Walking to better health

Ellen Jenkin-Cappiello, RN, BS, MPH, CHES
Health Educator

Walking, recognized over two thousand years ago as “man’s best medicine” by the Greek physician Hippocrates, is still one of the best forms of exercise and plays a role in disease prevention. Some of the health benefits include: muscle toning and strengthening; lowering bad cholesterol and triglyceride levels; lowering blood pressure; reducing risk of heart disease; slowing down the rate of bone loss and increasing bone mass; lessening stress and anxiety; and improving stamina and energy levels.

And if your goal is to shed pounds, walking is one of the safest ways to achieve that goal, when combined with a healthy diet. For example, if you walk for 30 minutes at four miles per hour you will burn about 165 calories on a level surface, 225 calories on a slight incline and 360 calories on a 10% incline. Exercise also aids with weight management by increasing metabolism, which causes the body to use calories more effectively and store less fat.

Choose your shoes

Unlike some other forms of exercise, walking requires very little equipment:

Sports nutrition for weekend warriors

Lisa Kimmel, MS, RD
Sports Nutritionist

Pick your proteins

Protein’s amino acids are building blocks for muscles. While it’s not the primary fuel source during exercise, it is an important component of body organs, enzymes and hemoglobin, which carries oxygen to working muscles. It also helps to rebuild muscle tissue after an intense workout. Animal-based protein foods (dairy, fish, poultry, and meat) contain all of the essential amino acids. Vegetarians can ensure that they get all of the essential amino acids by eating a wide variety of high protein, plant-based foods such as soybeans, nuts, beans, seeds and grains daily.

Count on your carbs

Carbohydrates are the premier energy source for working muscles. But think beyond rice and linguine. Carbohydrates are also found in fruits, vegetables, beans, dairy products, and starchy foods like potatoes and corn. Not only are these foods energy powerhouses, but they are also rich in antioxidants and minerals, like vitamins C and A and calcium.

When choosing grains, look for “whole” versus refined products. Whole grains are naturally rich in nutrients, especially B-vitamins which are critical for turning food into energy. (See the March 2008 issue of Yale Health Care for an article on whole grains; past issues are on our website: www.yale.edu/yhp/publications/.)

High-energy fitness favorites

• Oatmeal topped with strawberries
• Low fat yogurt with walnuts and blueberries
• Whole grain pita with hummus, spinach and fresh tomato slices
• Turkey slices on a whole grain roll with lettuce, tomato and avocado

In this issue, we’re focusing on health benefits of exercise, with tips on walking for health, on eating right, and on the impact of physical activity on psychological and emotional well-being. As always, if you have any questions or concerns about incorporating exercise into your life, talk with your clinician.

WATCH FOR OUR NEW FEATURE

Beginning with the next issue, yale health care will offer “Ask our clinicians”—a feature designed to answer members’ questions about health topics. Submit your queries to member.services@yale.edu, with “newsletter query” in the subject line. We’ll look forward to hearing from you.
Sports nutrition

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It was once thought that plant-based protein foods needed to be combined at the same meal. Research now supports that all of the essential amino acids can be accounted for by eating a wide variety of plant-based foods throughout each day.

Fit in fats

Many of us have a love/hate relationship with dietary fat. While trans fats (found in products that contain hydrogenated oils) should be avoided and “saturated fats” (found in animal foods, like full fat dairy products and meat) should be limited, “heart healthy fats” are important in a well-balanced diet. Healthy fats found in nuts, nut butters, oils, seeds, olives, flax, avocados and cold water fish are a concentrated source of energy and help the body absorb fat-soluble vitamins.

Divide and conquer

Think “peace sign” when it comes to picking your portions. Fill 1/3 of your plate with whole grains, 1/3 with fruits and vegetables and 1/3 with lean protein. Wash it down with skim milk, water, or other unsweetened drinks like seltzer or iced tea. Fruit juice, while a good source of vitamins and minerals, also provides significant calories, so if you are calorie-conscious, stick with low-calorie fluids, and eating your fruit instead.

Drink up...

