The KMA Committee on Community and Rural Health continues to work in five key health areas: diabetes (obesity), tobacco and substance abuse, disaster preparedness, health literacy, and bone health. Committee members participate in one or more workgroups developing programs and presentations in order to meet the committee’s goal of becoming a clearinghouse for collecting and disseminating information to Kentucky physicians and patients.

According to a recent update to the Kentucky Obesity Epidemic 2004, provided by the Partnership for a Fit Kentucky:

- Two-thirds of Kentuckians are either overweight or obese—about 38% are overweight and about 28% are obese
- The rate of obesity has more than doubled since 1990
- 30% of adults are physically inactive
- Only 17% of adults eat the recommended five or more servings of fruits and vegetables a day

Where Kentucky stands

- Kentucky ranks 3rd highest in the US for adults who are overweight or obese
- Kentucky ranks 9th highest in the US for adult obesity
- Kentucky ranks 3rd highest in the US for physical inactivity
- Kentucky ranks 3rd lowest in the US for eating five or more servings of fruits and vegetables a day

To address this growing crisis in Kentucky, the Committee has been involved in a number of activities including holding the first statewide Conference on Obesity in September 2006. Jointly sponsored by KMA, the American Heart Association, and Partnership for a Fit Kentucky, the conference provided toolkits to attendees to use in their practices to engage their patients in physical and nutrition activities.

Workgroup members Donna Stewart, MD; David Allen, MD; and Wendy Carlin, RN, have coordinated the publication of this special issue with an overall goal of providing information physicians can use personally to be a positive influence and example for their patients through proper nutrition and physical fitness.

This issue will include articles on fighting obesity from a fitness perspective, healthy lifestyles for physicians in training, and testimonials from fitness role models. Additional articles will appear in the March issue which will highlight specific programs which have been successful in the areas of physical activity and obesity prevention. We are grateful to these contributors for sharing their personal and professional experiences in treating and preventing obesity among Kentucky’s citizens.

Nancy C. Swikert, MD, Chair
KMA Committee on Community & Rural Health
The purpose of this article is to provide prevention-based nutritional recommendations for use in clinical practice. The goal of these nutritional recommendations is to assist individuals in achieving and/or maintaining a “healthy weight” in the context of a healthy lifestyle.

For the purposes of this article, a “healthy weight” is defined herein as a weight that eliminates and/or reduces the presence of, and/or risk for, weight-related comorbidities in an individual. These weight-related comorbidities include, but are not limited to, hypertension, insulin resistance, type-2 diabetes, metabolic syndrome, dyslipidemia, and sleep apnea, any of which may be reduced or eliminated by as little as a 10% loss of current body weight. In the latter case, the resultant body weight may, in fact, become a healthy weight or at minimum, a healthier weight for that individual especially if their initial Body Mass Index (BMI) was exceptionally high and decreased with the accompanying weight loss. For most adults though, the BMI most likely associated with the least risk for weight-related comorbidities corresponds to the National Heart Lung Blood Institute (NHLBI) BMI recommendations of 18.5 to 24.9 kg/m^2. The risk for developing a weight-related comorbidity does increase as BMI increases, especially as BMI values approach and exceed 35 kg/m^2. Yet BMI as a measure of total body fat has its limitations so its values must be interpreted accordingly. In youth 2 through 19 years of age, a healthy weight is likely described as falling between the 5th and the 85th percentiles on the Centers for Disease Control (CDC) BMI for age-and-gender growth charts yet as in adults, exceptions may occur. In some instances, a youth may be able to maintain his/her current weight as he/she grows in height which results in a more favorable percentile on the relevant CDC BMI for age-and-gender growth chart. The NHLBI also has an Aim for a Healthy Weight site with information for health professionals and the general public on achieving and maintaining a healthy weight.

This article is divided into three sections. The first section includes the background and corresponding references for the prevention-based “healthy eating” nutrition information. The second section provides a condensed summary of the prevention-based healthy eating nutrition information for essentially all healthy individuals 2 years of age or older. The final section expands this condensed summary to include nutrition “pearls” or teaching points for the major nutritional recommendations at each particular stage of the lifecycle, again based on these aforementioned references.

**SECTION 1: BACKGROUND**

There are three general reference sites that will be discussed in this section: The Dietary Guidelines for Americans 2005, the revised MyPyramid Food Guidance System, and the Web site for the American Dietetic Association. While countless other reputable sites for nutrition information exist, these sites were selected for several reasons. These reasons include the relevance of these sites in providing prevention-based nutrition information for use in the general population, for potential use as an interactive teaching tool to create an individual healthy eating plan, and for locating qualified dietitian nutrition professionals.

The Dietary Guidelines report is revised every 5 years to provide “science-based advice to promote health and reduce risk for major chronic diseases through diet and physical activity.” As a point of reference, the underlying scientific report that serves as the basis for these guidelines can be accessed for those interested in review-
ing the report in greater detail. There are nine general categories of recommendations which are made for healthy Americans. The nutrition suggestions given in this article summarize and condense these dietary recommendations.

