



ROOT CANALS

Table of Contents: **ROOT CANALS – THE MIRACLE**
ROOT CANAL TREATMENT: IS THERE A COVER-UP?
ROOT CANALS POSE HEALTH THREAT: INTERVIEW WITH GEORGE
MEINIG

See also:

Books:

[*Root Canal Cover Up* by George E. Meinig](#)
[*It's All In Your Head* by Dr. Hal Huggins](#)
[*How To Save Your Teeth with Toxic Free Preventive Dentistry*](#)
[by David C. Kennedy, DDS ISBN #0-913571-06-2 Pp. 184 \\$12.00](#)
[*Nutrition and Physical Degeneration* by Weston Price, DDS](#)

Articles:

Websites:

<http://www.drshankland.com/rootcanal.html>
http://www.curezone.com/dental/root_canal.asp

Audio/Video:

Publications:

Organizations:

Preventive Dental Health Association
<http://emporium.turnpike.net/P/PDHA/health.htm>

People:

Weston Price
<http://www.biologicaldentist.com> [Houston, Texas]

Integral Nutrition:

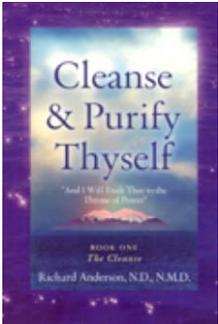
Conventional:

Terms:

NICO (Neuralgia Inducing Cavitational Osteonecrosis)

ROOT CANALS – THE MIRACLE

Source: "Root Canals – The Miracle" in Cleanse and Purify Thyself, Book 2 by Dr. Richard Anderson (305-307)



Dr. Gardaphe saw me as I walked into his office. He rushed up to me and with an excited expression he said, **"Rich, last week I pulled out a root canal from a lady who had lupus. 72 hours later she called me and said that all symptoms of lupus were gone."** I said, "Get her testimony, I'll put it the book."

A few weeks later Dr. Gardaphe was putting the finishing touches on my root canal removals.

After he was through and I was talking to his receptionist, the doctor came in and said, "Come in here, Rich. I want you to meet someone. Rich, meet Faith Snyder. Faith, Rich is writing a book about health and would like to hear your story about your lupus." The doc left the room and as Faith was lying in the dentist chair, I listened to her story.

She had the root canals and many mercury amalgam fillings placed in her mouth 12 -13 years ago. About two or three years ago things began to go terribly wrong. **She developed systemic lupus, and pain arose in her joints, arms, and legs.** The last year the pain became so intense that she could hardly get out of bed or walk. She had almost no energy. She had to be in bed more than out of bed. She couldn't open doors or take bottle caps off. She became more and more depressed, and her bright mind faded into a poor memory. She couldn't remember simple things. After talking to Dr. Gardaphe, she began to think that perhaps her problems were related to mercury and root canals. Last October and November, she was too ill to make it into the dentist office. Finally, in December, she started having the amalgams removed. After several fillings had been replaced, she still felt terrible. **On January 13th, Dr. Gardaphe removed the root canal. The next morning she got out of bed for the first time in years with very little pain.** The next day her mother-in-law called the doc. He said he heard screaming in the background - screams of happiness, of celebration. Most of the pain was gone. Her mind was also responding, her depression was gone, and her memory was returning. Her family rejoiced in gratitude for the miracle.

At the University of Arizona

I was attending a lecture by Dr. Huggins, D.D.S., M.S., at the University Medical Center in Tucson. That was when I first met Hal. He explained that Dr. Weston Price, Director of Research for the American Dental Association (ADA) for 14 years, had spent 35 years of his professional career researching the systemic dis-eases of the heart, kidney, uterus, nervous system, and endocrine system that resulted from toxins seeping out of root-canal-filled teeth. A certain percentage of people are sensitive to toxins that are manufactured within these dead teeth. He stirred up the dental community. Even with his vast experience, education, and thousands of controlled experiments, dentists were resistant to changing their thinking about the root canal procedures that they had been performing for decades. Here are a few of the facts that Dr. Price found that have been suppressed by the ADA.

Inserting Root-Filled Teeth Under Rabbits' Skins

If he removed root-filled teeth from people suffering from kidney and heart dis-ease, in most cases those people would improve. In an effort to establish a relationship between the tooth and the dis-ease, he inserted the root-filled teeth under the skin of rabbits. Rabbits have a similar immune system to that of humans. In fact, a normal, non-infected human tooth (as removed for orthodontic reasons) can be inserted under the skin of a rabbit for a year with practically no reaction. A thin film will form over it, but microscopically there are no infection cells present.

