

DENTAL HERBALISM, by Leslie Alexander, Ph.D., R.H., and Linda Straub-Bruce, B.S., R.D.H. Book Report and Comments by David G. Schwartz, M.D.

Dentists commonly have an awareness of systemic health issues that affect the mouth, but medical doctors are often less aware of how mouth and teeth conditions affect the rest of the body. This book takes a holistic view of the relationship of the health of the mouth as part of that of the whole body. It is a great way to learn about health issues of the mouth, the causes, prevention, and treatment, and more specifically the use of herbs. Plant medicine can play a huge role in oral health. This book is timely not only for educating people about herbs, but to call attention to the importance of the teeth and mouth in overall health, a concept too often neglected.

This book receives praise from many herbalists and dental professionals, including oral surgeon, Dr. Michael Kolodychak, Susan Weed, author of The Wise Woman Herbal series, Mary Bove, author of An Encyclopedia of Natural Healing for Infants and Children, and Rosemary Gladstar, founder of United Plant Savers, and author of Rosemary Gladstar's Family Herbal. She writes, "Brilliant, practical, and eminently empowering, Dental herabalism is a 'veritable owners manual for your mouth'...Dental Herbalism is sure to revolutionize the way we approach dental health."

Their book covers the whole range of oral anatomy, daily care, monitoring oral well being, utilizing the team of dental professionals, recognizing oral health problems, conventional treatment for each of many diseases, and an extensive herbal formulary applicable to many of these problems.

One in ten people over 40 are toothless. Dentures are not a solution. Jaw bone resorption can occur over time, and eventually there is no ridge to hold the dentures in place. About 47% of people over 30 have periodontitis, that is, loss of gum and bony structural integrity that holds teeth in place. There is much we can do to prevent the loss of teeth from periodontitis and decay, and it's about time we that get onto it.

Daily care keeps healthy microbial flora in the mouth and removes plaque and bio-film. This means brushing, flossing, finishing meals with raw, abrasive foods, rinsing with water after eating or drinking, choosing healthful foods, and minimizing sugars and processed foods. Minimizing snacking, and avoiding "grazing" altogether is more important than the quantities of food eaten at one time. Every time teeth are exposed to any small amount of food, bacteria produce acid, which de-mineralizes the teeth, promoting decay.

Regardless of whether one uses a regular tooth brush, power tooth brush, or chew stick made from roots or twigs, the technique should be gentle and thorough, getting every corner, using small, circular motions, allowing a full 2 minutes, 2-3 x/ day. Chew sticks have astringent and antiseptic properties that affect pH, enzymes, saliva production, and mineralization of teeth. Some good chew sticks are Neem, and Arak, also called Peelu and many other names. The stick is chewed to fray the end, and then the end is used as a brush. Flossing after meals is important to remove food particles from

between the teeth. A tongue scraper pulled over the tongue from back to front, removes dead cells, bacteria, and food. Rinsing with herbal teas provide immune support, anti-microbial action, and tightening of the tissues. Plants of the mint family such as mint, sage, rosemary, thyme, lavender, catnip, and bergamot, as well as leaves of raspberries and blackberries make good teas for swishing and swallowing. After dental work, more anti-microbial rinses from cinnamon, cloves, calendula, and myrrh may be preferred.

Tooth powders made from baking soda, licorice, myrrh, cloves, cinnamon, peppermint, and wintergreen provide gentle abrasion. They can be good alternatives to the toothpastes that may have dyes, sodium lauryl sulfate, and synthetic flavoring agents. Tooth powders are sold in small round containers with screw top lids. A good tooth powder would have herbs that are astringent, anti-microbial, anti-inflammatory, and mucilaginous, aiding in wound healing. Appendix 2 has suppliers of some of the products recommended.

Chapter 6, pregnancy, infants, and toddlers, includes teething, thrush, bottle decay, brushing, and the first dental visit.

The chapter on tooth decay describes the factors promoting decay, mentioned previously, some of which is low saliva flow. People with xerostomia (dry mouth), Sjogren's syndrome, those who take medications that cause dry mouth, and who had head and neck radiation therapy, have low saliva output and have much more tooth decay. Stress, acid reflux, bulimia, smoking, and chemotherapy can result in acid saliva, resulting in more caries. The saliva is supposed to bathe the teeth in a more alkaline environment, which protects against demineralization of the teeth, the first step in decay. The saliva is also anti-bacterial.

A practice recommended by an herbalist at a seminar I attended entails gathering saliva by swishing the tongue and holding a good amount of saliva in the mouth for a few minutes before swallowing. This helps to bathe the teeth in extra saliva. In Traditional Chinese Medicine, this Qigong practice is called "gathering the jade juice." The practice of "oil-pulling" also accumulates saliva. This is holding ½ tsp coconut or sesame oil in the mouth for 15 minutes, swishing, and then spitting it out. My dental hygienist recommended it. It is supposed to pull toxins out of the gums, etc. It could be that the greatest benefit is the saliva bathing. Another concept from that herbal seminar is the sympathetic/parasympathetic balance. Do you remember when you were very upset, scared or angry, palms sweaty and mouth dry? That is sympathetic over-drive, the "fight or flight" stress response. This makes saliva thick and scant. The parasympathetic response is the "rest and digest" function, or the "relaxation response." This makes saliva thin and abundant. Many people live in sympathetic overdrive all day long and have digestive disturbances and many other stress-related problems. They have dry mouth, promoting tooth decay.

