

Robert T. Sataloff, MD, DMA, Associate Editor

The Use of Nutrition and Integrative Medicine or Complementary and Alternative Medicine (CAM) for Singers, Part 2

Joel S. Edman, Lauren B. Kondrad, and Birgit Rakel



Joel S. Edman



Lauren B. Kondrad



Birgit Rakel

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IN PART 1 OF THIS ARTICLE a range of background information was presented that is important to understand in order to use effectively the various modalities that make up integrative medicine. This included an overall categorization of integrative medicine as well as specific information describing dietary and nutritional supplement guidelines, physical fitness, stress management, and other approaches. The challenge is to develop an individualized and unique program that is effective, by considering and applying these principles and modalities.

COMMON SYMPTOMS AND DISORDERS THAT MAY AFFECT SINGERS

Gastroesophageal Reflux Disease (GERD)

Gastroesophageal Reflux Disease (GERD) and laryngopharyngeal reflux (LPR) are common in choral and solo singers.¹ This gastrointestinal illness, more commonly known as heartburn, is caused by an abnormal passing of stomach acid into the esophagus. Integrative medicine therapies encourage lifestyle changes that can decrease GERD symptoms. For example, lifestyle changes such as quitting smoking and losing weight, avoiding medications and supplements that agitate the esophageal lining, reducing meal size, and reducing the quantity of fluids consumed with meals can reduce or eliminate GERD symptoms in some people. They also may help symptoms of laryngopharyngeal reflux.

Other integrative medicine modalities such as elimination diets, stress management, homeopathy, and traditional Chinese medicine (TCM) should also be considered when managing the effects of GERD or LPR. From a nutritional standpoint, food should be chewed well, and smaller and more frequent meals should be consumed to avoid overeating. Walking after eating if possible, and waiting two to three hours before lying down, also are helpful. Stomach stimulants or irritants such as high fat and/or fried foods, caffeine-containing foods (coffee, chocolate, tea, etc.), alcohol, spicy and hot foods, sugars, and acidic foods (tomatoes, orange juice, etc.) should be avoided or reduced. The elimi-

nation or rotation of particularly allergenic or intolerant foods such as dairy, wheat, and sugar may be beneficial. Healing foods or supplements such as ginger seasoning, aloe vera juice, digestive enzymes, and warm chamomile tea could improve GERD and LPR symptoms. Since stress has been reported to worsen GERD and LPR, exercise and relaxation techniques (described in Part 1) such as yoga, tai chi, chi gong, biofeedback, meditation/mindfulness-based stress reduction, guided imagery, and breathing exercises can reduce the stress contributing to GERD. Also, hobbies and fun approaches can lessen stress and promote relaxation. Finally, traditional Chinese medicine can be a helpful approach because it provides a complete assessment based on cultural, diagnostic, and therapeutic approaches that incorporate diet, lifestyle, botanical medicines, and acupuncture.

For integrative treatment of GERD or LPR, initial steps would include making diet improvements, exercising regularly, and introducing relaxation techniques. The next step would be to find supplements that might help, such as deglycyrrhizinated licorice (DGL, with the glycyrrhizin taken out, so it would not increase blood pressure), a probiotic, and/or a digestive enzyme. Finally, each approach might be refined and acupuncture/TCM might be introduced.

Allergies

More than twenty percent of Americans suffer from allergy symptoms each year, affecting their quality of life and their ability to work and function day to day. The term “allergy” is used to refer to physical symptoms or reactions such as rhinorrhea or “runny nose,” sneezing, throat itchiness, wheezing, and sometimes others. Integrative medicine promotes both preventive measures as well as treatment approaches. Preventive measures include removing environmental allergens from the home, reducing dust mites in mattress and pillow cases by washing them weekly in hot water, and replacing curtains with shades. It is also recommended that allergenic pets be removed from the home, or at least from the bedroom, and that high efficiency particulate air filters be purchased. Integrative modalities for allergy treatment include dietary guidelines and supplementation, mind-body therapy, and traditional Chinese medicine (TCM).

