



# Oral Systemic Mastery

A Patient Guide to Oral and Metabolic Health



## Issue 2: Dental Care for the Heart Disease Patient

**Thomas Larkin DDS - The Larkin Protocol**

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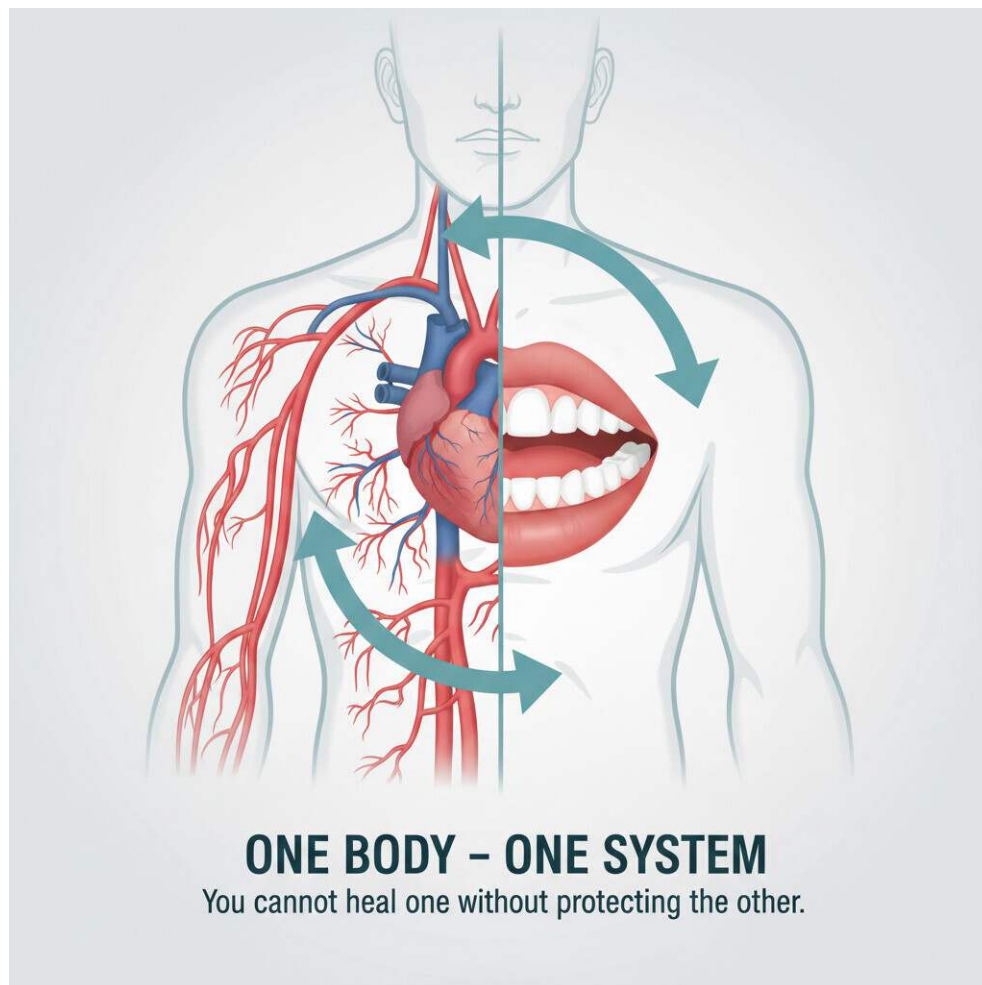
How Your Oral Health Can Save Your Life

## TABLE OF CONTENTS

1. Most Heart Disease is Preventable
2. The Health of Your Mouth and Heart Disease
3. The BaleDoneen Method
4. Professional Care for The Heart Patient
5. Home Care for Heart Healthy Mouth
6. Final Message to The Heart Patient

### Dental Care for the Patient with Heart Disease

*How Your Mouth Can Help Save Your Life*



## Chapter 1: Most Heart Disease Is Preventable

For decades, heart disease was thought to be an unavoidable consequence of aging, genetics, or bad luck. Today, modern science tells a very different story:

**The vast majority of heart attacks and strokes are preventable.**

Heart disease is not simply a “cholesterol problem.” It is primarily a disease of **chronic inflammation and arterial injury**. When inflammation is controlled and vessel injury is detected early, heart disease can be stopped—even reversed.