...and stay hydrated. Jazz up plain water with sliced citrus fruit or try flavored seltzers. “Eat your fluids” with foods naturally high in water content, like dark leafy greens, cucumbers, tomatoes, oranges and melons. Keep a water bottle handy during workouts and replace your losses when you’re done. A simple way to monitor your hydration status is to check the color of your urine—aim for a clear and lighter color. For most people, hydrating with water is the gold standard, but if you’re going to be active for 60 minutes or more, consider using a sports drink for an extra boost from easily-absorbed carbohydrates and added electrolytes.

Source: Nancy Clark’s Sports Nutrition Guidebook by Nancy Clark, MS, RD. 1997

If you are not a fan of commercial sports drinks, try making your own:

- 4 tablespoons sugar
- 1/4 teaspoon salt
- 1/4 cup boiling water
- 1/4 cup orange juice (not concentrate) or 2 tablespoons lemon juice
- 3 3/4 cups cold water

In a pitcher, dissolve the sugar and salt in the hot water. Add the juice and remaining water; chill and enjoy.

Nutrition information for 8 ounces (1 cup): calories: 50; carbohydrate 12 grams; sodium 110 mg; potassium 30 mg.

Source: Nancy Clark’s Sports Nutrition Guidebook by Nancy Clark, MS, RD. 1997

See our web site for an outline of important benefit changes and enhancements: www.yale.edu/yhp
The break-through in labor relations at Yale reflected in the University’s new contract with its Local 34 and Local 35 unionized employees is cause for cheer throughout the Yale community. Nowhere do we experience the positive impact of this agreement more directly than at YHP. The health plan is the workplace for more than 125 clerical and technical workers and, of course, a large majority of workers at Yale are YHP members.

The new contract provides a number of major benefits enhancements; it also offers compelling reasons for Aetna members to switch to YHP because the previous benefits differences between YHP and Aetna are disappearing. Of these, the change affecting virtually all members is in the YHP pharmacy benefit.

Starting this month, our staff and faculty members and dependents will no longer face a steep deductible and copayment schedule for prescription drugs, nor will there be an annual limit on YHP’s pharmaceutical coverage.

Other changes, while affecting smaller numbers of members, are still significant. Some examples: Coverage for inpatient rehabilitation and home health care is greatly increased. There will be a single infertility benefit for all Yale faculty and staff that increases our former YHP benefit four-fold. All YHP members can now enroll their 19-25 dependents in YHP at no additional cost. Our website www.yale.edu/yhp provides full details on all the changes.

Recognizing that YHP provides the greatest quality, service and value to Yale, the union negotiators stipulated that all newly-hired bargaining unit employees will receive health benefits through YHP exclusively for their first three years of employment. At the same time, the benefits enhancements at YHP and the rising cost of the alternative plan are very likely to encourage people to make a change to YHP. To facilitate enrollment, members of the Yale community will be able to switch into YHP during the month of July as well as during the annual open enrollment period in November.

The core values of YHP remain the same as they were at our founding nearly 40 years ago: excellent service for our members and the highest quality of care. We are pleased and proud that we can all now look to a very different future of labor/management cooperation and partnership as we plan for our move to 55 Lock Street.
Why sports?
Why do we participate in sports? The reasons are many—enjoyment of the activity, peer and family influence, health benefits, and an increase in physical conditioning and sense of well-being. Since “sport” could be an organized team, a structured game, or an individual endeavor, how do we define participation in sports? Is sport a way to push ourselves physically—either individually or as part of a team—or a necessary evil to get us off the couch?

Research (plus conventional wisdom) suggests that, for youngsters, participation in sports can improve self-esteem. Some research indicates that sports participation during early elementary school helps children develop essential motor skills. During adolescence—a time when individuals are struggling with potentially stressful physical, cognitive, and social changes—feeling positive about one’s physical self is an important predictor of general self-esteem. Physical self-esteem can include feelings of attractiveness as well as thinking that one is physically competent.

While a good deal of research supports the benefits of sports, actually participating in sports can be intimidating. Sport has a strong connection to the physical self which is an important part of identity and self-judgment. Sport can give one a sense of the body as trustworthy and strong, or the opposite, as weak and ineffective. Many have distressing memories of being pushed into sports activities they didn’t enjoy or do well at because the activities were supposed to be “good for them,” or were considered a health necessity.