When a root-filled tooth was implanted under the skin of a rabbit, the rabbit died within less than two days, sometimes within 12 hours. If a very small fragment were used, within two weeks the rabbit would lose more than 20% of its body weight, and die of heart dis-ease if that is what the human donor had, or of kidney dis-ease if that is what the human donor had. To further challenge this observation, he removed the fragment and transferred it to another rabbit. In two weeks he observed a duplicate performance. In one case, he re-implanted the same tooth fragment in 100 rabbits, each, in succession, dying from the same exact dis-ease that the human had had. In most experimental cases he transferred the fragment 30 times.

This is all that I'm going to say about silver fillings and root canals. I suggest that we investigate.⁴²³ (423 - Of course, all investigations should be free of cruelty to animals. Contact Dr. Hal Huggins office in Colorado Springs, CO, for more information about the root canals and all the studies done. (719) 522-0566.)

After the lecture at the medical center, I went upstairs to the medical library to look up Dr. Price's many writings. I checked the computer and lo and behold, everything that he had written seemed to have been pulled from the files. Nothing was there and it most certainly should have been, for after all, Dr. Price was head of the American Dental Association research lab for more than 17 years. I also have records from *The Journal of the American Medical Association*, which prove that there had been a great deal of information published about his studies. But I could not find it on the computers. So, while I was there I decided to look up Dr. Koch. There was very little reference to all his works on cancer and other dis-eases. Then I searched for Dr. Kellogg of The Kellogg Institute. No information could be found. Need I say more?

Current Health Care Costs

Well yes, I should say one more thing. From "USA Today," Monday, Dec. 30, 1991 in the article titled, "Health Costs Soaring," comes the following quote, "Total U.S. health-care spending will rise 11% next year to \$817 billion, the Commerce Department predicted Sunday. The growth rate, the same as this year's, will put health spending at 14% of the gross national product. The report projects health-care spending will continue to grow 12% to 13% a year for the next five years, putting it at roughly \$1.5 trillion by 1997." Sorry, I just had to say it one more time.

ROOT CANAL TREATMENT: IS THERE A COVER-UP?

Source: http://www.drshankland.com/root_canal.html

INTRODUCTION

For the past 50 years, dentists have saved millions of teeth by performing endodontic therapy, or *root canals*. Dental students and residents in Endodontics (the speciality in dentistry devoted to the diagnosis and treatment of diseases *inside* teeth) have been taught to perform various procedures to save injured, dead, and dying teeth. These procedures were taught purely to help the public, with absolutely no other reason. The dental profession succeeded in teaching the value of saving teeth. However, today, there has been some revealing research which may require the dental profession to reconsider conventional ideas about endodontically treated teeth.

Today, there are many reputable doctors (dentists, physicians, and PhDs) who are concerned about endodontic therapy and possible systemic effects on other organs and tissues in the body. It may even astound most dentists that the organisms which may be present in dead teeth *may be impossible to eradicate* no matter how well the root canal procedure is performed! These organisms are not actually in the canal portion of the tooth, but in the tiny microscopic tubules which comprise the dentin (the material below the enamel which is more organic than enamel) of the tooth. **Herein lies the scientific question: does it matter that these organisms remain viable even after endodontic therapy?** Researchers on both sides of this heated issue agree that these organisms do stay alive after root canal procedures, but they can't agree whether this is important or not.

Dr. Weston Price's Research

Dr. Weston Price, the noted and honored dental researcher of the early part of this century, headed a team of America's finest scientific researchers, numbering 60 doctors. Their research was conducted under the auspices of the American Dental Association (ADA). From their 25 years of study, this research team published 25 scientific papers dealing with the effects of dead or endodontically treated teeth producing other diseases and disorders in remote areas of the body. The research was not only accepted by the scientific community, but served to form an important concept in medicine which is even taught today: *the focal theory of infection*. Anyone who has a prosthetic joint replacement or a mitral valve prolapse will immediately understand this concept, as they **cannot** undergo any dental procedure without first being treated with certain antibiotics to stop the spread of bacteria from the mouth to remote areas of the body which may produce a fatal infection.