The Center for Nutrition Policy and Promotion, an organization of the US Department of Agriculture (USDA), is responsible for the MyPyramid Food Guidance System that translates the aforementioned Dietary Guidelines for Americans 2005 into healthy eating plans for individuals 2 years of age and older to follow. Specifically, this food guidance system offers eating plans tailored to an individual’s gender, age, and level of physical activity; an individual’s current height and weight is optional information that can also be included for determination of his/her particular kilocalorie level. There are twelve kilocalorie (kcal) eating plans on this site, given in 200 kcal increments between 1000 and 3200 kcal. There also is a section on this site geared for professionals that provides background information, printable consumer information, and nutrition-related links. This Web site further states that “MyPyramid food patterns are designed for the general public ages 2 and over. They are not therapeutic diets for specific health conditions, or for pregnancy or lactation. Those with a chronic health condition should consult with a health care provider to find a dietary plan that is right for them.”

The American Dietetic Association (ADA) provides authoritative nutrition information for professionals and consumers alike. Specifically, nutrition fact sheets, nutrition reading lists, and general nutrition information can be found at this general site. In addition, qualified registered dietitians (RDs) can also be located on this website by geographic area.

Section 2: Summary of “Healthy Eating” Teaching Points:

The following five points condense and summarize the “healthy eating” nutrition recommendations and are especially designed to be used when time is limited.

1. Eat a “Variety of Foods” from all food groups as described in the MyPyramid Food Guidance System or in the Dietary Approaches to Stop Hypertension (DASH).
   - “Eat a Rainbow” of different colored fruits and vegetables daily
   - Choose whole grains instead of only refined carbohydrates; ~half of servings/day from the grain group should be whole grains
   - Choose low-fat or lean protein foods daily; select fish, dry beans and peas, nuts, seeds as well as meat, poultry, and eggs
   - Choose fat-free/low-fat dairy products or alternative sources of calcium and vitamin D sources daily

2. Practice “Moderation” along with “Variety” in daily food intake
   - Moderate food portions/food intake; monitor serving sizes
   - Practice portion control instead of supersizing or eating larger portions
   - Use smaller plates; eat slowly; wait before taking second portions

3. Limit consumption of foods that are especially high in sugar, total fat, trans and saturated fat, and sodium/salt
   - Avoid or eliminate trans fat as much as possible
   - Monitor intake and types of other fats to create a balance; include monounsaturated vegetable oils as well as nuts, seeds;
   - Decrease excess/additional fat, sugar, sodium/salt, that is
     - limit fried foods, saturated fats, and cholesterol
     - limit intake of highly processed foods, “fast foods”
     - limit/decrease/avoid sugar-sweetened beverages
     - limit sodium intake to 2300 mg/day or less (~1 teaspoon salt/day); or to 1500 mg sodium/day or less in “individuals with hypertension, blacks, and middle-aged and older adults” and consume foods prepared with little salt while consum-
ing potassium-rich foods such as vegetables and fruits.\textsuperscript{9}

4. Practice “healthy eating” principles as part of healthy lifestyle
   • Follow key “healthy eating” recommendations as described in \textit{Dietary Guidelines for Americans 2005}\textsuperscript{9} and as summarized and condensed in this article
   • Model healthy eating patterns as a family; plan structured meals/meal times instead of haphazard meals that are always eaten “on-the-run”
   • Choose and include snacks wisely since all snacks count towards the day’s total kilocalorie and nutrient intake

5. Provide daily “Move More, Sit Less” opportunities as part of a healthy lifestyle
   • Increase the day’s activities to include more physical activity opportunities (eg, bike or walk to work or for errands, take the stairs, park farther away from entrances)
   • Decrease sedentary activities; limit screen time <2 hours/day

\textbf{SECTION 3: NUTRITION “HEALTHY EATING PEARLS” THROUGH THE LIFECYCLE}

Table 1 shows a summary of “healthy eating pearls” relative to the different stages of the lifecycle. This summary expands the condensed recommendations in Section 2 of this article. Beginning at 2 years of age, these nutritional recommendations are in keeping with the \textit{Dietary Guidelines for Americans 2005}.\textsuperscript{9} These \textit{Dietary Guidelines} further state that the basic food groups to emphasize include fruits, vegetables, whole grains, and fat-free or low-fat milk and milk products; lean meats, poultry, fish, beans, eggs, and nuts. The \textit{Dietary Guidelines} also recommend that the foods chosen should be low in saturated fats, \textit{trans} fats, cholesterol, salt (sodium), and added sugars. These healthy eating recommendations must be applied throughout the different stages of the lifecycle and should be kept in mind when reviewing Table 1. Detailed information regarding infant nutrition practices and nutrition in pregnancy is beyond the scope and length of this article. Readers are referred to the American Academy of Pediatrics statement regarding breastfeeding,\textsuperscript{19} to the American Dietetic Association position on eating during pregnancy,\textsuperscript{20} and to consumer friendly articles at Mayo Clinic Web site,\textsuperscript{21} to mention several.