### The True Causes of Heart Disease

Modern research shows that heart disease develops when:

- Blood vessel walls become inflamed
- Microscopic arterial injury occurs
- The immune system responds with plaque formation
- That plaque becomes unstable and ruptures

This process is driven by:

- Poor metabolic control
- Insulin resistance
- Chronic infections
- Toxic exposures
- Nutrient deficiencies
- And **oral inflammation**

### Why Early Detection Changes Everything

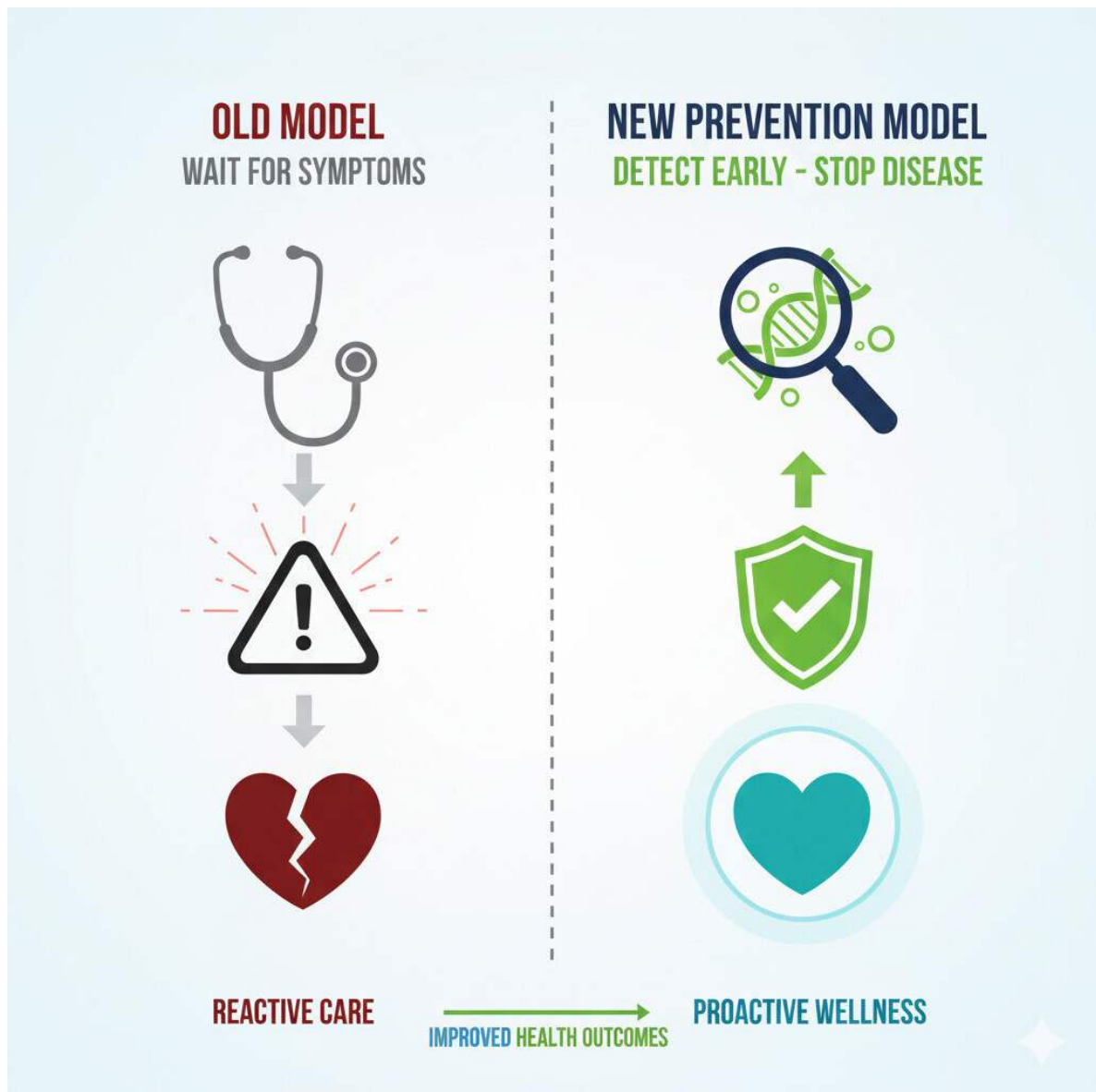
Traditional medicine waits for symptoms:

