivary MS scores reported after consumption of the probiotic ice cream (**The Use of Probiotic Strains in**

**Caries Prevention: A Systematic Review, that was conducted by Maria Grazia Cagetti, and published in July of 2013).**

## A Lollipop that Prevents Cavities

Licorice root (Glycyrrhizol A) is a sweet tasting herb that contains substances that exhibit strong antimicrobial activity against cariogenic bacteria. A research study created a method for producing a sugar-free lollipop containing licorice root, aiming to effectively kill cariogenic bacteria such as Streptococcus mutans. The study found that the licorice lollipops were not only sugar-free, but that their antimicrobial activity is stable in lollipop form. Two pilot human studies were conducted which found that brief applications of these lollipops (twice a day for 10 days total) led to a significant reduction of oral causing cariogenic bacteria in the oral cavity among most of the human subjects tested (**Development and evaluation of a safe and effective sugar-free herbal lollipop that kills cavity-causing bacteria. Chu-hong Hu. et al. Jan 2011).**

## Dark Chocolate (Cocoa) for the Prevention of Cavities

The following information comes from a meta-data analysis study titled: **Anti-cariogenic effects of polyphenols from plant stimulant beverages (cocoa, coffee, tea)**, which was conducted by Ferrazzano GF and published in May 2009.

Recent studies have found that cocoa, coffee and tea are abundant in polyphenols which play a role in the prevention of cariogenic processes (cavity formation). This is due to their antibacterial action. The main substances responsible for the protection against cavities in dark chocolate are Cocoa polyphenol pentamers, which have been scientifically proven to significantly reduce acid production and biofilm formation produced by the cavity forming bacteria *Streptococcus mutans* and *S. sanguinis*.

### **Dark Chocolate reduces Cavities by 73 per cent**



Studies on hamsters in which 20% of their sugar containing control diet was replaced by sweetened chocolate, had a reduction in their caries by up to 35 per cent when fed milk

chocolate and up to 73 per cent when fed dark chocolate (Inhibition of hamster caries by substance in chocolate. A Strålfors Sept 1967).

### **Roasted Coffee for Strong and Healthy Teeth**



Roasted Coffee and Green

Tea contain the substances caffeine, chlorogenic acid and trigonelline which interfere with the cavity causing bacteria *Streptococcus mutans*' ability to cause cavities (Anti-cariogenic effects of

**polyphenols from plant stimulant beverages (cocoa, coffee, tea) Ferrazzano GF et al. May 2009).**

### **A Dark Chocolate Rich Diet for the Prevention of Periodontitis**

Studies conducted by Tomofuji et al. examined the effects of a cocoa-enriched diet (10% of total food intake) on gingival oxidative stress upon rats that had periodontitis. His study concluded that a cocoa rich diet diminished periodontitis-induced oxidative stress, thus possibly suppressing the progression of periodontitis. The study further observed that the rats did not exhibit gingival infection compared to the control group. The study recommended further studies to define the optimum dose of dark chocolate in the diet for healthy teeth and gums as well as new experiments to develop inflammatory processes to reduce chronic periodontitis in humans.

### **Some Chocolates and Cocos may REDUCE the risk for Cavities and Periodontal Disease**

Studies by Mao et al. found that consuming some cocoas and chocolates could reduce the risk for dental caries and periodontal disease. Their hypothesis was that purified cocoa flavanol oligomers inhibits the bacteria responsible for cavities via immunomodulatory effects in the production of various cytokines as well as the abundance of procyanidins. Especially noted was the presence of the cytokine IgA which has been shown to exhibit protective effects in periodontal diseases. The study concluded that dark chocolate could be therapeutic for those suffering from periodontal disease.

### **Further**

### **Reading**

The effect of cocoa ash on caries in the rat: comparison of ashed cocoa with a mineral mixture. Kinkel HJ et al. May 1960.

The role of cacao extract in reduction of the number of mutans streptococci colonies in the saliva of 12-14 year-old-children.

Fajriani et al. Apr 2016.

Inhibition of hamster caries by cocoa. Caries inhibition of water and alcohol extracts of cocoa. Strålfors A. Mar 1966.

Effect on hamster caries by dialysed, detanned or carbon-treated water-extract of cocoa. Strålfors A. Jun 1966.

<b>Nutrition Facts</b>	
<b>Valeur nutritive</b>	
Per 3 squares (30 g) / pour 3 carrés (30 g)	
Amount Teneur	% Daily Value % valeur quotidienne
<b>Calories / Calories</b> 180	
<b>Fat / Lipides</b> 16 g	<b>25 %</b>
Saturated / saturés 10 g	<b>50 %</b>
+ Trans / trans 0 g	
<b>Cholesterol / Cholestérol</b> 0 mg	
<b>Sodium / Sodium</b> 10 mg	<b>0 %</b>
<b>Carbohydrate / Glucides</b> 9 g	<b>3 %</b>
Fibre / Fibres 4 g	<b>16 %</b>
<b>Sugars / Sucres</b> 2 g	
<b>Protein / Protéines</b> 0 g	
Vitamin A / Vitamine A	2 %
Vitamin C / Vitamine C	0 %
Calcium / Calcium	2 %
Iron / Fer	15 %

## Dark Chocolate contains Less Sugar

The next time you are in the supermarket, look at the nutrition facts label of a 90% Cacao Chocolate Bar. You will find it has much less sugar than a standard chocolate bar, which can contain on average up to 15 grams of sugar. 90% dark chocolate contains on average between 2 and 8 grams of sugar.