Still, sports or physical activity can offer great benefits. The physical self is the public self that we and others see. Being physically active is a way to get in touch with our physical selves and appears to strengthen both the physical person and the sense of self.

What is self-esteem?
In 1969, noted self-esteem specialist, psychologist Nathaniel Branden, defined self-esteem as “...the experience of being competent to cope with the basic challenges of life and being worthy of happiness.” He indicates that self-esteem is a basic human need—central to normal, healthy self-development and valuable for survival.

Research into self-esteem has shown that positive self-esteem, or general self-worth, allows individuals to feel good about who they are and what they can do, while giving them the confidence to meet challenges. Individuals with high self-esteem generally have greater, and more accurate, knowledge of themselves than those with low self-esteem. High self-esteem is also related to involvement in daily activities, a more optimistic attitude, and better psychological health.

A decline in self-esteem can have a major effect on daily functioning and on future hopes and dreams. Individuals with low self-esteem often feel inadequate and incompetent, expect to fail, and eventually give up. Such a cycle of failure can be difficult to escape.

Where’s the connection?
What is the connection between self-esteem and sports? From early ages, children may be encouraged to experience team sports as a way to know themselves, to expand their abilities, to learn how to work with others, how to approach competition, and how to deal with both success and failure. For some, sports participation can provide a means of establishing an identity with a group, and a cooperative experience where everyone is valued regardless of outcome. We often hear about kids with early troubles who use sports to excel or those who say that relationships with coaches “saved their lives.” For all ages, sports can also be an outlet in times of stress.

However, while most people understand the benefits of physical activity, we may have difficulty finding activities that suit our needs and abilities. Sports activities may be readily available to young people, but once we are out of school, finding access to such activities is more difficult. For many, sports are equated with a feared gym class. We may have upsetting memories of being shunned because of lack of coordination, or overwhelmed by the thought of exposing ourselves and our bodies to ridicule or rejection.
Given these realities, the question is: in what ways can sports participation best enhance self-esteem?

**How does it work?**

While sports participation may directly improve feelings about one’s physical self (e.g., I can run fast), it may have a more indirect relationship with overall feelings of general self-esteem. Several researchers have shown that girls and boys who regularly participate in sports-related activities (outside of gym class) feel better about themselves physically, and have more positive body images than those who do not. The relationship between sports participation and general self-esteem is not direct; instead, participating in sports activities may increase feelings of physical ability and satisfaction with physical appearance—both of which increase general self-esteem. Physical appearance has been found to be the single most important factor in predicting general self-worth throughout the life cycle. For adolescents in particular, physical self-esteem (feelings about appearance) is consistently the most important predictor of general self-worth.

But what about the rest of us? Although much of the research focuses on early childhood through high school, concerns about appearance and body awareness continue throughout life. Early lessons that affect self-esteem also tend to last a lifetime. Individuals of all ages who participate in sports have a more positive body image than those who do not.

In researching this article I interviewed A., a varsity athlete on Yale’s women’s basketball team. When she was little, her first athletic endeavor was dance. She “loved it” and all it took was encouragement and enthusiasm, not skill. She describes herself as a “quiet” child and felt that dance and ultimately sports, gave her confidence and “forced me out of my shell.” She also emphasized the support she received from teammates in her success as an athlete as well as in the transition to Yale as a freshman. She stated, “Team support went beyond the court and helped me deal with competitive academic demands.”

She added, “Sports helps to broaden one’s self-definition by providing more than one way to measure ourselves and our successes.”

**Where do we go from here?**

Research clearly suggests that sports participation may enhance physical self-esteem, which in turn, predicts more positive general self-esteem. This side of the equation seems to be widely accepted. The opposite side, however, raises concerns.

The finding that sports participation might actually weaken the self-worth of some has implications for physical educators, parents, coaches, or anybody else who might encourage young and old alike to partake in sporting activities.

How can we make gym classes and formal team sports most beneficial? Educators, gym teachers, coaches, and parents need to emphasize and develop ways to measure and illustrate the physical and psychological gains available from these activities. At the same time, they need to focus less on the outcomes of competitive sports or the physical deficiencies of the less athletic children.