- Chest pain
- Shortness of breath
- Heart attack
- Stroke

Prevention-focused medicine looks for:

- Inflammatory markers
- Early arterial injury
- Vascular dysfunction
- Immune system imbalance

When detected early, heart disease is **manageable, controllable, and often reversible**.



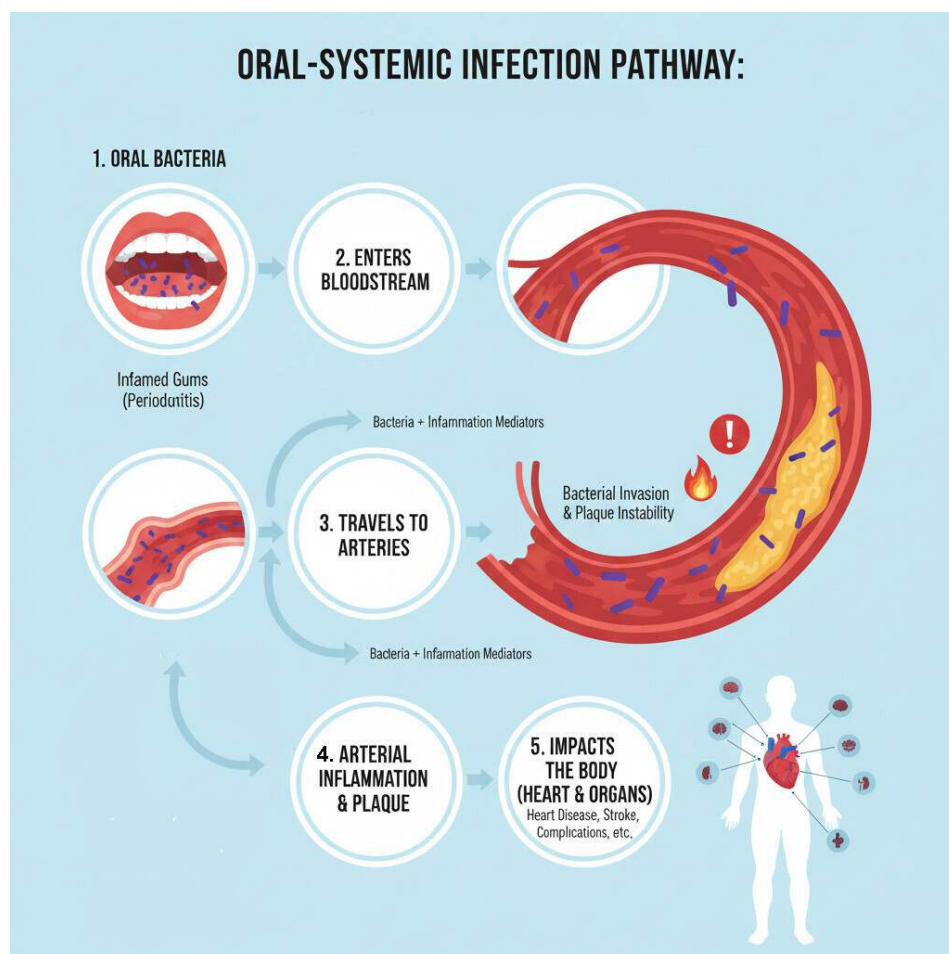
## Chapter 2: The Health of Your Mouth and Heart Disease