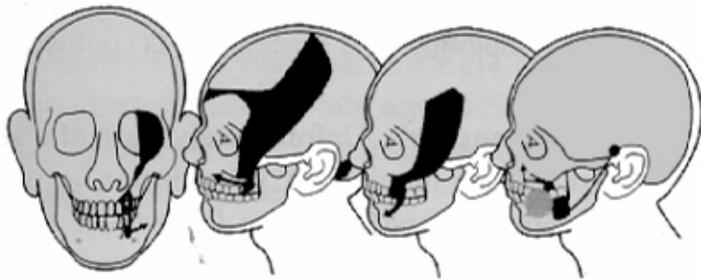
Since the advent of antibiotics, dentists and physicians have been taught that the focal theory of infection is erroneous and has no scientific basis. Further, they are taught that there is no modern evidence that endodontically treated teeth are the source of focal infections. However, again, recall that patients with joint replacements and certain heart conditions *must* take antibiotics before and after any dental procedures. Why? Because the bacteria which live in the mouth enter the blood stream because of the dental procedures and travel to the heart and joints, thus possibly causing severe and often fatal diseases. Now, think about what you've just read: *how can any dentist or physician claim that the focal theory of infection has no scientific validity when dentists are **required** to premedicate their patients to avoid producing a distant or focal infection?*

NICO (Neuralgia Inducing Cavitational Osteonecrosis)

As recent as 1979, a newly described pain disorder was reported. This disorder, which came to be known as **osteocavital lesions** (Ratner's bone cavities), produced pain similar to trigeminal neuralgia, both the typical and atypical types. In fact, usually these patients were diagnosed with trigeminal neuralgia.

The diagnosis is complicated by the fact that the x-ray examination of the bone is usually normal. Also, NICO produces referred pain patterns which also serve to confuse both patient and doctor. However, just like trigeminal neuralgia, there are trigger areas that, when pressed, produce pain. These trigger areas develop directly over the areas of dead bone. The mandible is affected more often than the upper jaw.

One important aspect of NICO is a history of tooth extraction usually years earlier. Any tooth may be involved. However, lower back teeth seem to be most common. Small areas of bone actually die,



Referred Pain Patterns of NICO

producing neuralgia-like pain symptoms. It appears that after a tooth extraction, NICO may develop due to injury of the blood vessels in the area which ultimately results in poor circulation, resulting in bone death in some cases. Pathologically, this is termed **osteomyelitis**. This bone infection, which can result in bone death, has been known for years. Yet, in the form of NICO, it is a newly described problem.

POSITION OF THE AMERICAN DENTAL ASSOCIATION

1. Root canal fillings are safe.
2. The Focal Theory of Infection *does not apply* as related to endodontically treated teeth.
3. As early as 1938, Cecil and Angevine reported in the *Annals of Internal Medicine* that endodontically treated teeth did not produce systemic illnesses.
4. Microbes do remain in the dentinal tubules of endodontically treated teeth, but pose no health hazard.
5. Endodontically treated teeth do not contribute to the formation of NICO (jaw bone cavitations).
6. References:
 - o American Association of Endodontists (<http://www.aae.org>).
 - o American Dental Association (<http://www.ada.org>).
 - o Easlick K: An evaluation of the effect of dental foci of infection on health. *JADA* 1984;42:615-686, 694-697.
 - o Grossman L: Pulpless teeth and focal infection. *J Endodon* 1982;8:818-824.
 - o Grossman L: Focal infection: are oral foci of infection related to systemic disease? *Dent Clin N Amer* 1960;7:49-763.
 - o Goldman M, Pearson A: A preliminary investigation of the "hollow-tube theory" in endodontics. *J Oral Therapeutics and Pharm* 1965;1:618-626.

POSITION OF ANTI-ROOT CANAL ADVOCATES

1. Root canal fillings may not be safe.
2. Focal infections as a result of bacteria still in teeth treated with root canals may be the cause of many systemic diseases.
3. Dr. Weston Price, along with 60 of the Nation's leading scientists, while working for the ADA, were convinced that endodontically treated teeth **DID** produce such systemic diseases as

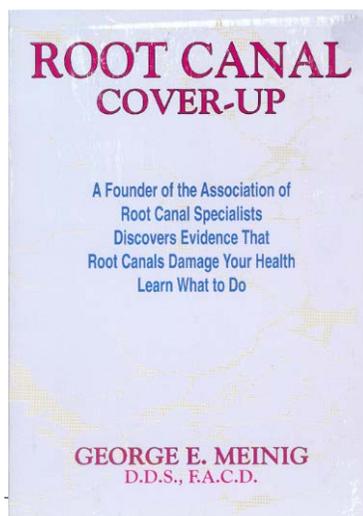
kidney and heart diseases, arthritis, pregnancy complications, endocarditis, and other systemic diseases.