All young people, whether physically able or physically handicapped, or whether “naturally” athletic or not, can benefit physically, psychologically and socially from remaining physically active. The same benefits are available to people at all ages. For those who do not want to join a team or compete with others, choices might include walking, hiking, swimming, biking, martial arts conditioning, skating, dancing, boxing, aerobics, yoga, juggling, rock climbing or jumping rope—to name just a few.

When I asked A. how she might motivate her non-athlete friends in the years after college, she said she would invite them to experience the “natural high” one gets from physical activity. She concluded, “There is no other way to get the feeling of well-being that comes from physical activity, and it can be any one you choose!”

**Facts and concepts in this article are based on the work of a number of researchers. A detailed list of references is available on our web site at: www.yale.edu/uhp/publications/yhc/goldberg_sportsandselfesteem_references**
In addition, he is “a role model for commitment to patient care, and a resource to every prescriber in this building and many outside of it.” This past year “Dave trained three new pharmacists, and supported the ICF’s pharmacy needs for several months, on-call time included.” His “calm handling of questions and planning for new programs of interest to the surveyors contributed greatly to a highly successful review of our services by the Joint Commission.”

DEB DEMARTINO
Billing Coordinator, Billing

A “wonderful employee” to whom YHP is “indebted to for keeping the Billing Department afloat through several transitions,” she has “cheerfully trained new co-workers and works closely with her supervisor and manager.” She contributed greatly to the success of the transition of collections of third party payors from YUHS to another supplier, and her depth of knowledge related to subrogation is invaluable in dealings with legal issues.

DIANE PETERSEN
Staff Relations Coordinator

After joining YUHS in 1995 as a senior administrative assistant in the director's office, Diane “quickly ascended to the role of administrative coordinator, managing the day-to-day office operations” before assuming her current position in 2001.

In this role, she is “well-known and highly-regarded as “a constant, reassuring presence for all of our staff members, always available to listen and advise employees and managers, while maintaining the utmost confidentiality.” She has also earned the respect of colleagues and staff throughout the University for her “compassion, sensitivity and keen ability to be objective and fair.” And—last but not least—“she has a great sense of humor and is a super party planner!”

CYNTHIA WILSON
Office Assistant, Pharmacy

With the Pharmacy’s customer service positions particularly critical to how YHP interacts with members—the Pharmacy is YHP’s most-visited department—“Cynthia has wowed our customers,” with “an astounding memory for names and faces and her personal interest in their well-being.” She has been with YHP since April of 2006 and, ever since her first days as a per diem staff member, “she has developed impressive relationships with patients” and “set the bar for superb customer service,” regardless of the day’s challenges or the length of the waiting line.
comfortable clothing and the right shoes. But don’t underestimate the importance of good walking shoes. Improperly fitting shoes may result in discomfort at the least and injury at worst. Here are some tips:

- Because feet tend to enlarge as the day goes on, you should be fitted for your walking shoes at the end of the day.
- When being fitted, wear the same weight socks that you intend to wear for walking.
- If you have high arches, you may need shoes with greater shock absorbency. If you have low-arched feet, you may find a shoe with less cushioning but greater support and heel control to be more comfortable.
- Allow a half inch between the end of your longest toe and the end of the shoe and enough room to wiggle your toes.
- A good walking shoe will allow your feet to breathe, absorb shock, provide stability and will be made of lightweight nylon fabric.
- Shoes must be replaced regularly as shock absorbency breaks down with time and use. The guideline is every 500 miles for runners, or about every six months for walkers.

**Get warm**
Warm-up and flexibility exercises increase blood flow to and stretch your muscles before beginning your walk. Include at least five minutes of warm-up exercises. TheWalkingSite.com is an excellent resource for finding warm-up and stretching exercises. This site also offers cool-down exercises to do after walking.

**Get moving**
- Choose walking routes that are well-paved and well lit. Limit street crossings and be aware of automobiles and bicycles.
- Carry your cell phone in case of an emergency.
- Consider walking with another person. Walking with others provides security and companionship; a commitment to walk with others also increases the likelihood that you will follow through with your walking goals.
- Watch your posture. Keep your head up, spine straight and look straight ahead. Good posture increases the effectiveness of your walk. Tighten your abdominal muscles, but keep your arms and shoulders loose.
- Take moderate strides to maintain good balance and posture.
- Take regular breaths.
- Carry a water bottle and drink often to avoid dehydration.
- Walk at a rate that has you breathing hard but allows you to walk and speak at the same time. Endurance is built up over time, so pace yourself and increase speed gradually.
- Consider using a walking log to track your progress and increase your sense of accomplishment.