Your mouth is not separate from your heart. It is **one of the most powerful and overlooked drivers of cardiovascular inflammation in the body.**

Gum disease is a **chronic bacterial infection** that continuously releases inflammatory toxins into the bloodstream. These toxins directly impact:

- The inner lining of blood vessels (endothelium)
- Plaque stability inside arteries
- Blood clot formation
- Immune system regulation

### How Oral Bacteria Affect the Heart



Bacteria from gum disease:

- Enter the bloodstream during chewing and brushing
- Attach to damaged arterial walls
- Increase Plaque inflammation
- Destabilize existing arterial plaque

This makes plaque far more likely to **rupture and cause heart attack or stroke**.

### Primary High-Risk Periodontal Pathogens Include:

#### 1. *Porphyromonas gingivalis*

*Most implicated organism in heart disease*

- Keystone pathogen capable of immune subversion
- Found in atherosclerotic plaques
- Promotes:
  - Endothelial dysfunction
  - Foam cell formation
  - Platelet aggregation
  - Molecular mimicry → autoimmunity

#### 2. *Aggregatibacter actinomycetemcomitans*

- Strongly linked to acute coronary syndromes
- Produces leukotoxin A (LtxA) → neutrophil hyperactivation
- Associated with hyperinflammatory phenotypes and rapid tissue destruction

#### 3. *Tannerella forsythia*

- Part of the classic Red Complex
- Associated with systemic inflammatory burden
- Synergistic with *P. gingivalis* in vascular inflammation

#### 4. *Treponema denticola*

- Highly motile spirochete
- Penetrates tissues and vascular endothelium
- Contributes to:
  - Endothelial injury
  - Smooth muscle proliferation

#### Additional Pathogens with Cardiovascular Links

##### 5. *Fusobacterium nucleatum*

- Facilitates bacterial translocation into bloodstream
- Linked to endothelial activation and thrombosis

##### 6. *Prevotella intermedia*

- Associated with elevated systemic inflammatory markers (CRP, IL-6)

#### Bacterial Screening in the Dental Office Include:

Phase contrast microscopy

Salivary PCR testing

Inflammatory markers (MMP8)

#### The Inflammation Connection

Gum disease raises:

- C-reactive protein (CRP)
- Fibrinogen
- Interleukins
- Tumor necrosis factor (TNF- $\alpha$ )

These are the **same inflammatory markers** linked to heart attack risk.