## Lozenges

Another study used lozenges to deliver probiotics (*Lactobacillus brevis* CD2) to 191 children. The subjects sucked on the lozenges at six week intervals. The study found a statistically significant reduction in cariogenic oral bacteria at the end of the study (**The Use of Probiotic Strains in Caries Prevention: A Systematic Review, that was conducted by Maria Grazia Cagetti, and published in July of 2013**).

## Honey

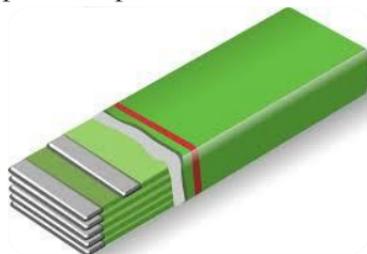
Honey applied topically minimizes the severity of oral mucositis in patients that had oral cancer. Honey also expedites healing

and reduces the occurrence of oral fungal infections as well as reduce the incidence of cavities due to its ability to inhibit colonization by *S. mutans*. Also studies have found that Manuka honey restricts the growth of *S. mutans* (**Beneficial effects of specific natural substances on oral health. Sameer Shaikh, MDS and S. Manoj Kumar, Dec 2017**).

## Chewing Gums for Healthy Teeth

### Meswak Extract Chewing Gum

This chewing gum was found to promote periodontal health due to its ability to reverse plaque, bleeding and gingival in the gums (**Salvadora persica L. (Meswak) in dental hygiene. Hilal Ahmad and K Rajagopal. Jul(y 2014)**).



### Persica Chewing Gum

This gum exhibits strong effects on gingival bleeding and gingival inflammation (**Salvadora persica L. (Meswak) in dental hygiene. Hilal Ahmad and K Rajagopal. Jul(y 2014)**).

### Probiotic Chewing Gum

The probiotic *Lactobacillus reuteri* was administered via chewing gum two times daily for 2 weeks. After 2 weeks, the study discovered that plaque in the group taking the probiotic fell significantly. The study concluded that *Lactobacillus reuteri* was highly effective in reducing both plaque and gingivitis in patients with moderate to severe gingivitis (**Probiotics in periodontal health and disease that was conducted by Anirban Chatterjee et al. and published in January of 2011**), (**Decreased gum bleeding and reduced gingivitis by the probiotic *Lactobacillus reuteri*. Krasse P et al. 2006**), (**Short-term effect of chewing gums containing probiotic**

**Lactobacillus reuteri on the levels of inflammatory mediators in gingival crevicular fluid. Svante Twetman et al. Jul 2009).**

### **Cranberries**

Cranberry was found to prevent the formation of *P. gingivalis* and it also inhibited tooth demineralization (**Inhibition of Oral Pathogens Adhesion to Human Gingival Fibroblasts by Wine Polyphenols Alone and in Combination with an Oral Probiotic. Adelaida Esteban-Fernández et al. Feb 2018).**

### **What is Gingivalis?**

Gingivalis is a bacteria found in the oral cavity, where it is responsible for periodontal diseases. It is also found in the the respiratory tract and colon.



### **Cheese and Peanuts**

Cheese and peanuts have been found to reduce the acid production after eating foods high in sucrose (**Role of Sugar and Sugar Substitutes in Dental Caries: A Review that was conducted by . Prahlad Gupta et al and published in December of 2013).**

When a test group of elderly people consumed cheese containing *L. rhamnosus* strains GG and LC705 and *Propionibacterium freudenreichii* ssp. *shermanii* JS for 16 weeks, the number of high oral yeast counts decreased (**Probiotics and Oral Health. Anna Haukioja. Jul 2010).**

### **Carob**

Carob, commonly used as a chocolate substitute, contains an abundance of gallic acid (as do walnuts) which enhances tooth remineralization, reduces the effects caused by demineralization and synergizes with chitosan (**Chitosan effect on dental enamel de-remineralization: an in vitro evaluation. Arnaud**

TM et al. Nov 2010), (Changes in composition and enamel demineralization inhibition activities of gallic acid at different pH values. Zhang J et al. Feb 2015).

### Raisins

Raisins are beneficial to oral health due to their antimicrobial action against oral pathogens which are responsible for causing cavities and / or periodontal disease (**Beneficial effects of specific natural substances on oral health. Sameer Shaikh, MDSc and S. Manoj Kumar, Dec 2017**).

