

# Bolster Membership With Innovative Integrated Programming

AS MORE AT-RISK POPULATIONS BECOME A PART OF OUR MEMBERSHIPS, IT WILL BE NECESSARY TO LOOK AT FITNESS AS MEDICINE AND TO TREAT THE WHOLE PERSON — MIND, BODY AND SPIRIT.

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**I**ntegrated medicine is a form of alternative, or complementary, medicine that incorporates concepts from both Chinese and western medicine. Like Asian medicine, it respects and follows the laws of nature, which makes it a natural medicine.

Integrated medicine encompasses all aspects of Chinese medicine — acupuncture, moxibustion, cupping, Tui Na, T'ai Chi and Qi Gong, as well as the latest scientific and technological advances in orthodox medicine. While western medicine focuses on anatomical findings and laboratory evidence of disease, traditional Chinese medicine is a form of energy medicine. In Chinese medicine, the accuracy of diagnosis de-

pends on the practitioner's understanding of Qi/Chi (the vital essence or energy of all living systems), and the patient's Yin/Yang balance.

Even dietary therapy in Chinese medicine is based on Yin/Yang principles.

Chinese and western medicine often support each other and alternate leading roles so that one becomes the complementary medicine of the other, depending on what the clinical condition of the patient best calls for. Integrated medicine is still practiced by only a few physicians worldwide, since it requires a strong background and training in both eastern and western medicine. Still, it is evolving as a major breakthrough in the medical field and attracts the interest of the public, who can envision its potential for significantly advancing the good practice of medicine and the overall health of the population at large.

## An integrated approach in your facility

This integrated model can be utilized in a variety of settings where healing takes place. What better facility to create integrative/complementary models than your club? More and more facilities are looking to integrated programs to excite members and staff about the continuum of positive lifestyle change. When designing these programs, it is often helpful to focus on a specific group within your membership. As an example, this article outlines the steps toward creating an integrated program for an at-risk group present in most facilities: Women.

The No. 1 cause of mortality in America is cardiovascular disease. Fifty-seven million

Americans have cardiac disease. It is also the leading cause of death in American women, causing more deaths annually than all forms of cancer combined. Of the 945,000 Americans who die each year from cardiovascular disease, 500,000 are women. African-American women are at special risk; they are 60 percent more likely than Caucasian women to die of coronary heart disease. A higher percent of African-American women also have hypertension and diabetes, both of which increase the risk of heart disease.

Approximately 25 percent of American women have high cholesterol levels. In addition to treating high blood pressure and

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maintaining a healthy lifestyle (which includes proper exercise, a nutritious diet, weight management and avoidance of smoking), the American Heart Association recommends aggressively treating high cholesterol to prevent heart disease in women.

Since cardiovascular disease has the greatest mortality, it will serve as an example for integrative/complementary programming for the club setting. Heart disease is the No. 1 killer of women. It's a scary statistic, but one we can change. Follow this explanation and action plan to learn how to keep the female heart beating strong for years to come.

### Step 1: Are you heart smart?

Learn the causes of heart disease (and how to avoid them) by becoming involved with the American Heart Association and the American Association of Cardiovascular and Pulmonary Rehabilitation. Find an interventional cardiologist in the area who is interested in community service and exercise prescription for the prevention and treatment of cardiovascular disease. This can be a medical doctor, naturopath, osteopath or Chinese physician.

### Step 2: Explore what constitutes healthy cholesterol levels

Excess cholesterol in the blood collects on the walls of certain blood vessels, decreasing their ability to provide proper blood flow to the tissues they feed. For example, a heart attack occurs when the heart receives insufficient blood flow. High levels of cholesterol also increase the risk of high blood pressure, stroke and circulation problems.





