****In the July 2007 issue of the Dentistry Today magazine the role of advanced techniques to address Periodontitis were discussed. Following is an excerpt from that article which is now available on-line. To read the entire article click on the following link Dentistry Today Home Page. Once you're at the web site you must Register (it's free) and then click on the Articles Achieve tab on the left margin.**

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New Age Periodontics: What's Coming Down the Pike

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A whole new light is emerging as we continue to learn more about periodontitis, one of the most interesting and baffling diseases. We are entering a new age as we look at periodontal disease from a different perspective. New modes of therapy have arrived, and laser treatment has expanded rapidly over the last several years. Treatment with locally administered antibiotics has become common. Utilization of host modulators such as subantimicrobial doses of doxycycline are popular. As we progress, risk assessment will become increasingly important, as well as a patient's nutritional status and antioxidant assessment and supplementation.

Similarly, free radicals play an important role in the development of periodontal disease. Bacteria in periodontal pockets produce collagenase, hyaluronidase, endotoxins, and antigens that trigger immunologic reaction. Neutrophilic lysosomes produce oxygen-derived free radicals, collagenase, serine proteases, and histamines. Patients with chronic periodontal disease have lower levels of antioxidants, especially glutathione. Antioxidants can neutralize the free radicals. A better understanding of how antioxidants function in the pathogenesis of periodontitis, and the effects of diet and nutritional supplementation on antioxidant status, may lead to new strategies on the treatment of the disease. An accurate and low-cost noninvasive laser test to measure a patient's antioxidant levels is commercially available and will become part of the prevention and treatment modules (Biophotonic Scanner [Pharmanex]). It is well-accepted that antioxidants play a major role in the immune system, fighting cancer and aging.(15) Studies have shown that antioxidant levels play a role in periodontal disease and that periodontal disease significantly improves when these levels are restored to accepted levels. High-quality pharmaceutical-grade nutritional supplements are now proven to make a difference, elevate antioxidants and beta carotenoids, and become part of every module in the model. The laser test for antioxidants provides a method to measure these levels on an ongoing basis and to confirm the effectiveness of a supplement. Nutritional assessment and supplementation are not new to dentistry, and the role of the dental hygienist as a nutritional counselor will enjoy renewed attention and importance.