### Curry

### Leaf

A research study found that a mouthrinse containing curry leaf can be considered as a safe and effective alternative to Chlorhexidine (**Effectiveness of Curry-Leaf Mouthwash in Maintaining Salivary and Tongue pH as Compared to Chlorhexidine Mouthwash: A Randomised Controlled Trial. Gupta A and Purohit A. Jan 2018**).

### Olives

A research study examined the antimicrobial impact of an extract of olive and found that low doses of olive exhibited strong bactericidal effects at low concentrations against strict anaerobic bacteria (**Prevotella intermedia, Fusobacterium nucleatum, Porphyromonas gingivalis and Parvimonas micra**). (**High-Level Antimicrobial Efficacy of Representative Mediterranean Natural Plant Extracts against Oral Microorganisms. Lamprini Karygianni, et al. Jun 2014**).

**What is Fusobacterium nucleatum?**

F. nucleatum is a key component of plaque and also plays a role in periodontal disease.

## Red



## Wine

Extracts of red wine were shown to reduce the severity of *P. gingivalis* and *F. nucleatum*. The study found that red wine inhibited antimicrobial action in an oral biofilm model that consisted of *F. nucleatum*,

*Streptococcus. oralis*, *S. mutans*, *Actinomyces oris* and *Veillonella*, including choice oral streptococci. Also studies by Muñoz-González and colleagues stated that bactericidal effects of caffeic acid extracted from red wine and grape seed extract were effective against *F. nucleatum*. caffeic and p-coumaric acids and provinols extract was found to inhibit biofilm formation of *F. nucleatum* (**Inhibition of Oral Pathogens Adhesion to Human Gingival Fibroblasts by Wine Polyphenols Alone and in Combination with an Oral Probiotic.** Adelaida Esteban-Fernández et al. Feb 2018). (**Red wine and oenological extracts display antimicrobial effects in an oral bacteria biofilm model.** Muñoz-González et al. May 2014), (**Natural Antimicrobials and Oral Microorganisms: A Systematic Review on Herbal Interventions for the Eradication of Multispecies Oral Biofilms.** Lamprini Karygianni, et al. Jan 2016), (**Effect of Wine Wastes Extracts on the Viability and Biofilm Formation of *Pseudomonas aeruginosa* and *Staphylococcus aureus* Strains.** Carolina María Viola et al. Jul 2015), (**Antibiofilm Activity of Plant Polyphenols.** Livia Slobodníková, et al. Dec 2016).

## Further

Remineralization of Artificial Caries in Primary Teeth by Grape Seed Extract: An In Vitro Study. Mahkameh Mirkarimi et al.

## Reading

### Fast Fact

**Combining certain extracts with naringin, quercetin, genistein, piperine, and can enhance the bioavailability of an extract, when drops of the extracts are placed directly under the tongue and held for up to 15 seconds**

**(Bioavailability enhancers of herbal origin: An overview Kritika Kesarwani and Rajiv Gupta. Apr 2013)**

### **Red wine and Probiotics**

Reciprocal activity was found to take place between probiotics and polyphenols. This includes phenolic extracts of red wine combined with the probiotics Bifidobacterium and Lactobacillus. Also combinations of red wine with oenological-origin probiotic strains were shown to exhibit inhibitory effects against E. coli adhesion (**Inhibition of Oral Pathogens Adhesion to Human Gingival Fibroblasts by Wine Polyphenols Alone and in Combination with an Oral Probiotic. Adelaida Esteban-Fernández et al. Feb 2018**).

### **Wintergreen (Gaultheria procumbens)**

Wintergreen is part of the Ericaceae family of trees. Wintergreen is commonly used as a mouth rinse and makes an excellent antiseptic and exhibits strong astringency properties (tightens tissues). Cotton swabs soaked in wintergreen oil are used for the relief / remedy for gum inflammation and sore throats. Studies by Nikoli et al. showed Wintergreen essential oil exhibits strong antimicrobial activity against a wide variety of Gram-positive and Gram-negative bacteria and fungi, and that it exhibits good antioxidant behavior (**Periodontal Disease**

and Phytotherapy. Petrovic MS. et al. March 2015. **Journal of Oral Hygiene & Health**. ISSN: 2332-0702).

A commercial mouthrinse that has been for sale for over 100 years consisting of thymol, eucalyptol, menthol and methyl salicylate (oil of wintergreen) was scientifically studied for its ability to reduce plaque. The study found that it reduced plaque up to 34% and gingivitis up to 35% (**Prevention in Clinical Oral Health Care**. By David P. Cappelli, DMD, MPH, PhD, Connie Chenevert Mobley, PhD, RD. 2008).

The below information comes from a study titled: **Cocoa Polyphenols and Their Potential Benefits for Human Health**, which was conducted by I. Andújar et al and published in October of 2012.