**Put your best foot forward**
In order to gain the maximum benefit, your goal should be to walk for at least 20 minutes a day—working up to 60 minutes—at least three to five days a week. Exercise on a regular basis actually increases energy levels.

To minimize fatigue initially, start exercising for short periods until you build tolerance. You can incorporate exercise walking into your daily life. For instance: park your car in the farthest row when you shop; walk to work; get off the bus a few stops before your destination; use the stairs. Remember that simply being on your feet all day, or walking on your job (with some exceptions) is usually not enough to provide the cardiovascular benefits of exercise. True cardiovascular aerobic exercise is performed non-stop for 20 to 30 minutes at a moderate to intense level.

**Keep going**
Starting a walking program takes initiative and sticking with it takes commitment. But the potential health benefits are well worth the effort. Over time you’ll likely feel more invigorated. If your regular walking schedule is interrupted, don’t let a few days off sabotage your plan to reach a higher level of fitness and improved health. Just get back on track, reducing your speed temporarily, if necessary, until you build back up again to where you were before.

Before beginning any new exercise program discuss your overall fitness goals and any health concerns with your clinician.

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**YHP members at the April kick-off of Yale Walking Works.** Nearly 40 groups are walking together around the campus. To find a group to join, go to [www.yale.edu/uhs/health/walking](http://www.yale.edu/uhs/health/walking).

From left to right: Robert Cervone, Susan Smith-Kemp, Terry Reese, and Michelle Sandagata

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**Want to learn more about walking for health?**
Go to [www.yale.edu/uhs/health/walking](http://www.yale.edu/uhs/health/walking) where you will find both information on Yale Walking Works—a program to encourage walking for health—and links to information on a wide range of walking-related topics.
Countdown to 2010: A look behind the scenes as 55 Lock Street takes shape

Construction of the new YUHS building is well underway, with completion scheduled for 2010.

**NEW YUHS BUILDING HONORS HISTORY, GREET THE FUTURE**

“The design of Yale’s new University health center,” say representatives of architectural firm Mack Scogin Merrill Elam (MSME), “strives to promote the human aspect and experience of health care, where design can be of critical benefit to healing and wellness.”

The nationally-known firm is based in Atlanta, Georgia. For our soon-to-be completed facility at 55 Lock Street, the firm paid close attention to what it calls “the original impulses of Yale College and the early campus,” which was laid out facing and in integral relationship to the New Haven Green. The building forms an urban edge along Lock Street, reinforcing the pedestrian route to the corridor that helps Hillhouse Avenue to Canal Street across Prospect Street.

The combination of the two buildings on the block—Rose Center/University Police and the health center—along with site structures and landscape elements reinterpret the traditional, interiorized Yale campus block. Pedestrian and auto traffic will be able to move easily into and through the site.

The structure rises above the Grove Street Cemetery. The New Haven Green is visible beyond and, to the northeast, the building visually communicates with Ingalls Rink and Kline Biology Tower.

All views from the building and the garage are oriented to the green areas around the site.

Traffic flow through the building progresses from public to more and more private conditions, both vertically and horizontally. The ground level houses Urgent Care, Internal Medicine, Pharmacy, Member Services, conference and training spaces for education and group activities.

Upper levels house other clinical services, the Inpatient Care Facility and administrative functions. The clinical departments are entered from public corridors radiating from the centralized elevator core. These entrances open onto reception areas that then give access to exam and treatment rooms. The setup of the corridors lends a sense of privacy to patients, while also moving them toward daylight and exterior views.

The triangular shape of the building allows for maximum daylight into the interior, while a healing garden is located on the roof terrace, providing a place of respite. The feel of the entire building is open and welcoming, while also providing a sense of retreat and calm. It is designed for maximum flexibility to accommodate changes in both the Yale population and in the delivery of health care over the coming decades.

Architectural rendering of the lobby filled with daylight.