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- *The popularity of alternative medicine, along with yoga, tai chi and other mind/body programming, has led many people to seek a more integrated approach in their clubs and exercise routines. Log on to the URL above to see how one facility incorporated an integrated focus into its offerings.*

Cholesterol can be affected by consuming foods high in fat, but the body also synthesizes

cholesterol. Some people who adhere to a low-fat diet still have high cholesterol levels because their body synthesizes an excess amount. There are two forms in which cholesterol is present in the body: LDL (the harmful form) and HDL (the helpful form). Depending on the relative levels of these forms, along with the concentration of triglycerides (another type of body fat), certain drugs are more effective than others in correcting abnormalities. For example, a person with elevated LDL levels and normal triglycerides may be treated with different medications than someone with only elevated triglycerides. As with all medication, cholesterol-lowering drugs have a risk of side-effects. Research indicates that aerobic exercise and diet are the most effective ways to control cholesterol and should be the initial focus of treatment.

In addition to cholesterol, it is important for women to have their HDL and triglyceride levels monitored because these appear

to be stronger risk factors for heart disease in women than in men. The rise in the incidence of coronary heart disease at the time when estrogen levels decline has led to the common use of hormone replacement therapy (HRT) during menopause and thereafter. To tap into HRT members, you could develop a peri-menopause support group within your facility.

### Step 3: Explore nutritional and pharmaceutical alternatives

Statins are a class of drugs frequently used to reduce cholesterol. Some examples of statins are Lipitor, Mevacor and Baycol. An additional benefit of these drugs for postmenopausal women is that they may reduce the risk of osteoporosis and resultant fractures by stimulating bone growth. An exercise program of weight-bearing activity can complement the medication, or provide an alternative. Statins are currently the most potent drugs available for lowering cholesterol levels.

## Customize Mind/Body Programming to Benefit Your Members

This integrated approach can be utilized in a variety of special programs ranging in length from 6 to 12 weeks, or longer, with appropriate fees to cover time, expertise, equipment/supplies and personnel. Programs should include an initial assessment, the fundamental components of spirit, mind, body and emotion, and a final evaluation for efficacy and improvement. Typically, the program is comprised of:

- Education • Exercise • Nutrition • Group support
- Meditation/stress reduction

Some examples of mind/body programming include:

- **Weigh To Go:** A comprehensive weight management program
- Five sessions, each lasting one and a half hours, presented by a registered dietician
- One class session led by an exercise specialist
- A comprehensive personal wellness profile defining each member's lifestyle and health status
- A complete handbook
- Coping strategies class session led by a psychologist
- Meditation orientation
- Bereavement support group: A support group to help grieving family members cope with the loss of a loved one.
- Brain injury community network group: A community network group and educational program for survivors of brain injury, including family members, caregivers and friends.
- Diabetes awareness group: A support group to heighten awareness of diabetes, its cause, prevention and current treatments.
- Stroke support group: A support group for stroke survivors and their families, as well as those seeking information on current trends in prevention and treatment.

Other drugs, such as Questran and Colestid, lower cholesterol by causing the body to increase the conversion of cholesterol to bile acids, which are subsequently excreted. The B vitamin niacin may also be used to lower cholesterol, but due to its high tendency to cause severe flushing and itching, many people cannot tolerate it. Even though it is a vitamin, it can have some serious side-effects at the doses needed to lower cholesterol, so people receiving niacin should be supervised.

Evolve and Cardiff are two over the counter supplements made from rice bran oil that lower cholesterol. They contain a tocotrienol that has activity similar to vitamin E. They act like the statins by decreasing the body's synthesis of cholesterol. Although they appear to be effective, long-term studies are needed to prove their safety and effectiveness.

Garlic is an alternative medicine for lowering cholesterol. In



the U.S., all nutraceuticals (food substances used for their pharmacological drug effects), such as garlic supplements, are not regulated as drugs, so scientific data supporting

claims are not always available. Rigid quality control standards are not required for nutraceuticals and marked variability can occur in the potency and purity of these products. Although garlic seems to inhibit the body's ability to synthesize cholesterol, recent studies suggest that garlic supplements may not lower cholesterol, either. Garlic used for cooking is generally safe, but large amounts in supplements can increase the effects of anticoagulants, therefore increasing the tendency for bleeding, and can also interfere with blood sugar control in diabetics. Further studies are required before conclusions can be made.

Fiber and whole grains may reduce the risk of heart disease. The FDA allows health claims to be placed on foods that contain at least 51 percent whole grains (whole wheat, oats, corn, barley and rice). The claims may state that these foods reduce the risk of heart disease. The fiber in the grain appears to provide the benefits. Psyllium acts by inhibiting absorption of dietary cholesterol. The effects on cholesterol levels are generally modest at best. Oat bran acts in a similar manner, but is more effective at lowering cholesterol than psyllium.