### **Why Chocolate May not Be a Primary Reason for Cavities**

Over the last few decades chocolate has been seen as the enemy of teeth, with intake of chocolate being considered detrimental for tooth health. This negative effect is because high concentrations of sugar, as well as other compounds present in the chocolate are the prime mechanisms for the cavities in the chocolate.



### **Dark Chocolate for the Protection against Cavities**

Research studies conducted by Ferrazzano et al. noted the protective effect of dark chocolate (cocoa) on dental caries. Dark Chocolate contains a dextranucrase enzyme which naturally inhibits the formation of plaque

caused by sucrose / sugar. Dark chocolate also contains an

abundance of phenolic substances, which exhibit anticaries effects.

A research study involving rats that were exposed to the cavity forming bacteria *Streptococcus sobrinus*, were fed a water-soluble extract of dark chocolate powder (cocoa). The study found that the rats exhibited significantly less cavities. Other studies found that cocoa polyphenols inhibited the growth of *S. sanguinis*, but not *Streptococcus mutans*. However dark chocolate was able to inhibit acid production responsible for cavities from sucrose.

### **A Natural Dark Chocolate Mouth Wash**

A recent study used ground husks of cocoa beans (which are abundant in polyphenols) to make a mouthwash. The study found that the mouthwash reduced *mutans streptococci* counts up to 20.9% and plaque decrease up to 49.6% (**Chocolate mouth rinse: Effect on plaque accumulation and *mutans streptococci* counts when used by children. Srikanth RK et al. June 2008**).

The following information comes from a meta-data analysis study titled: **Plant Polyphenols and Their Anti-Cariogenic Properties: A Review**, which was conducted by Gianmaria F. Ferrazzano, et al and published in February of 2011. **Dark Chocolate reduces the adherence of *Streptococcus mutans***

Research studies conducted by Smullen et al discovered that cocoa, red grape seeds and green tea extracts all contain an abundance of polyphenols which are effective against the adherence *Streptococcus mutans*. Another study found that a cocoa polyphenol pentamer significantly reduced biofilm adherence that was produced by *Streptococcus mutans* and *S. sanguinis*.

Another in vivo study demonstrated that the cavity protection effect of chocolate with high cocoa levels was less than 40% of sucrose and was also lower than chocolate that

had low cocoa levels.

### **Phenolic Substances exhibit Cavity Protection**

Studies suggest that phenolic substances are one of the prime mechanisms responsible exhibiting protection against cavities, most likely due to their inhibition of synthesis of the water insoluble glucans.

### **Polyphenols for Protection against Cavities**

A *in vitro* study discovered that tea polyphenols showed no effect on the de/remineralisation enamel, however the cavity protection came from anti-microbial activity.

### **The Composition of Dark Chocolate**

Cocoa powder contains up to 50mg of polyphenols per gram. Flavanols in cocoa exist as monomers catechin and epicatechin and contain proanthocyanidins or condensed tannins (**Cocoa and Chocolate in Human Health and Disease. David L. Katz et al. Nov 2011**).

### **Dr. Christopher's Herbal Tooth Powder**

This Herbal Tooth Powder contains Peppermint Leaf, Licorice Root, Prickly Ash Bark, White Oak Bark, Cloves, Stevia, Propolis, Ginger Root and wildcrafted Shavegrass is used to keep the teeth strong and prevent cavities.

### **Xylitol**



A natural sweetener, scientifically proven to prevent cavities (**Xylitol in preventing dental caries: A systematic review and meta-analyses.**

**Chandrashekar Janakiram et al. Jan 2017**), (**Effect of erythritol and xylitol on dental caries prevention in children. Honkala S et al. 2014**), (**Dental plaque formation and salivary mutans streptococci in schoolchildren after use of xylitol-containing chewing gum. Holgerson PL**

et al. Mar 2007).

### **Stevia**

Another natural sweetener. Showed very potent antiplaque and anti-gingivitis properties reducing plaque up to 10% and a strong reduction in gingival scores (**Effectiveness of stevia as a mouthrinse among 12 to 15-year-old schoolchildren in Nellore district, Andhra Pradesh - A randomized controlled trial. Kuna Vandana et al. Jan 2017**), (**Stevia in the fight against dental caries. Ma MS and Blanksma NG. Jan 2015**).

### **Excessive Stevia Intake and Brain Damage**

A research study looking at a number of artificial sweeteners, including Stevia, found that Stevia is composed of stevioside and rebaudioside A. These substances are rich in the minerals cobalt, iron and manganese. In a study conducted on rats, Stevia showed a reduced reduction for rats to navigate a water maze as well as exhibited signs of cellular apoptosis in the rats. The study concluded that the reason for the neuronal damage occurring may have been due to the mineral components of stevia. Further research on artificial sweeteners aspartame and sucralose found significant percentages of neuronal damage (cellular apoptosis) occurred, compared to the control group (**Neurotropic effects of aspartame, stevia and sucralose on memory retention and on the histology of the hippocampus of the ICR mice (Mus musculus). Lejan Miguel Alabastro Villareal et al. Feb 2016**).