4. Microbes in the **dentinal tubules DO** pose a health problem.
5. Endodontic therapy may cause NICO (jaw bone cavity) formation, which is often misdiagnosed as trigeminal neuralgia.
6. **Further help with resoruces and locating a doctor:** [Research in Toxicity](#)
7. References:
 - o Meinig GE. [Root Canal Cover-Up](#) Ojai: Bion Publishing, 1996 (ISBN 0-945196-19-9).
 - o Neville BW, Damm DD, Allen CM, Bouquot JE. *Oral & Maxillofacial Pathology*. Philadelphia: WB Saunders Co., 1995:631-632.
 - o Bouquot JE, Christian J: Long-term effects of jawbone curettage on the pain of facial neuralgia. *J Oral Maxillofac Surg* 1995;53:387-397.
 - o Byron MA. *A Clinicopathologic Review of 2278 NICO Cases*. Masters Thesis; West Virginia University:1994
 - o Shankland WE: Osteocavitation lesions (Ratner bone cavities): frequently misdiagnosed as trigeminal neuralgia--a case report. *J Craniomand Pract* 1993;11:232-235.
 - o Ratner EJ, Evins ML: Alveolar cavitation osteopathosis in the causation of chronic pain. *J Periodontol* 1986;57:593-603.
 - o Roberts AM, Person P: Etiology and treatment of idiopathic trigeminal and atypical facial neuralgias. *Oral Surg* 1979;48:298-308.
 - o Shankland WE: Craniofacial pain syndromes that mimic temporomandibular joint disorders. *Ann Acad Med Singapore* 1995;24:83-112.

FOR MORE INFORMATION: Contact Dr. Wesley Shankland, Director, **TMJ** & Facial Pain Center in Columbus, Ohio at: (614) 794-0033 or E-Mail [Dr. Shankland](#) Mailing address: 6011 Cleveland Avenue, Columbus, OH 43231, USA. [Bibliography of Dr. Shankland](#). Two Facial Pain books, which discuss NICO lesions and other facial pain disorders, [TMJ: ITS MANY FACES and FACE THE PAIN](#). (*FACE THE PAIN* has a more extensive discussion of root canals and NICO lesions.)

ROOT CANALS POSE HEALTH THREAT AN INTERVIEW WITH GEORGE MEINIG, D.D.S.

Source: http://www.curezone.com/dental/root_canal.asp



Dr. Meinig brings a most curious perspective to an expose of latent dangers of root canal therapy - fifty years ago he was one of the founders of the American Association of Endodontists (root canal specialists)! So he's filled his share of root canals. And when he wasn't filling canals himself, he was teaching the technique to dentists across the country at weekend seminars and clinics. About two years ago, having recently retired, he decided to read all 1174 pages of the detailed research of Dr. Weston Price, (D.D.S). Dr. Meinig was startled and shocked. Here was valid documentation of systemic illnesses resulting from latent infections lingering in filled roots. He has since written a book, *Root Canal Cover-Up EXPOSED - Many Illnesses Result*, and is devoting himself to radio, TV, and

personal appearances before groups in an attempt to blow the whistle and alert the public.

MJ Please explain what the problem is with root canal therapy.

GM First, let me note that my book is based on Dr. Weston Price's twenty-five years of careful, impeccable research. He led a 60-man team of researchers whose findings - suppressed until now rank right up there with the greatest medical discoveries of all time. This is not the usual medical story of a prolonged search for the difficult-to-find causative agent of some devastating disease. Rather, it's the story of how a "cast of millions" (of bacteria) become entrenched inside the structure of teeth and end up causing the largest number of diseases ever traced to a single source.

MJ What diseases? Can you give us some examples?

GM Yes, a high percentage of chronic degenerative diseases can originate from root filled teeth. The most frequent were heart and circulatory diseases and he found 16 different causative agents for these. The next most common diseases were those of the joints, arthritis and rheumatism. In third place - but almost tied for second - were diseases of the brain and nervous system. After that, any disease you can name might (and in some cases has) come from root filled teeth.