Vitamin E has been used for its cardio-protective effect due to its ability to prevent oxidation (antioxidant) reactions. Part of the damage to blood vessels associated with high cholesterol is due to oxidation of LDL and the action of oxidative enzymes. Vitamin E is thought to be able to slow or reverse this process. Several recent studies have not seen a cardioprotective effect of vitamin E, but this may be due to the dose used or the possibility that combination antioxidants may be needed to see this effect. For example, vitamin C may be necessary to keep the vitamin E in an antioxidant form. Vitamin E is well-tolerated, but at high doses it can increase the risk of bleeding associated with anticoagulants.

Homocysteine levels have also been implicated to increase the risk of heart disease. Homocysteine is an amino acid that is formed from protein that appears to damage the lining of blood vessels and can result in atherosclerosis, a condition in which fat deposits in the arteries and makes them stiff, interfering with blood flow. Atherosclerosis can cause heart disease. Folic acid can decrease homocysteine levels. Vitamin B6 and B12 can also be helpful. Homocysteine levels may be an inherited trait, or may be associated with renal failure, psoriasis, certain leukemias, folate B6 or B12 deficiencies of certain drugs. The AMA recommends consuming at least 400mcg of folic acid per day. People with elevated homocysteine levels will require higher amounts. Adequate folic acid consumption is important in pregnancy to decrease the chances of the baby developing neural tube defects. People with elevated homocysteine levels will require higher amounts.

A recent article in the *Journal of the American College of Cardiology* (37: 1858-1863, 2001) reported that heart disease patients who ingested 5 milligrams of folic acid daily for 12 weeks had slightly better functioning of their arterial inner lining, as well as a greater ability of their arteries to widen appropriately, than those who took an inactive placebo.

#### **Step 4: Learn how to recognize and minimize heart-damaging stress**

A recent survey reported the 33 percent of 2,500 workers said they were more “stressed” now than at the same time a year ago. There are two types of stress: eustress and distress. Eustress is a positive type of stress that stimulates and motivates an individual. Distress, or hindrance stress, is linked to red tape, stalled careers, lack of job security, confusion over job goals and the degree to which politics rather than performance shape employer decisions, according to John Boudreau, head of Cornell University’s Center for Advanced Human Resource Studies. Regardless, any kind of stress, if prolonged or frequent, can damage health. The National Institute for Occupational Safety and Health shows research linking stress to ailments ranging from heart disease to muscle-bone and immune-system disorders.

It is well-established and grounded in clinical research that exercise can bring about beneficial psychological and physiological changes that reduce stress. Stress is associated with increases in cortisol secretion, blood pressure, heart rate, blood glucose levels, myocardial ischemia and decreased immune function. Meditative techniques have proven to elevate stress and provide an exercise component to beginning exercisers and veterans of exercise alike.

**Yoga.** Yoga can enhance flexibility, build strength, align the musculoskeletal system, reduce elevated blood pressure, aid in cancer treatment and lessen breathing difficulties. Yoga is an ancient art of practiced meditation used for centuries to effectively calm the body and enhance concentration.

**Tai Chi.** Tai Chi’s full name is Tai Chi Ch’uan, also written taijiquan and often translated as “Chinese shadow boxing.” While considered a martial art, Tai Chi consists of sequences of smooth, flowing movements called forms, which are inspired by animals in nature. Each of the

## **Start a Speakers’ Bureau**

The speakers’ bureau is a community service offered to local social and civic clubs, businesses and other organizations. The speakers bureau includes physicians, nurses, managers, physical therapists, exercise physiologists and other skilled professionals who can talk to groups on a variety of subjects. Typical topics include:

- The female athlete
- Asthma
- Sports injury prevention
- Stress reduction
- Good nutrition
- Osteoporosis
- Work safety and violence
- Prescriptive vs. non-prescriptive drugs and their interactions

60 or so forms has a name that is both evocative and descriptive, such as Grasp a Sparrow's Tail and Stork Spreading Its Wings. Tai Chi is better observed or experienced than explained. Forms range in difficulty from those that take a minimum of skill to perform to those that require exquisite grace and balance to execute. A Tai Chi routine can be tailored to suit the practitioner, employing forms that are appropriate for one's skill level. However, doing any of the forms properly requires balance, muscle control, concentration and deep, uniform breathing (See Tai Chi for Stress Reduction.).