### **Luo Han Kuo fruit extract (Siraitia grosvenori)**

Another natural sweetener. Has shown inhibitory ability against oral bacterial species Porphyromonas gingivalis, Streptococcus mutans and yeast Candida albicans. This powder is 250 to 400 times sweeter than sugar. It also has medicinal properties that include healing throat infections, coughs, heat

stroke, constipation and diabetes.

### Yogurt

The first studies of the use of probiotics for enhancing oral health were tested for the effectiveness against periodontal inflammation. Patients with various periodontal diseases, pregnancy gingivitis, gingivitis and periodontitis were locally treated with a culture supernatant of a *L. acidophilus* strain (found in abundance in yogurt and fermented milk). Significant recovery was reported for almost every patient (**Probiotics in periodontal health and disease that was conducted by Anirban Chatterjee et al. and published in January of 2011**).

### Green and Black Tea

A research study found that both green and black tea inhibited the growth of *Streptococcus mutans* when used as a mouthwash with Black Tea showing the best results. When Chlorhexidine (0.2%) was added, it created a beneficial synergy with enhanced the results (**An In vitro Study to Compare the Effect of Different Types of Tea with Chlorhexidine on Streptococcus mutans. Dona Elizabeth George et al. Sept 2017**), (**Effectiveness of Black Tea Mouthwash on Plaque Formation. Dr. Smitha K.B, Sri Hasanamba Dental College and Hospital. Sept 2015**), (**Effect of green tea mouthwash on reducing plaque and gingivitis. Elham Romoozi et al. Dec 2017**), (**An In vitro Study to Compare the Effect of Different Types of Tea with Chlorhexidine on Streptococcus mutans. George DE et al. Sept 2017**).

### Oolong Tea

This tea has a high number of monomeric polyphenols which showed a stronger inhibitory effect on the growth of the disease oral causing bacteria *S. mutans* compared to green tea



and black tea (**An In vitro Study to Compare the Effect of Different. Types of Tea with Chlorhexidine on Streptococcus mutans.** Dona Elizabeth George et al. Sept 2017).

Additional research studies conducted on oolong, green and black teas showed the tea polyphenols exerted an anti-cavity effects via their anti-microbial modes-of-action. Also the galloyl esters of epicatechin, epigallocatechin and galocatechin, which are found in the teas, exhibit strong antibacterial activities. The study concluded that anti-cariogenic effects against bacteria that cause cavities (streptococci) by polyphenols from dark chocolate, coffee and tea should be studied further for the prevention of pathogenesis of dental caries anti-cariogenic effects of polyphenols from plant stimulant beverages (cocoa, coffee, tea). Ferrazzano GF et al. May 2009).

In summary, there is an abundance of foods that help prevent / treat cavities. The secret is knowing which foods to take and that is what this book is all about, giving you the best foods to prevent / heal cavities and keep your teeth healthy and strong all lifelong.

## **Biofilms and Hydrophobicity**

### **Hydrophobic Substances for defeating Bad Bacteria**

The term hydrophobic also goes by the name biofilm. This means that a substance that is applied to a surface greatly reduces the ability for bad bacteria to cling to it. One example is the Lotus Seed. For example, a 1,288 Lotus Seed (*Nelumbo nucifera* Gaertn.) from a lake bed at Pulantien, Liaoning Province, China was successfully germinated. It is the oldest directly dated seed ever reported, being one of the early crops of lotus cultivated by Buddhists. It not only germinated but is still growing strong (since March, 1994). Of six lotus fruits that were planted, over two-thirds germinated more than 1,000 years later (**Exceptional Seed Longevity and Robust Growth: Ancient Sacred Lotus from China.** J. Shen-Miller et al.

1995). This is because the exterior surface of the Lotus Seed contains a slippery, hydrophobic surface, that keeps bad bacteria away, thus preserving it for centuries (Wikipedia - Lotus effect).

The Lotus Seed has been proven to have a 1,300-year or more lifespan (that we currently know of), allowing it to sprout after over 1,000 years. This is due to its exceptional ability to repel water, which is known as the lotus effect. The lotus effect is caused by nanoscopic particles which contain closely packed protuberances, which act as a self-cleaning mechanism upon its leaves. Hence over time these leaves have evolved as self-cleaning mechanisms. This method is also employed in the industrial paint, Lotusan (**Exceptional Seed Longevity and Robust Growth: Ancient Sacred Lotus from China. J. Shen-Miller, et al. Nov 1995**).

#### Further

#### Reading

Genome of the long-living sacred lotus (*Nelumbo nucifera* Gaertn). Ray Ming, et al. May 2013.