Specialized allergen avoidance diets may be helpful to control allergy symptoms or significantly reduce them

in some people. Although the most common contributing factor is thought to be dairy products, foods that may cause reactions include peanuts, wheat, sugar, citrus, yeast, and possibly others. Processed foods, saturated fat, partially hydrogenated oils, sugar, and refined flour products also may be problems because they may contribute to inflammation, and these might be avoided or minimized, as well. Higher intakes of cooked vegetables, tomatoes, and fruit can be protective factors for shortness of breath and wheezing in asthmatic individuals.² Certain supplements can prevent and reduce allergy symptoms and should be discussed with a primary care doctor or integrative medicine practitioner as an alternative measure to pharmaceuticals or to try before resorting to medication. These supplements include omega-3 fatty acids, quercetin, vitamin C, and magnesium. A good resource is *Sinus Survival* by Robert Ivker, with specific chapters that include information on diet, supplements, stress, air and water quality, etc.³

Research suggests that mind-body therapy may be helpful for many allergic conditions.⁴ These therapies may include self-hypnosis, meditation, and mindfulness-based stress reduction.

Acupuncture and Chinese herbs and botanicals also have positive effects on allergic rhinitis. Healing botanicals include stinging nettle as an antihistamine, and butterbur for the treatment of seasonal rhinitis (hay fever). These treatments sometimes may be just as effective as pharmaceuticals, and although more research is needed, they often have fewer side effects.

Upper Respiratory Infections

Viral infections of the upper respiratory tract cause the common cold, an upper respiratory infection (URI). Some people are more prone to URIs, while others get them less frequently, but URIs are man's most common illness. Common symptoms of URIs include nasal congestion and drainage, sore throat, cough, and sneezing with variations in severity. Although there is no specific cure for the common cold, many preventive measures such as frequent hand washing, nutrition, and exercise can help protect against colds, all of which are incorporated into an integrative approach.

Botanical remedies have historically been the most prevalent treatment measure for the common cold. Chamomile has been used for acute respiratory infec-

tions, and a few cups of chamomile tea per day or hot moist chamomile inhalation via humidifier during a URI are used commonly as a supportive treatment. Some studies have shown benefits with the use of echinacea in early treatment of the common cold. Peppermint has also been used widely for coughs and colds as tea infusions or as mint oils applied topically.⁵ Other botanicals with common medicinal use with potential benefits for URI symptoms include lemon, ginger, garlic, goldenseal, elderberry, astragalus, and andrographis.

Some nutritional and supplementation approaches also have known benefits in treating URI symptoms. Traditionally, hot chicken soup (preferably if the soup is made from free-range chicken with hearty organic vegetables) is a great cold remedy, with researched support and positive testimonial outcomes. Vitamin C as a supplement has also been used for prevention and treatment of colds due to research that indicates vitamin C has a role in respiratory defense mechanisms.⁶ Zinc also can have a benefit on URI treatment, but further studies are needed to determine the extent of benefit. Overall, maintaining a healthy diet daily with incorporation of vitamin C, zinc, astragalus, and/or goldenseal can be a good preventive measure to reduce yearly occurrences of URIs.

Many studies also support mind-body therapies in treatment and prevention of URIs. Moderate regular exercise protects against infection, while acute and chronic stress increases risk. Thus, maintenance of psychological health and measures to improve mental health, such as positive thinking and meditation, counseling or mindfulness-based stress reduction, are also important to the prevention and moderation of URI symptoms.

The foundation approach when an individual develops URI should include diet changes, baseline supplements, exercise, relaxation, saline spray, or netipot. Extra supplements—astragalus, elderberry, slippery elm, or zinc lozenges—and steam inhalations can be taken if patients feel an illness beginning.

Menopause and Hot Flashes

Menopause is defined as the cessation of a woman's period for one year. The average American woman goes into menopause at age fifty-two. Although all women experience menopause, it is not considered a disorder, even though some women need treatments to help alleviate symptoms like hot flashes, insomnia, and mood

changes. Since the release of data from the Woman's Health Initiative, which showed an increase in breast cancer and cardiovascular disease, and with it the decrease of use of Hormone Replacement Therapy (HRT), more women are looking to find relief by using integrative therapies.⁷ By far the most effective and well researched herbal remedy is black cohosh, with more than twelve clinical trials including a workshop by the NIH on the safety of black cohosh.⁸ Black cohosh is a selective estrogen receptor modifier that can produce mild GI symptoms in rare cases and is otherwise well tolerated. Evening primrose oil has been shown to help with menopausal hot flashes in some women, but it may need to be avoided in women with a coexisting seizure disorder if there are adverse effects. Valerian root is a helpful herbal remedy for insomnia, which affects a lot of menopausal women.