#### What the Research Shows

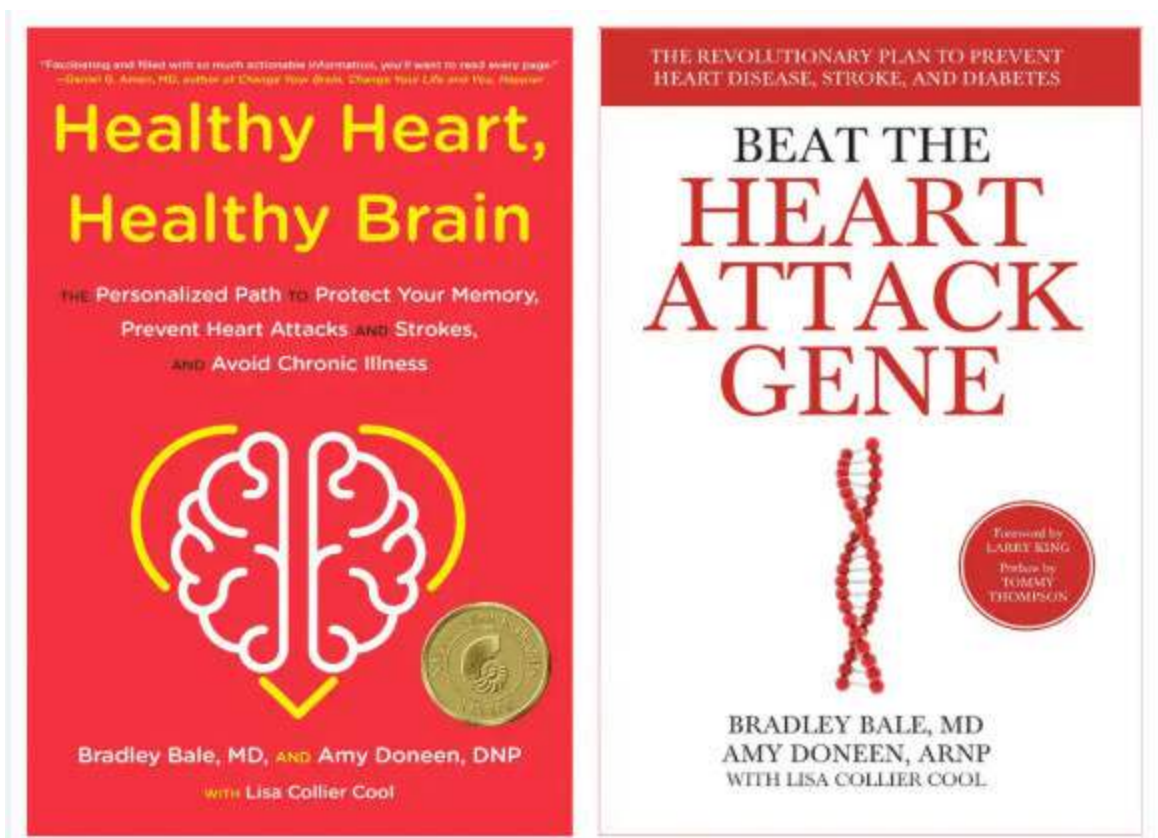
Studies have demonstrated that people with untreated periodontal disease have:

- Higher rates of heart attack
- Increased stroke risk
- Greater carotid artery plaque
- Higher medical costs
- Worse long-term survival

Treating gum disease has been shown to:

- Lower systemic inflammation
- Improve blood vessel function
- Reduce cardiovascular risk

A bleeding mouth is a warning sign for a bleeding heart.





## Chapter 3: The BaleDoneen Method - A New Standard for Heart Disease Prevention

If I told you there was a physician who offered a *money-back guarantee* that you would not have a heart attack or stroke while under his care—following his method—what would your reaction be? Pretty negative, right?

Mine was too. I was turned off at first... but also intrigued.

At the time, I checked every box for *maximum risk*. Fourteen years later, that initial skepticism led me to dedicate my career to bridging the educational gap between preventive physicians, dentists, and dental hygienists.

The **BaleDoneen Method**, developed by Dr. Bradley Bale and Dr. Amy Doneen, represents a revolutionary shift in how heart disease is understood and prevented.

If you have heart disease it is imperative that you read these books to better understand the integration of oral health to cardiovascular disease.

Rather than guessing risk based on age or cholesterol, this method **directly measures arterial injury and inflammation**.

### Three Core Principles

1. Heart disease is an inflammatory disease
2. Early arterial injury can be measured
3. Aggressive prevention stabilizes plaque

### Key Diagnostic Tools

The BaleDoneen Method evaluates:

- High-sensitivity CRP
- Homocysteine
- Lp(a)
- Fibrinogen
- Insulin and metabolic markers
- Advanced lipid particles
- Coronary calcium scans
- Carotid intima-media thickness (CIMT)