### Hydrophobic Substances

Quercetin, Chicory

**Quercetin Synergists** - Ampicillin, Cephadrine, Ceftiaxone, Imidenem and Methicillin.

### Red Wine with Grape Seed Extract

Red Wine with Grape Seed Extract reduces the ability of bad bacteria to cling to teeth (**In Vitro Antimicrobial Activity and Effect on Biofilm Production of a White Grape Juice (*Vitis vinifera*) Extract Angela Filocamo, et al. Dec 2015**), (**Red wine and oenological extracts display antimicrobial effects in an oral bacteria biofilm model. Muñoz-González et al. May 2014**).

### **Plant Extracts that Exhibit Biofilm Activity**

A Meta-Analyses study involving 1848 articles found that plant extracts displaying antiadhesive and antibiofilm activity included: *Coffea canephora*, *Camellia sinensis*, *Vitis vinifera*, *Pinus spp.*, *Vaccinium macrocarpon*, *Caesalpinia ferrea* Martius, *Galla chinensis*, *Psidium cattleianum*, representative Brazilian plants and manuka honey (**Natural Antimicrobials and Oral Microorganisms: A Systematic Review on Herbal Interventions for the Eradication of Multispecies Oral Biofilms** Lamprini Karygianni, et al. Jan 2016).

### **Further**

### **Reading**

Grape Seed Extract Exerts Abhesive Effect Against *Staphylococcus aureus*: In vitro Study. Marwan S.M. Al-Nimer. et al. 2012.

Mechanism of Bacterial Inactivation by (+)-Limonene and Its Potential Use in Food Preservation Combined Processes. Laura Espina, et al. Feb 2013

In Vitro Antimicrobial Activity and Effect on Biofilm Production of a White Grape Juice (*Vitis vinifera*) Extract. Angela Filocamo et al. Aug 2015.

Effect of Wine Wastes Extracts on the Viability and Biofilm Formation of *Pseudomonas aeruginosa* and *Staphylococcus aureus* Strains. Carolina María Viola et al. 2018.

### **Good Dental Hygiene Contributes to Longevity**

Many substances that exhibit potent lifespan extension effects are also powerful cavity prevention substances. For example below is a short list of the substances covered in this book that help prevent cavities.

**Black tea extract** Boosts Superoxide Dismutase Levels (Peng C. Dec 2009). Black Tea and Grape Seed are SIRT1 activators. Black Tea contains the powerful anti-aging substance

Thioflavin T, which is a potent inhibitor of amyloids that cause Alzheimer's (Grelle G et al. Dec 2011).

**Thioflavin T** has been shown to extend lifespan up to 78% spanning three strains of *Caenorhabditis* species. This is due to the amyloid dye. (**Amyloid-binding compounds maintain protein homeostasis during ageing and extend lifespan. Alavez S et al. Apr 2011**), (**Regulation of Aging and Age-Related Disease by DAF-16 and Heat-Shock Factor Aolin Hsu et al. May 2003**), (**Article - A chemical that stains Alzheimer's-associated proteins may help cells to cope with toxic trash. Ewen Callaway. Nature Mar 2011**).

**Resveratrol** and Black Tea Polyphenol Combination Synergistically Suppress Mouse Skin Tumors. Jasmine George, et al. Aug 2011). Resveratrol, found in abundance in red wine, extends lifespan. (**Lifespan and healthspan extension by resveratrol. Bhullar KS and Hubbard BP. June 2015**).

**Peptides**, used in cavity Vaccines, extend lifespan (A deuterohemin peptide extends lifespan and increases stress resistance in *Caenorhabditis elegans*. Guan S et al. Jul 2010). (**Drosophila insulin-like peptide dilp1 increases lifespan and glucagon-like Akh expression epistatic to dilp2. Post S et al. Feb 2019**), (**Dental Caries Vaccine. A Possible Option? Shanmugam KT et al. pr 2013**).

**Dark Chocolate for Dark Diabetics**  
A research study suggested that daily consumption of flavanols from dark chocolate may act as a preventive tool for the nutritional management of people with diabetes. However, the study recommended caution as commercial cocoa products or chocolates contain low amounts of flavanols and may be rich in sugar and calories, which may aggravate glycaemic control in patients with diabetes (**Effects of Cocoa Antioxidants in Type 2 Diabetes Mellitus Sonia Ramos, et al. Oct 2017**).

## Chapter 2

### Does Fluoridation of Water Prevent Cavities? The Facts

For many decades, the ADA (**American Dental Association**) has issued warning statements to various cities across the United States that if they ended their water fluoridation programs, that the rate of their citizen's tooth decay will most likely increase. However, let's look at the facts.