Diet plays an important role in a treatment plan, as phytoestrogens (compounds found in foods like soy, flaxseed, chickpeas, and vegetables like brussels sprouts and broccoli) have been shown to have mild estrogenic effects, or modify estrogen metabolism, and that can reduce menopausal symptoms. It is important to note that some women might experience an increased amount of GI bloating and flatulence, so singers might want to introduce one food at a time to avoid possible discomfort that might affect vocal performance.

Another important factor may be influences from stress, although the research is not very strong at this point.⁹ Therefore, regular stretching and/or exercise, as well as relaxation techniques, could produce benefit.

Performance Anxiety

Music Performance Anxiety (MPA) is a challenge that affects nearly every professional vocalist at some time. MPA is classified as an anxiety disorder that ranges in severity from the normal healthy anxiety associated with the profession to the debilitating symptoms associated with "stage fright."¹⁰ Anxiety disorders remain among the most common medical conditions in primary care. They are characterized by excessive worrying, irritability, muscle tension, restlessness, difficulty concentrating, and sleep disturbance, which can result in a disruption of daily life if left untreated.

Exercise and movement therapies have been shown to greatly decrease performance anxiety symptoms. Aerobic exercise for longer than twelve minutes per day

for a minimum of ten weeks proved necessary to achieve significant anxiety reduction.¹¹ Yoga also has been shown to reduce anxiety symptoms.¹² Yoga is a technique used in holistic medicine that incorporates meditation, breathing exercises, concentration, and physical posturing that increases strength and flexibility. In integrative medicine, yoga is individualized to each person's abilities and needs; it can decrease acute and chronic stress, and enhance performance in a variety of physical and cognitive tasks, all of which would be beneficial in combating performance anxiety.

Some dietary and nutritional supplementation approaches also can help with performance anxiety. Hypoglycemia, or abnormal glucose tolerance, is a primary dietary factor that should be addressed (see Part 1 of this article). Caffeine increases anxiety in most people and should be avoided or minimized by people with this problem. Alcohol should also be avoided because it decreases serotonin levels; serotonin is an important neurotransmitter for combating stress.

Inadequate omega-3 fatty acid intake and status has been correlated with increased anxiety and depression, so performers should look at dietary and supplemental sources to achieve adequate omega-3 intake, and balanced omega-3 to omega-6 levels.¹³ Deficiency in some nutrients also can lead to anxiety, so supplementation of certain nutrients, such as vitamin B₁₂ and folic acid or a stress B complex may be helpful in decreasing overall anxiety.¹⁴

Incorporation of mind-body techniques is a big part of integrative medicine, and is especially beneficial for performance anxiety. Psychotherapy often is a very effective therapeutic intervention in the forms of behavioral and cognitive-behavioral therapies. Relaxation and stress reduction techniques such as mindfulness-based stress reduction also are beneficial. Other potentially effective relaxation therapies for anxiety are those that promote a sense of calm, such as massage, sound or music therapy, aromatherapy (e.g., lavender), guided imagery, and hypnosis. These techniques teach the patient how to manage anxiety rather than trying to eliminate it, which is usually ineffective. Finally, traditional Chinese medicine techniques such as acupuncture have been shown in some small trials to enhance the treatment of anxiety.

An integrative approach to MPA would therefore include a foundation of a healthy diet, regular exercise,

frequent practice of a relaxation technique, and targeted nutritional supplements. Other approaches could include counseling, massage, acupuncture/TCM, and/or other specific and helpful approaches.

PRACTICAL APPLICATION OF NUTRITION AND INTEGRATIVE MEDICINE

There are three primary steps for setting up an integrative medicine approach to care, including: (1) developing a healthy lifestyle (or as healthy as possible); (2) assembling an integrative healthcare team; and (3) learning how to optimally use the tools and resources available. While these approaches may not always work, they will keep people feeling as well as possible and provide excellent opportunities to address symptoms or problems using natural approaches, minimizing the risk of other approaches that may have side effects.