These tools detect danger **long before symptoms appear.**

### **Where Dentistry Fits Perfectly**

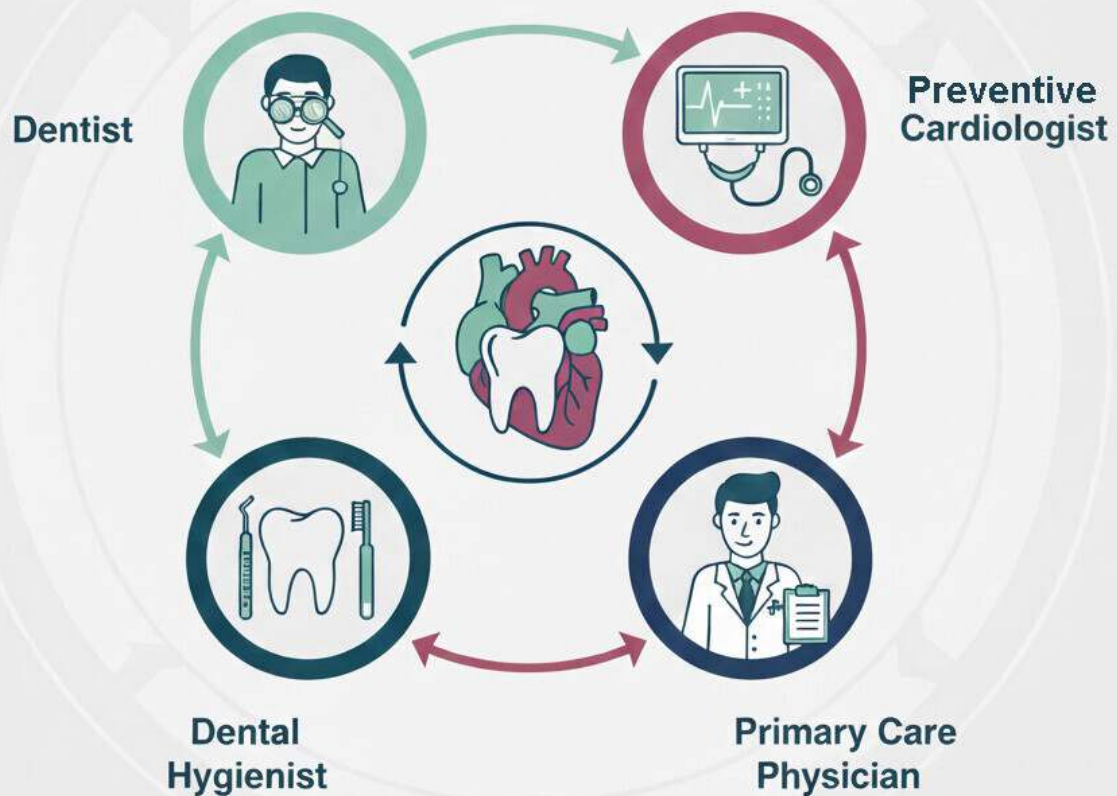
Oral infections are one of the **largest hidden drivers of vascular inflammation.**  
Without managing:

- Gum disease
- Oral biofilm
- Chronic oral infections

True cardiovascular prevention is incomplete.

**Dentistry is not cosmetic—it is cardiovascular protection.**

# Integrated Care for the Cardiac Patient



A Collaborative Approach to Systemic Health

## Chapter 4: Professional Dental Care for the Heart Patient

**Dr. Craig Backs, MD**, founder of **The Cure Center**, is a nationally respected leader in preventive and integrative cardiovascular medicine whose work closely aligns with the principles of **The Larkin Protocol**. Board-certified in family medicine and a long-standing faculty member of the **BaleDoneen Method and Oral Systemic Mastery**. Dr. Backs is known for identifying silent, early-stage disease through advanced risk assessment, inflammatory markers, and metabolic profiling—often years before conventional medicine would intervene. His approach mirrors the Larkin Protocol's **Test → Teach → Treat → Repeat** framework, emphasizing early detection, patient education, targeted intervention, and ongoing monitoring to reduce systemic risk. Dr. Backs consistently underscores the role of chronic oral inflammation and microbial dysbiosis as modifiable drivers of cardiovascular disease, reinforcing dentistry's critical position within preventive healthcare. Through his work at The Cure Center, Dr. Backs exemplifies the interdisciplinary, data-driven, and wellness-centered model that the Larkin Protocol champions—positioning dentistry and medicine as collaborative partners in preventing heart attack, stroke, and other chronic diseases before they occur.