The public spaces work group was responsible for ensuring that the new facility is a comfortable, welcoming and accessible environment for patients, staff and visitors, now and in the future.
• No deductibles
• No annual limit to coverage
• $5 co-pay for Tier 1 prescriptions up to a 31 day supply at the Yale University Health Services (YUHS) Pharmacy
• $20 co-pay for Tier 2 prescriptions up to a 31 day supply at the YUHS Pharmacy
• $30 co-pay for Tier 3 prescriptions up to a 31 day supply at the YUHS Pharmacy
• When using a non-YUHS (out-of-network) pharmacy members pay the greater of 20% of the price of the drug or the co-pay for the Tier of the drug (YHP reimburses the difference)
• No annual out-of-pocket maximum

| PRICE FOR PRESCRIPTIONS AT YUHS PHARMACY |
|------------------------------|-----------|-----------|
| TIER 1                      | TIER 2    | TIER 3    |
| Up to 31 day prescription   | $5 co-pay | $20 co-pay| $30 co-pay |
| 32–62 day prescription      | $10 co-pay| $40 co-pay| $60 co-pay |
| 63–100 day prescription     | $15 co-pay| $60 co-pay| $90 co-pay |

Tier 1 drugs are generics and other preferred drugs.
Tier 2 drugs are preferred drugs.
Tier 3 drugs are non-preferred drugs that have clinical alternatives in Tier 1 and/or Tier 2.

For a detailed chart of all the benefit enhancements effective July 1, 2009 visit our website at www.yale.edu/yhp/member/memberbenefitsjuly09

Changes apply to faculty, M&P, C&T, and S&M.
Q How do I know if my drug is covered and what Tier it is in?
A Review the Yale Health Plan (YHP) Drug List on our website: www.yale.edu/yhp/druglist. The YHP Drug List:
- Provides access to quality medications
- Promotes appropriate and cost-effective therapy
- Provides clinicians with information relating to alternative therapies
- Gives members information to help them discuss medications with their clinician
The YHP Drug List is subject to change.

Q What are the differences between brand-name and generic drugs and why should I use generic drugs?
A The Food and Drug Administration (FDA) has deemed that generic drugs are therapeutically equivalent to brand-name drugs. Generic drugs must contain the same active ingredients in the same amounts as their brand-name counterparts. Additionally, the same rigorous FDA quality and safety reviews apply to generic drugs and brand-name drugs. Under our plan the use of generic drugs will substantially lower your costs. If a drug becomes available as a generic, the generic drug would be available as a Tier 1 drug and the brand-name drug, if continued to be available and covered, will be moved to Tier 3.

Q How does YHP decide what drugs are on the YHP Drug List?
A Our goal is to provide a drug list that gives members access to quality, cost-effective medications. Yale Health Plan’s Pharmacy and Therapeutics (P&T) Committee meets regularly to review drugs that have been approved by the FDA. The P&T Committee is comprised of YHP clinicians and pharmacists from a variety of specialties. After evaluating information from multiple sources, the P&T Committee decides whether a drug is an appropriate clinical addition to the YHP Drug List and whether it will be covered. If the drug is covered the committee then decides which Tier it will be placed in and what limitations may apply. The YHP Drug List is subject to change.

Q How much will my prescription cost at the YUHS Pharmacy?
A The YHP Drug List is on our website: www.yale.edu/yhp/druglist. Look up your prescription name (use the name that is on the label of your container) and find the Tier and corresponding co-pay amount.

Q What if the price of my prescription is less than the co-pay?
A If the price of your prescription is less than the co-pay you will pay the price of the prescription.

Q What if my prescription is for less than 31 days?
A You will pay 1 co-pay.

Q What if my prescription is for more than 31 days but less than 62?
A You will pay the applicable co-pay X 2 (e.g., prescription for 60 days of a Tier 2 drug = $20 X 2 = $40).

Q What if my prescription is for more than 62 days but less than 100?
A You will pay the applicable co-pay X 3 (e.g., prescription for 90 days of a Tier 1 drug = $5 X 3 = $15).

Q Can my clinician prescribe any medication he or she chooses?
A Yes, your clinician is responsible for determining the most appropriate treatment for your care; however coverage of a prescribed medication is determined according to your prescription drug benefit plan.