Let me tell you about the research itself. Dr. Price undertook his investigations in 1900. He continued until 1925, and published his work in two volumes in 1923. In 1915 the National Dental Association (which changed its name a few years later to The American Dental Association) was so impressed with his work that they appointed Dr. Price their first Research Director. His Advisory Board read like a Who's Who in medicine and dentistry for that era. They represented the fields of bacteriology, pathology, rheumatology, surgery, chemistry, and cardiology.

At one point in his writings Dr. Price made this observation: "Dr. Frank Billings (M.D.), probably more than any other American internist, is due credit for the early recognition of the importance of streptococcal focal infections in systemic involvements."

What's really unfortunate here is that very valuable information was covered up and totally buried some 70 years ago by a minority group of autocratic doctors who just didn't believe or couldn't grasp - the focal infection theory.

MJ What is the "focal infection" theory?

GM This states that germs from a central focal infection - such as teeth, teeth roots, inflamed gum tissues, or maybe tonsils - metastasize to hearts, eyes, lungs, kidneys, or other organs, glands and tissues, establishing new areas of the same infection. Hardly theory any more, this has been proven and demonstrated many times over. It's 100% accepted today. But it was revolutionary thinking during World War I days, and the early 1920's!

Today, both patients and physicians have been "brain washed" to think that infections are less serious because we now have antibiotics. Well, yes and no. In the case of root-filled teeth, the no longer-living tooth lacks a blood supply to its interior. So circulating antibiotics don't faze the bacteria living there because they can't get at them.

MJ You're assuming that ALL root-filled teeth harbor bacteria and/or other infective agents?

GM Yes. No matter what material or technique is used - and this is just as true today - the root filling shrinks minutely, perhaps microscopically. Further and this is key - the bulk of solid appearing teeth, called the dentin, actually consists of miles of tiny tubules. Microscopic organisms lurking in the maze of tubules simply migrate into the interior of the tooth and set up housekeeping. A filled root seems to be a favorite spot to start a new colony.

One of the things that makes this difficult to understand is that large, relatively harmless bacteria common to the mouth, change and adapt to new conditions. They shrink in size to fit the cramped quarters and even learn how to exist (and thrive!) on very little food. Those that need oxygen mutate and become able to get along without it. In the process of adaptation these formerly friendly "normal" organisms become pathogenic (capable of producing disease) and more virulent (stronger) and they produce much more potent toxins.

Today's bacteriologists are confirming the discoveries of the Price team of bacteriologists. Both isolated in root canals the same strains of streptococcus, staphylococcus and spirochetes.

MJ Is everyone who has ever had a root canal filled made ill by it?

GM No. We believe now that every root canal filling does leak and bacteria do invade the structure. But the variable factor is the strength of the person's immune system. Some healthy people are able to control the germs that escape from their teeth into other areas of the body. We think this happens because their immune system lymphocytes (white blood cells) and other disease fighters aren't constantly compromised by other ailments. In other words, they are able to prevent those new colonies from taking hold in other tissues throughout the body. But over time, most people with root filled teeth do seem to develop some kinds of systemic symptoms they didn't have before.

MJ It's really difficult to grasp that bacteria are imbedded deep in the structure of seemingly-hard, solid looking teeth.

GM I know. Physicians and dentists have that same problem, too. You really have to visualize the tooth structure - all of those microscopic tubules running through the dentin. In a healthy tooth, those tubules transport a fluid that carries nourishment to the inside. For perspective, if the tubules of a front single-root tooth, were stretched out on the ground they'd stretch for three miles!

A root filled tooth no longer has any fluid circulating through it, but the maze of tubules remains. The anaerobic bacteria that live there seem remarkably safe from antibiotics. The bacteria can migrate out into surrounding tissue where they can "hitch hike" to other locations in the body via the bloodstream. The new location can be any organ or gland or tissue, and the new colony will be the next focus of infection in a body plagued by recurrent or chronic infections.

All of the "building up" done to try to enhance the patient's ability to fight infections - to strengthen their immune system - is only a holding action. Many patients won't be well until the source of infection - the root canal tooth - is removed.

MJ I don't doubt what you're saying, but can you tell us more about how Dr. Price could be sure that arthritis or other systemic conditions and illnesses really originated in the teeth - or in a single tooth?