The ideal integrated model that I personally use is this: I see a medical provider every three months. My primary care physician sees me every six months, and in the intervening three-month intervals I'm evaluated by Dr Backs. This alternating schedule ensures continuous oversight, early detection of issues, and a strong emphasis on prevention rather than reaction. I also see my dental hygienist every 6 months. By engaging a provider every 3 months and shared information across all three entities, it is the most ideal precision based proactive model that I know of. This is the framework of the 100% perfect track record that he and other practitioners of The BaleDoneen method have.

Dr Backs has a virtual platform for remote patients and can be contacted if you have questions or want to become a patient.  
[drbacks@thecurecenter.life](mailto:drbacks@thecurecenter.life).

For patients with heart disease or elevated cardiovascular risk, professional dental care is not optional—it is **part of the cardiac prevention protocol**.

### Why Heart Patients Need Specialized Dental Monitoring

Chronic oral infection:

- Raises systemic inflammatory burden
- Promotes plaque instability
- Increases clot formation risk
- Worsens insulin resistance

Heart patients require:

- More frequent professional care (every 3–4 months)
- Periodontal monitoring at every visit
- Bacterial control at subgingival levels
- Continuous inflammation assessment
- Periodic carotid ultrasound (CIMT) to evaluate vascular health. Dr Backs trains dental hygienists to perform this chairside

### **Advanced Professional Therapies**

Heart-focused dental care may include:

- Therapeutic periodontal maintenance
- Laser bacterial reduction
- Air-polishing biofilm disruption
- Antimicrobial therapy
- Salivary diagnostics
- Phase-contrast microbial assessment

Each of these therapies:

- Lowers systemic inflammation
- Reduces bloodstream bacterial exposure
- Stabilizes vascular health

### **Dental Procedures and Cardiac Safety**

Prior to invasive procedures, the dental team may:

- Collaborate with cardiology
- Review medications such as anticoagulants
- Stage treatment safely
- Support healing with inflammation control

## Chapter 5: Home Care for the Heart-Healthy Mouth

What you do at home each day plays a major role in **protecting your heart through your mouth**.

Daily oral care is not about preventing cavities—it is about **preventing inflammation from entering your bloodstream**.

### Daily Heart-Protective Oral Routine

- Brush twice daily at the gumline
- Clean between teeth every day
- Use inflammation-reducing rinses
- Stay hydrated to support saliva
- Address dry mouth immediately

### The Diet–Mouth–Heart Connection

Frequent sugar and refined carbohydrates:

- Feed harmful oral bacteria
- Increase systemic inflammation
- Worsen insulin resistance
- Destabilize arterial plaques

A whole-food, anti-inflammatory diet benefits: Mediterranean Diet

- Oral health
- Vascular stability
- Blood sugar control
- Immune balance

### Warning Signs That Require Immediate Attention

- Bleeding gums
- Chronic bad breath
- Loose teeth
- Gum recession
- Recurrent oral infections

These are not “dental problems”—they are **cardiovascular warning signals**.

Not all oral hygiene products are created equal. For heart patients, the goal is not just cosmetic cleanliness—it is **biofilm control, inflammation reduction, enamel protection, and microbiome balance.**

The Following are the products that I use and recommend. For your convenience some have Amazon affiliate links in place.

Your product choices directly influence:

- Infection risk
- Healing response
- Gum stability
- Blood sugar inflammation burden

## **Toothbrushes**

Recommended options generally include:

- Electric toothbrushes with pressure sensors
- Soft or ultra-soft manual brushes for sensitive gums
- Small brush heads for precision around the gumline

Worn bristles do not clean effectively and can injure inflamed tissue. Brushes should be replaced every 2–3 months.