The chapter on gum disease describes in detail the progression from gingivitis to severe periodontitis, and tooth loss, prevention and treatments. Factors that contribute to

gingivitis include poor nutrition, diabetes, smoking, poor oral hygiene, dry mouth, hormone fluctuations, immune deficiencies, and stress.

Symptoms of periodontitis include red, swollen, sore gums, mouth sores, foul breath, receding gums, pockets, loose teeth, and pus.

The dentist may do scaling to remove plaque and calculus below the gum line. Sometimes surgery is necessary to allow the gums to repair the damage. Mouthwashes or rinses are suggested for routine care and for helping the gums to heal from periodontitis. Sage, rosemary, stevia, and thyme are anti-microbial, and then calendula, cleavers, yarrow, propolis, and myrrh can be added for the more severe stages of periodontitis.

Table 8.2 matches each of the herbs, barberry, calendula, capsicum, cinnamon, Echinacea, goldenseal, myrrh, oak, plantain, raspberry leaves, stevia, rosemary, thyme, and yarrow, with each of the actions, such as alternative (purifier), analgesic, anti-inflammatory, anti-microbial, aromatic, astringent, circulatory stimulant, immune support, oxygenation, styptic (stopping bleeding), and vulnerary (healing of wounds).

Each person may need more of some of these actions than others, and another person may have different needs, according to the stage and specific characteristics of the periodontitis. So for someone with these problems, it would be worth it to get the book, to look at which rinses are best for his or her mouth, and to make the teas. These are safe to swallow after rinsing, and could have systemic benefits as well.

Contrast this with synthetic chemical antiseptic rinses often recommended by dentists. They kill bacteria and can be helpful with infected gums, but could be toxic if swallowed. They can be useful for that situation, but when people use these harsher mouthwashes routinely, when there is no periodontitis, they kill many beneficial bacteria as well. This is my comment, not in the book: The microbiome in the mouth needs to be balanced. Plant substances developed along with humans and have more complex actions than synthetic chemicals. They are less likely to harm the beneficial bacteria, having a selective action against invasive, virulent bacteria and viruses, naturally, as the plants themselves developed these substances to protect themselves against invasive microorganisms. I would also add that the beneficial bacteria in the mouth are needed to transform nitrates in green vegetables and beets into nitrites, which are then converted to nitric oxide in the stomach. We need nitric oxide to relax arteries. It is called “endothelial relaxing factor.” Studies demonstrated that people using regular commercial mouthwash saw their blood pressure go up, and the blood pressure would come down after stopping the mouthwash. The chemical rinses have only one action, anti-microbial, while the herbal rinses have all those other healing actions as well.

If a person finds it daunting to concoct all these rinses and teas from the various herbs, an herbal practitioner can be consulted. This book has information in the appendices about sources for obtaining these products and how to prepare herbal medicines from the raw materials.

The book discusses loss of teeth and the pro's and con's of implants, bridges, partials, and full dentures.

The authors do not take a position for or against root canals, a method of removing the insides of a dead tooth, and filling it with inert materials. I oppose root canals categorically. The microscopic channels in the dead tooth are too small to be filled, and varieties of non-beneficial bacteria can live in these areas indefinitely and can trigger systemic responses by the immune system that are causative of a variety of inflammatory and autoimmune conditions. In my opinion, a root canal tooth is still a dead tooth, and our bodies don't usually tolerate a dead part. My choice is to either tolerate a missing tooth, to get a bridge, or a partial. An implant is an option, but even titanium can cause health problems.

The book has a chapter on "Changing Ideas," about pro's and con's of fluoride, antibiotics, sealants, X-Rays, triclosan, and (mostly negative) about amalgams.

Chapter 10 describes habits, conditions, and diseases affecting the mouth, and their symptoms. Table 10.1 matches 49 conditions with 30 symptoms and signs, a very thorough coverage of a very complex set of health conditions affecting the mouth. Then 30 pages are devoted to these conditions, the causes, and medical and dental interventions for each.

The chapter with the 50 pages of herbal formulary for 41 herbs describes for each herb the botanical name, the parts of the plants used, constituents, taste, actions, indications, and safety issues. This can be helpful for choosing which combination of herbs could be most helpful for any individual's condition.

A chapter with 35 pages describes how to prepare the various types of herbal remedies, teas, decoctions, infusions, baths, compresses, poultices, oils, and tinctures. Table 12.2 is across-reference of 41 herbs with 29 symptoms.

Chapter 13 discusses various foods and beverages, food constituents affecting the pH of the mouth and the rest of the body, and a variety of vitamins and minerals and their importance for the mouth.

A chapter about "The Mouth as Microcosm of the Body" describes the oral-systemic connections reported in the scientific literature: Alzheimer's disease and other neurological disorders, arthritis, cancer, cardiovascular disease, immune dysfunction, diabetes, HIV, hypertension, implants, kidney disease, liver disease, lung disease, reproductive health, medications, obesity, head and neck cancer, osteoporosis, pancreatic cancer, pregnancy, scurvy, stroke, lupus, tobacco and alcohol, and ulcers. The mouth can be a window on the rest of the body, and almost any condition in the body can affect the mouth and teeth.