Integrative Healthcare Team

An integrative healthcare team will be different for each person based on his/her needs and preferences. What would be included for everyone would be a good primary care physician (PCP, a family medicine or internal medicine physician), an effective integrative medicine practitioner (could be a physician and/or other practitioner such as a nutritionist, acupuncturist, osteopath, herbalist, massage therapist), and a mind/body medicine practitioner or counselor (there are many ways to address this as described above). Other practitioners would address any other health concerns that are important, such as an OB-GYN, cardiologist, allergist, personal trainer, etc.

What to Do When Medications are Recommended

Attention to medication use is important because the therapeutic value is also accompanied by potential side effects and interactions of medications.¹⁵ Probably the best way to approach this situation, in addition to having a good otolaryngologist, is to have an integrative medicine physician who can consult regarding possible nonallopathic options that may be available. At the same time, it is helpful to have a primary care doctor who is open to these potentially helpful approaches so that patients are not "caught in the middle" with conflicting recommendations.

How to implement an approach will also depend on what the specific symptoms or problems are, although they may be categorized according to whether they are acute and self-limiting (e.g., cold or URI), or whether they are chronic and ongoing (e.g., allergies, performance anxiety, or ongoing GERD or LPR). Interestingly, applying these integrative approaches effectively may help in the amelioration of the symptoms or address underlying contributing factors so that new problems do not progress to a chronic condition.

An example of how to apply these approaches to a cold or URI would be to take steps at the time symptoms are noted. These would include eating better, getting more rest, and taking additional supplements like vitamin C, zinc, and/or astagalus.

With regard to something like GERD or LPR, the first step would be to establish a better overall lifestyle that includes a healthy diet with less allergenic foods, or other foods that aggravate reflux (spices, caffeine, etc.), some beneficial supplements, regular stretching and exercise (three to five times per week), and regular relaxation practice (again, three to five times per week plus when needed). A next step could be to try a few supplements to see if they help and/or to see an acupuncturist/traditional Chinese medicine practitioner. Another option would be to get some body work such as massage and/or osteopathic or chiropractic therapies. It would be better not to apply them all at once so that the effects of each intervention can be recognized. Finally, it is most helpful to have the guidance and support of integrative practitioners who have significant experience with these symptoms and disorders. It also is important to remember that traditional medical evaluations should be considered in many conditions. GERD and LPR for example, can have significant consequences including cancer, and a comprehensive medical assessment should be combined with integrative approaches.

Important Consideration for Integrative Medicine Use

The term that is now used for applying holistic care is integrative medicine, and it incorporates the best of natural healing modalities and standard medical care. With this in mind, people should be cautious about applying integrative modalities alone, when there is a severe or acute situation that has risks associated with it, or when

there are ongoing significant symptoms that could be alleviated quickly and effectively by use of medication. Working with qualified and caring practitioners functioning as an interdisciplinary team can create as effective a process as possible for addressing symptoms or problems as they arise.

CONCLUSION

Integrative medicine is a developing approach to health care that is increasing in demand. In many ways, it seeks to return to a system that is personal, supportive, holistic, and as noninvasive as possible. This is especially important and useful to promote optimal health, well-being, and performance, especially as people age. Although there are many areas that require significantly more research and development, many of the techniques can be used safely and effectively.

An important consideration for the use of integrative medicine is how to find qualified practitioners who can effectively contribute to an individual's care and participate in a health care team. Because credentialing will vary according to the specialty being considered, potential practitioners could be identified from academic or hospital settings (see CAHCIM listing below), organizations such as the American Holistic Medical Association (see listing below), from family, friends, or work colleagues who have had good experiences, and/or other sources. In addition, while physician visits often are covered by health insurance (especially as an out of network consultation), acupuncture, chiropractic treatments, nutritional counseling, and massage are covered only in some cases. Some modalities, however, such as yoga, tai chi, qigong, and others, may be accessed through group classes, books, tapes, and videos.

Integrative medicine approaches can be beneficial for wellness and preventive care, as well as for integrative or adjuvant treatment for chronic disorders. Unfortunately, many individuals seek such help only when they have exhausted conventional treatments, and they may have unrealistic expectations for dramatic results when integrative medicine approaches often have a longer time frame and produce more gradual benefits. As more preventive and lifestyle approaches are incorporated into healthcare, one hopes there will also be more discussion by individuals with their practitioners about some of

these integrative medicine treatment options. This should help to encourage two important tenets of integrative medicine, partnership in choices of treatment approaches and healthy lifestyle or prevention.