GM Yes. Many investigations start with the researcher just being curious about something - and then being scientifically careful enough to discover an answer, and then prove it's so, many times over. Dr. Price's first case is very well documented. He removed an infected tooth from a woman who suffered from severe arthritis. As soon as he finished with the patient, he implanted the tooth beneath the skin of a healthy rabbit. Within 48 hours the rabbit was crippled with arthritis!

Further, once the tooth was removed the patient's arthritis improved dramatically. This clearly suggested that the presence of the infected tooth was a causative agent for both that patient's and the rabbit's - arthritis.

[Editor's Note - Here's the story of that first patient from Dr. Meinig's book: "(Dr. Price) had a sense that, even when (root canal therapy) appeared successful, teeth containing root fillings remained infected. That thought kept prying on his mind, haunting him each time a patient consulted him for relief from some severe debilitating disease for which the medical profession could find no answer. Then one day while treating a woman who had been confined to a wheelchair for six years from severe arthritis, he recalled how bacterial cultures were taken from patients who were ill and then inoculated into animals in an effort to reproduce the disease and test the effectiveness of drugs on the disease.

With this thought in mind, although her (root filled) tooth looked fine, he advised this arthritic patient, to have it extracted. He told her he was going to find out what it was about this root filled tooth that was responsible for her suffering. "All dentists know that sometimes arthritis and other illnesses clear up if bad teeth are extracted. However, in this case, all of her teeth appeared in satisfactory condition and the one containing this root canal filling showed no evidence or symptoms of infection. Besides, it looked normal on x-ray pictures.

"Immediately after Dr. Price extracted the tooth he dismissed the patient and embedded her tooth under the skin of a rabbit. In two days the rabbit developed the same kind of crippling arthritis as the patient - and in ten days it died.

"..The patient made a successful recovery after the tooth's removal! She could then walk without a cane and could even do fine needlework again. That success led Dr. Price to advise other patients, afflicted with a wide variety of treatment defying illnesses, to have any root filled teeth out."]

In the years that followed, he repeated this procedure many hundreds of times. He later implanted only a portion of the tooth to see if that produced the same results. It did. He then dried the tooth, ground it into powder and injected a tiny bit into several rabbits. Same results, this time producing the same symptoms in multiple animals.

Dr. Price eventually grew cultures of the bacteria and injected them into the animals. Then he went a step further. He put the solution containing the bacteria through a filter small enough to catch the bacteria. So when he injected the resulting liquid it was free of any infecting bacteria. Did the test animals develop the illness? Yes. The only explanation was that the liquid had to contain toxins from the bacteria, and the toxins were also capable of causing disease.

Dr. Price became curious about which was the more potent infective agent, the bacteria or the toxin. He repeated that last experiment, injecting half the animals with the toxin-containing liquid and half of them with the bacteria from the filter. Both groups became ill, but the group injected with the toxins got sicker and died sooner than the bacteria injected animals.

MJ That's amazing. Did the rabbits always develop the same disease the patient had?

GM Mostly, yes. If the patient had heart disease the rabbit got heart disease. If the patient had kidney disease the rabbit got kidney disease, and so on. Only occasionally did a rabbit develop a different disease - and then the pathology would be quite similar, in a different location.

MJ If extraction proves necessary for anyone reading this, do you want to summarize what's special about the extraction technique?

GM Just pulling the tooth is not enough when removal proves necessary. Dr. Price found bacteria in the tissues and bone just adjacent to the tooth's root. So we now recommend slow-speed drilling with a burr, to remove one millimeter of the entire bony socket. The purpose is to remove the periodontal ligament (which is always infected with toxins produced by streptococcus bacteria living in the dentin tubules) and the first millimeter of bone that lines the socket (which is usually infected).

There's a whole protocol involved, including irrigating with sterile saline to assure removal of the contaminated bone chips, and treating the socket to stimulate and encourage infection-free healing. I describe the procedure in detail, step by step, in my book [pages 185 and 186].

MJ Perhaps we should back up and talk about oral health - to PREVENT needing an extraction. Caries or inflamed gums seem much more common than root canals. Do they pose any threat?

GM Yes, they absolutely do. But let me point out that we can't talk about oral health apart from total health. The problem is that patients and dentists alike haven't come around to seeing that dental caries reflect systemic - meaning "whole body" - illness. Dentists have learned to restore teeth so expertly that both they and their patients have come to regard tooth decay as a trivial matter. It isn't.