### Step 5: Stay informed of new treatment regimens

A plethora of information is available through scientific journals, the Internet and accredited organizations, including the Center for Disease Control and The National Institute of Health. Look to professional organizations and support their efforts toward the prevention and treatment of heart disease and the other leading killers and disablers. Armed with this new knowledge, enlighten the membership and create new opportunities and programs for their enhanced lifestyles.

### Ponder this

A recent study from Johns Hopkins University Center for Health Promotion strongly suggests that life may be longer for optimists, especially for those with a family history of heart disease. Why? After following 586 such men and women for five to 12 years (the average age starting at age 45), researchers found that the optimists had only half the number of "heart events" of their less optimistic counterparts. Surprisingly, education level, diabetes and smoking status were not found to be strong predictors of heart disease. Having fun could be considered a new way to self-medicate. **FM**

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### Reader feedback:

Do you have an example of the use of integrated medicine in your facility? Tell us about it!

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## Tai Chi Stress Reduction

As the ultimate in self-defense, the principles of Tai Chi Chuan are related to physiology, dynamics, psychology and moral life.

**Tai Chi Physiology.** The whole body and its limbs are moved slowly, without much exertion, so that the ligaments and bones will develop without harm, the moving of blood and strength will be regular, and the whole body will develop balance.

**Tai Chi Dynamics.** Every movement in Tai Chi Chuan contains a circle. The circle neutralizes the force of oncoming attacks, a principle closely related to Newton's law. The route of any matter in motion is straight. If one intends to get control of the oncoming force at an angle, change its direction and shift the opponent's center of gravity out of the base, the best method to adopt is a circular formation. It not only neutralizes the force, but also employs it for one's own use; with the help of a slight returning force, it will give remarkable results in a counter attack.

**Psychology.** Tai Chi Chuan needs slow movements only, as it makes use of intrinsic energy. The application of the psychology requires that when you intend to move the energy, you must will that you are moving it; that when you intend to lower it, you should will that you are lowering it to your navel-psyche center. When you intend to apply the intrinsic energy in pushing, you must will that it goes from the palm to the opponent.

**Moral life.** A certain amount of space and energy go toward the end of each movement, and the joint parts of the upper and lower limbs should not be straight, but slightly bent in the form of an arc. To deal with things and people, we go a roundabout way, without wasting energy insisting on an extreme. This is the way to strengthen ourselves to meet unforeseen developments.

Tai Chi is an extremely convenient form of exercise. A typical routine takes only about 10 minutes to perform, preferably shortly after rising and before retiring for a duration of 10 to 30 minutes. Equipment consists of loose clothing and flat shoes with soles that won't stick to the floor. Lighting and music are optional.

Historically, the Chinese have used Tai Chi to treat a host of health problems, including circulation and nervous system disorders, addictions, muscle injuries, arthritis and even asthma. A study published in the *Journal of the American Geriatrics Society* demonstrated that Tai Chi instruction improved balance and strength in people ages 70 and older, reducing the risk of falls in that age group. Of 200 women and men, those who were randomly assigned to undergo Tai Chi training for 15 weeks reduced their risk of falling by 47.5 percent. The Tai Chi group also had significantly lower blood pressure in response to aerobic exercise at the end of the program than they did at the beginning. An earlier study, published in the same journal, reported that practicing Tai Chi regularly may delay the decline of cardiopulmonary function in older adults.

In effect, Tai Chi Chuan is closely related to meditation. However, long practice of meditation may hinder blood circulation, but Tai Chi Chuan helps to quicken it. It also helps to bring about the peace of mind and exercise of breathing as desired in meditation. Tai Chi Chuan clears the mind and strengthens the brain. It renders one's thinking lucid, one's mind peaceful and increases one's vital force.