### Fluoridation Cessation Studies

#### CANADA:

Cavities decreased over time in a community that ended water fluoridation (**Patterns of dental caries following the cessation of water fluoridation. Community Dentistry and Oral Epidemiology. Maupome G, et al. 2001. 29: 37-47.**)

#### FINLAND

The city of Kuopio ceased water fluoridation and found no increase in cavities. **Caries Trends 1992-1998 in Two Low-Fluoride Finnish Towns Formerly with and without Fluoridation. Seppa L, et al.**

#### GERMANY

Authorities initially expected an overall increase in dental cavities in the residents following the cessation of adding fluoride to the water in the cities of Chemnitz and Plauen. However over time studies showed a significant fall in cavities instead (**Decline of caries prevalence after the cessation of water fluoridation in the former East Germany. Kunzel W et al. 2000.**)

#### CUBA

In 1997 Cuba stopped adding fluoride to its city's water. DMFS

and DMFT values remained at low levels for children aged between 6 and 9 and the trend for cavities appeared to reverse themselves for children aged between 10 and 11. In children aged between 12 and 13, a significant decrease in cavities was noted and the percentage of cavity free children in this group showed an increase. Caries prevalence after cessation of water fluoridation in La Salud, Cuba. Kunzel W et al. 2000).

### **Why Living near Volcanoes results in Higher Fluoride Intake**

People living in regions where volcanoes are active are susceptible to increased fluoride levels due to volcanic aquifers and atmospheric volcanic emissions. This may contribute to chronic fluoride intoxication. Fluoride happens to be a cumulative toxin, meaning low doses ingested continuously over a long period of time build up to critical levels. Fluoride is naturally removed from the body via urine as well as being absorbed by the bones. When a person is young, especially if they are an infant, fluoride retention in their bones can be as much as 90% of the absorbed levels from the environment. However fluoride retention in the bones of an adult is only 50% or less. Studies by Mostafaei et al. discovered the rate of absorption of fluoride in bones is 3 times as much among people who drink tea, compared to non-tea drinkers. Some mineral waters as well as black tea contain an abundance of fluoride. Studies have found that populations that consume lots of black tea, that water fluoridation is not only unnecessary in those communities, but also possibly harmful (**Mechanisms of action of fluoride for caries control. Buzalaf MA et al. 2011**). Also normal bottled water (not mineral water) has not been shown to prevent cavities (**An investigation of bottled water use and caries in the mixed dentition. Broffitt B et al. Summer 2007**). Black tea is high in natural fluoride (**Risk Assessment of Fluoride Intake from Tea in the Republic of Ireland and its Implications for Public Health and Water Fluoridation. Declan T. Waugh et al. Feb 2016**).

### Further

### Reading

Fluoride content of bottled natural mineral waters in Spain and prevention of dental caries. Maraver F et al. Jan 2015.

Green tea: A boon for periodontal and general health. Anirban Chatterjee, et al. Apr 2012.

### Seasonal Variations of fluoride Levels in the Body

To avoid one's risk of dental fluorosis, it can be good to know what time of year fluoride accumulates in the body. A study looking at fluoride levels in children throughout the year found that children aged between 0 and 12 months and 12 to 72 months showed varying results to who their bodies processed fluoride. Children that were younger than 12 months did not show seasonal variation. However as the children got older, the children aged between 12 and 72 years of age retained fluoride in the bodies more often during summer. fluoride intake from beverages showed an increase with the monthly temperature (**Seasonal variation in fluoride intake: the Iowa fluoride study. Broffitt B et al. Fall 2004**).

### Seasonal Variations of Cavities

#### Seasonal Variation of Tooth Pain

Tooth pain occurs more often during the early morning with less pain occurring during the early afternoon. Seasonally maximum pain occurs from October to November with minimum pain occurring during May (**Rhythmic changes in pain sensitivity in teeth. Pöllmann L, et al. 1978**). In another study in Quebec discovered that during the seasons of fall and winter people were more susceptible to dental pain, possibly due to the outdoor cooler temperatures (**Dental pain induced by an ambient thermal differential: pathophysiological hypothesis. Anaïs Le Fur-Bonnabesse et al. Dec 2017**).

#### Seasonal Variation of Dental Cavities

A study looked at the number of times people in South

America (Brazil, Colombia, Peru, and Venezuela) used the Internet to search for remedies for toothache between 2004 and 2017. The lowest number of Internet searchers occurred during the months of June, July and December (**Digital behavior surveillance: Monitoring dental caries and toothache interests of Google users from developing countries. Cruvinel T et al. Oct 2018**). In South America the warmer summer months occur between fall between December and February with winter months being June and August.

### **Seasonal Variability of Gingivitis**

A research study in Kenya examining volunteers aged between 5 and 46 years of age found that gingivitis occurred in 58.5 per cent below 11 years and 32.9 per cent between 21 and 40 years of age. 72 per cent of the volunteers exhibited symptoms from March to April and again between September and December (close to the equinoxes). Could this mean that bad bacteria is more prevalent around the equinoxes? (**Demography and seasonal variation of acute necrotising gingivitis in Nairobi, Kenya. Kaimenyi JT. et al Dec 1999**).