Future developments in integrative medicine will significantly influence how broadly and effectively integrative medicine modalities will be utilized. Therefore, many resources and references are included below in order to assist readers in exploring the effective use of integrative medicine. Singing teachers should be familiar with important concepts in nutrition and integrative medicine and should be prepared to guide their interested students toward appropriate reference sources and consultation. It is also important for teachers to help their students understand that nutrition and integrative medicine are complex topics and that advice from experts can be invaluable. Unguided self-treatment using these modalities without expert diagnosis and guidance can be as hazardous in some cases as self-treatment with traditional allopathic interventions.

WEBSITES AND RESOURCES

American Academy of Medical Acupuncture (AAMA) and Medical Acupuncture Research Foundation, 5820 Wilshire Blvd., Suite 500, Los Angeles, CA 90036; (323) 937-5514; www.medicalacupuncture.org.

American Association of Acupuncture and Oriental Medicine, 433 Front St., Catasauqua, PA 18032; (610) 266-1433; www.aaom.org.

American Association of Naturopathic Physicians, 4435 Wisconsin Ave., NW, Suite 403, Washington, DC 20016; (866) 538-2267; www.naturopathic.org.

American Botanical Council, 6200 Manor Road, Austin, TX 78723; (512) 926-4900; <http://www.herbalgram.org>.

American Chiropractic Association, 1701 Clarendon Blvd., Arlington VA 22209; (703) 276-8800; www.amerchiro.org.

American Holistic Medical Association, PO Box 2016, Edmonds, WA 98020; (425) 967-0737; www.holisticmedicine.org.

American Institute of Homeopathy, 801 N. Fairfax St., Suite 306, Alexandria, VA 22314; (888) 445-9988; www.homeopathyusa.org.

American Massage Therapy Association; www.amta.org; Foundation research database—www.amtafoundation.org.

American Osteopathic Association, 142 E. Ontario St., Chicago, IL 60611; (800) 621-1773; www.osteopathic.org.

Association for Applied Psychophysiology and Biofeedback, 10200 W. 44th Ave., #304, Wheat Ridge, CO 80033; (303) 422-8436; www.aapb.org.

Bravewell Collaborative, 1818 Oliver Ave. South, Minneapolis, MN 55405; www.bravewell.org.

Consortium of Academic Health Centers for Integrative Medicine (CAHCIM); www.imconsortium.org (listing of potential health centers and integrative medicine practitioners).

Duke University's Center for the Study of Religion, Spirituality and Health; www.dukespiritualityandhealth.org.

Institute for Functional Medicine, 4411 Pt. Fosdick Drive NW, Suite 305, P.O. Box 1697, Gig Harbor, WA 98335; (800) 228-0622; Fax: (253)853-6766; <http://www.functionalmedicine.org/>.

National Center for Complementary and Alternative Medicine (NCCAM), National Institutes of Health (NIH); 6707 Democracy Blvd., Suite 401, Bethesda, MD 20892; (888) 644-6226; <http://nccam.nih.gov>.

Natural Medicines Comprehensive Database (subscription required); <http://www.naturaldatabase.com>.

Office of Dietary Supplements, NIH, 6100 Executive Blvd., Rm 3B01, MSC 7517, Bethesda, MD 20892; (301) 435-2920; <http://ods.od.nih.gov>.

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Joel S. Edman, DSc, is the Director of Integrative Nutrition and Associate Research Director at the Myrna Brind Center of Integrative Medicine, Thomas Jefferson University and Hospital, Philadelphia, PA. He is also an integrative medicine consultant, educator, and health coach in Media, PA (www.EdmanNutrition.com).

Lauren B. Kondrad is a senior at Drexel University, majoring in biology, with future plans to attend medical school.

Birgit Rakel, MD, is the Director of the Integrative Medicine Women's Health Program and a Family Physician at the Myrna Brind Center of Integrative Medicine, Thomas Jefferson University and Hospital, Philadelphia, PA. She completed her integrative medicine/Bravewell Fellowship with Dr. Andrew Weil at the University of Arizona, and is an assistant professor in the departments of Family and Community Medicine, and Emergency Medicine.

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Dr. Peter Dennee
 Chair, Department of Music
 Carthage College
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