[NIMBUS](#) A high quality, extra soft, my choice

[Philips Sonicare](#) Standard tried and true

[EMMI-DENT](#) A new technology, especially if your gums are sensitive

## **Interdental Tools**

I prefer interdental stimulators over floss. Picks for narrower spaces and the brush and rubber tip for larger spaces. Using the interdental with baking soda covering them is also a plus.

Effective options include:

[GUM Soft Picks](#)

[GUM Proxabrush](#)

[GUM Rubber tip stimulator](#)

## **Tongue Scraping**

Tongue Scraping is critical part of biofilm management. My favorite is Dr Tung's.

[Dr Tung's Tongue Scraper](#)

How to Properly Scrape Your Tongue

1. Use a stainless steel or copper scraper
2. Stick your tongue out naturally
3. Place scraper gently at the back of the tongue
4. Pull forward with light pressure
5. Rinse scraper after each pass
6. Repeat 5–10 strokes
7. Do this first thing in the morning

## **Toothpaste**

Ideal toothpaste formulations often include:

- Low-abrasion formulas
- Anti-inflammatory or antimicrobial ingredients

Avoid excessively abrasive whitening pastes unless directed by your dental provider.

[Arm & Hammer PEROXICARE](#)

## **Water Flossers**

Water flossers as tolerated are an important tool.



Waterpik

Water Flosser

## Oral Rinses

Beneficial rinse categories may include:

- Antimicrobial rinses
- Oxygenating rinses
- Xylitol-based formulations
- Herbal anti-inflammatory rinses

Your dental team may also recommend **therapeutic antimicrobial cycles** for higher-risk periods.

**Therapeutic – By RX For use while undergoing periodontal therapy**

Molecular iodine

Therasol

Carifree Treatment Rinse

Sodium Hypochlorite – Slots Protocol

**Daily Maintenance – For long term maintenance**

Therasol

Oracare

Closys

Peroxyl

iORinse

## Carifree Maintenance Rinse

### Saliva Support Products

For patients with dry mouth, products may include:

- Saliva substitutes
- Oral moisturizing gels
- Xylitol lozenges or sprays
- Prescription salivary stimulants when necessary

## Biotine

## Xyliments

Maintaining moisture is essential to:

- Protect enamel
- Control bacterial growth
- Prevent fungal infections
- Improve comfort and swallowing

### Prebiotics and Probiotics

Probiotics and prebiotics are an interesting emerging category. Meant to health stabilize the oral microbiome toward a health tilt. AOXcare is a new technology that looks extremely promising for both patient's with gum disease and those with dental implants.

## AOXcare

## Stella Life

## Probiora

### Supplements and the Oral-Systemic Connection

Under professional guidance, some diabetic patients benefit from:

- Vitamin D support for immune balance
- Omega-3 fatty acids for inflammation control
- Probiotic or prebiotic support for microbiome modulation
- Collagen and mineral support for tissue healing

These should always be coordinated with a healthcare provider.

## The Key Principle

There is **no single “magic product.”** Success comes from:

- Consistent daily home care
- Proper professional guidance
- Individualized product selection
- Regular reevaluation as health changes

Together, these form the foundation of long-term oral and metabolic stability.

## Chapter 6. FINAL MESSAGE TO THE HEART PATIENT

**You cannot fully protect your heart without protecting your mouth.**

Heart disease prevention requires:

- Inflammation control
- Early detection
- Vascular protection
- Metabolic stability
- And **oral infection management**

When medicine and dentistry work together, patients do not just survive—they **live longer, stronger, and healthier lives.**

## About the Author

Dr. Thomas Larkin, DDS is the founder of The Larkin Protocol and a national leader in preventive, health-centered dentistry. He specializes in oral-systemic disease detection and patient education through phase-contrast microscopy and metabolic screening.