Small cavities too often become big cavities. Big cavities too often lead to further destruction and the eventual need for root canal treatment.

MJ Then talk to us about prevention.

GM **The only scientific way to prevent tooth decay is through diet and nutrition.** Dr. Ralph Steinman did some outstanding, landmark research at Loma Linda University. He injected a glucose solution into mice - into their bodies, so the glucose didn't even touch their teeth. Then he observed the teeth for any changes. What he found was truly astonishing. The glucose reversed the normal flow of fluid in the dentin tubules, resulting in all of the test animals developing severe tooth decay! Dr. Steinman demonstrated dramatically what I said a minute ago: **Dental caries reflect systemic illness.**

Let's take a closer look to see how this might happen. Once a tooth gets infected and the cavity gets into the nerve and blood vessels, bacteria find their way into those tiny tubules of the dentin. Then no matter what we do by way of treatment, we're never going to completely eradicate the bacteria hiding in the miles of tubules. In time the bacteria can migrate through lateral canals into the surrounding bony socket that supports the tooth. Now the host not only has a cavity in a tooth, plus an underlying infection of supporting tissue to deal with, but the bacteria also exude potent systemic toxins. These toxins circulate throughout the body triggering activity by the immune system - and probably causing the host to feel less well. This host response can vary from just dragging around and feeling less

energetic, to overt illness - of almost any kind. Certainly, such a person will be more vulnerable to whatever "bugs" are going around, because his/her body is already under constant challenge and the immune system continues to be "turned on" by either the infective agent or its toxins - or both.

MJ What a fascinating concept. Can you tell us more about the protective nutrition you mentioned?

GM Yes. Dr. Price traveled all over the world doing his research on primitive peoples who still lived in their native ways. He found fourteen cultural pockets scattered all over the globe where the natives had no access to "civilization" - and ate no refined foods.

Dr. Price studied their diets carefully. He found they varied greatly, but the one thing they had in common was that they ate whole, unrefined foods. With absolutely no access to tooth brushes, floss, fluoridated water or tooth paste, the primitive peoples studied were almost 100% free of tooth decay. Further - and not unrelated - they were also almost 100% free of all the degenerative diseases we suffer - problems with the heart, lungs, kidneys, liver, joints, skin (allergies), and the whole gamut of illnesses that plague Mankind. No one food proved to be magic as a preventive food. I believe we can thrive best by eating a wide variety of whole foods.

MJ Amazing. So by "diet and nutrition" for oral (and total) health you meant eating a pretty basic diet of whole foods?

GM Exactly. **And no sugar or white flour.** These are (and always have been) the first culprits. Tragically, when the primitives were introduced to sugar and white flour their superior level of health deteriorated rapidly. This has been demonstrated time and again. During the last sixty or more years we have added in increasing amounts, highly refined and fabricated cereals and boxed mixes of all kinds, soft drinks, refined vegetable oils and a whole host of other foodless "foods". It is also during those same years that we as a nation have installed more and more root canal fillings - and degenerative diseases have become rampant. I believe - and Dr. Price certainly proved to my satisfaction - that these simultaneous factors are NOT coincidences.

MJ I certainly understand what you are saying. But I'm still a little shocked to talk with a dentist who doesn't stress oral hygiene.

GM Well, I'm not against oral hygiene. Of course, hygiene practices are preventive, and help minimize the destructive effect of our "civilized", refined diet. But the real issue is still diet. The natives Dr. Price tracked down and studied weren't free of cavities, inflamed gums, and degenerative diseases because they had better tooth brushes!

It's so easy to lose sight of the significance of what Dr. Price discovered. We tend to sweep it under the rug - we'd actually prefer to hear that if we would just brush better, longer, or more often, we too could be free of dental problems.

Certainly, part of the purpose of my book is to stimulate dental research into finding a way to sterilize dentin tubules. Only then can dentists really learn to save teeth for a lifetime. But the bottom line remains: A primitive diet of whole unrefined foods is the only thing that has been found to actually prevent both tooth decay and degenerative diseases.

To order "*Root Canal Cover-Up EXPOSED - Many Illnesses Result*", by Dr. Meinig, send your check or money order (U.S. funds) for \$19.95 + \$2.00 shipping (\$2.50 to Canada, \$3.00 to other countries), California residents add \$1.45 for state sales tax. Send to Bion Publishing, 323 E. Matilija 110-151, Ojai, CA 93023.