Another study conducted in Cape Town South Africa conducted between 15 March 1992 to 15 March 1998 that examined the prevalence of gingivitis in patients. The study found that out of 19,944 patients that were admitted for periodontal treatment 58% were males and 73% were between 5 to 12 years of age. 55.4% of patients were admitted during summer, 27.7% during fall and 8.4% during winter and spring (**Seasonal variation of acute necrotising ulcerative gingivitis in South Africans. Arendorf TM et al. May 2001**).

### **Seasonal Variations of Plaque**

A study involving 80 schoolchildren aged between 12 and 15 years was conducted. The PH levels of their saliva was higher in summer, compared to winter and plaque accumulation tended to be higher in winter compared to summer. Gingivitis was also more common during winter. The study hypothesized the reason for higher plaque and gingivitis levels during winter may have been due to sweet foods in stores market and school

Avoid Root Canals. 101 Homeopathic Nutrition Remedies to Stop  
Tooth Cavities

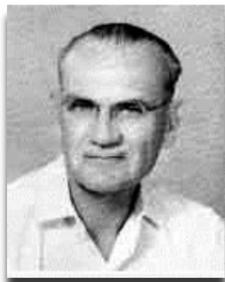
cafeterias during winter and that these substances tend to become more sticky, solid and more retentive during cooler weather, which allows the substances to strongly adhere to the tooth surface for longer durations during cooler temperatures, lowering pH levels in the saliva. A study published by MC Mazengo et al.(1994) and colleagues discovered that gingivitis was more common among urban subjects due to their diet(s) containing more sucrose and less fiber-rich foods. The study also observed that children in the city had healthier teeth. The study stated this may be due to improved oral hygiene among urban children compared to rural children. This finding was also published by Blay D, Astrom AN, Haugejorden O (2000) **(Variation in Salivary Parameters and its Correlation with Plaque and Gingival Status among 12 to 15 Years Schoolchildren of Rural and Urban Jaipur City in Winter and Summer Seasons. Anupama Gaur et al. Feb 2012).**

**Seasonal Variation of Toothache**

An analysis of toothache reports in Kanpur District India discovered that toothaches peaked during March and May. The study also found that an increase in worm infestations and diarrheal diseases occurred during mid May and that gastritis peaked during May and June. Hence treatments of worms and gastritis may also prevent toothache, although further research is needed to substantiate this **(Morbidity Profile and Seasonal Variation of Diseases in a Primary Health Center in Kanpur District: A Tool for the Health Planners. Ranjeeta Kumari et al. Jul 2012).**

## Chapter 3

### The Pioneering Work of Dr. Melvin Page



Dr. Page studied Dr. Weston Price's research on the dental health of primitive people and began his research at Hackley Hospital and Mercy Hospital in Muskegon. His studies involved over two thousand blood chemistries. He concluded that cavities would not form when the calcium to phosphorus ratio was 10 to 4 in the blood. The Department of Dental Research of the United States Air Force confirmed this finding 42 years later. Dr. Page also discovered that the ideal blood sugar level of 85, plus or minus 5 (on the Sclavo test) was optimal for dental health and that refined carbohydrates and white sugar increased serum calcium (Calcium drawn from the bones). It was these findings that led Dr. Page to develop what's today known as the "**The Page Food Plan**". This plan created a diet that restored an upset body chemistry and is based on the glycemic index. This is due to the fact that tooth decay occurs far less often, or in some cases not at all, when a precise ratio of calcium to phosphorus is present in the blood. When this condition persists for a period of months, tooth decay develops. The ratios are as follows -

#### **Calcium to Phosphorus Ratio - 10 to 4**

#### **Blood Sugar - 80-90**

Foods that have close to the ideal calcium ratio of 10 to 4 include Collards, Butterbur (Fuki), Mustard Spinach (Tendergreens), Papayas, Turnip Greens, Dill Weed, Basil, Arugula, Oranges, Beet Greens, Chinese Cabbage and Dandelion Greens.

### **The Cause of Calculus Deposits**

Research by Dr. Page found that calculus deposits (tartar - a form of hardened dental plaque) above a gum line were indicative of a high blood calcium level and that irritated gums and existing calculus



below the gum line near the root of the tooth, occurred if a person's blood phosphorus levels were too in the relationship to blood calcium (low blood calcium).

### **Gingivitis**

Dr. Page found gingivitis was present in patients who had high phosphorus and low calcium counts. This could be remedied by reducing phosphorous to its correct proportions. Hence gingivitis is a precursor to periodontal disease due to an imbalance in blood chemistry.

### **Gum Disease. Types 1 and 2**

**Type 1** - Blood calcium is too low in relation to blood phosphorous.

**Type 2** - Both phosphorous and blood calcium levels are low.

These can be corrected by replenishing the body with the proper minerals and vitamins.

Scott Rauvers

*Thank you for reading another fine  
publication by the Solar Institute.*

*Purchase this edition in hardcover or KDP  
versions at Amazon.com or look for it in your  
favorite bookstore.*

*Scott Rauvers*

*Author*