\begin{table}[h]
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\hline
\textbf{Table 1. Nutrition “Healthy Eating Pearls” through the Lifecycle} \\
\hline
\textbf{Preconception/Pregnancy} \\
• Eliminate alcohol and other contraindicated drugs, medicines, etc \\
• Maintain adequate folic acid intake to prevent neural tube defects \\
• Begin/continue “healthy eating” plan; no “fad” diets/supplements \\
• Maintain adequate weight gain throughout pregnancy \\
\hline
\textbf{Infant} \\
• Breast milk or iron-fortified formula exclusively until solids added \\
• Introduce solid foods (eg, iron-fortified infant rice cereal mixed with breast milk or water) when developmentally ready @ ~4-6 months of age; prepare without added salt/sugar \\
\hline
\textbf{Toddler/Preschooler} \\
• Families model “healthy eating” habits (eg, eat a variety of foods in appropriate and moderate amounts; introduce appropriate new foods prepared without added salt, sugar) \\
• Limit foods high in \textit{trans} fat, sodium, sugar \\
\hline
\textbf{School Age/Preadolescent} \\
• Continue following/modeling “healthy eating” practices; ie, eat a variety of vegetables, fruits, whole grains, lean protein, and fat-free/low-fat dairy foods \\
• Keep introducing a variety of new foods repeatedly \\
• Include daily physical activity and limit sedentary activity \\
• Maintain adequate fluids; eliminate sugar-sweetened drinks \\
• Reduce \textit{trans} fat intake; eliminate \textit{trans} fat \\
\hline
\textbf{Adolescent} \\
• Continue to reinforce “healthy eating” practices as part of healthy lifestyle \\
• Identify/evaluate/reduce any nutrition-related concerns (eg, if eating disorder present, if following fad diets, if eliminating certain groups of foods, if large weight fluctuations . . . ) \\
• Emphasize fruits, vegetables, whole grains, lean protein & dairy sources of foods \\
• Emphasize calcium intake to maximize bone mass; if not consuming dairy foods, identify other calcium, vitamin D sources to include \\
• Moderate consumption of foods high in fat, sugar, sodium; avoid \textit{trans} fat \\
• Incorporate snack choices as part of overall “healthy eating” plan \\
• Balance physical activity with sedentary activities to achieve healthy weight \\
\hline
\textbf{Adult/Elder} \\
• Continue to follow “healthy eating” practices as part of healthy lifestyle to achieve and/or maintain healthy weight and prevent/reduce weight-related comorbidities \\
• Maintain high quality nutrition intake; include snacks to meet nutrient recommendations as needed \\
• Remain physically active \\
\hline
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In conclusion, this article summarizes healthy eating recommendations to meet overall nutrient needs and to assist individuals in achieving a healthy weight. Following these aforementioned healthy eating practices from a young age increases the likelihood that a healthy weight will be achieved and maintained during one’s lifecycle. As stated in the Executive Summary of the Dietary Guidelines’ “To maintain body weight in a healthy range, balance calories from foods and beverages with calories expended; To prevent gradual weight gain over time, make small decreases in food and beverage calories and increase physical activity,” This weight management approach implies a lifelong “way of life” process. *Dieta*, in Greek, means “way of life” and is likely where the word “diet” originates. Instead of the common and cyclic process of going “on and then off a diet” to manage one’s weight, create a *dieta* or “way of life” that incorporates healthy eating practices with adequate amounts of physical activity. With respect to these lifelong healthy weight management skills, “an ounce of prevention” is truly worth more than “a pound of cure.”

**REFERENCES**


The Partnership for a Fit Kentucky is a statewide physical activity and nutrition coalition with the mission of preventing obesity and reducing chronic diseases. The coalition is supported in part by the federal obesity prevention grant awarded to our state in July 2003. This CDC State Nutrition and Physical Activity Program mandates the use of evidence-based strategies to prevent obesity in the following arenas:

- Increase the intake of fruits and vegetables
- Increase physical activity
- Increase parental involvement
- Increase initiation and duration of breastfeeding
- Decrease screen time
- Other dietary concerns (information regarding the intake of fiber, water intake, sweetened beverages, etc)

The Partnership for a Fit Kentucky began its work with a series of nine obesity forums conducted throughout the state in August 2004. Over 1,300 citizens attended forums in Louisville, Lexington, Ashland, Hazard, Somerset, Paducah, Owensboro, Bowling Green, and Northern Kentucky. Kentuckians prioritized how they wanted their communities to address obesity. Schools and worksites were the highest priority venues for changes in physical activity and nutrition. All nine regions of the state chose identical priorities. The top priorities are listed below.

**SCHOOL INTERVENTIONS:**
- Provide mandatory physical education for K-12/ more organized recess
- Increase healthy choices in vending machines/ develop legislative policies for vending machines
- Eliminate fast food in schools

**WORKSITES INTERVENTIONS:**
- Improve worksite policies to allow time to exercise, a place to exercise, health seminars and flexible time
- Provide employer incentives for exercise plan
- Provide public/worksite breastfeeding rooms

The members of the Partnership for a Fit Kentucky utilized their professional expertise, the forum input, and the CDC-mandated strategies to develop The Kentucky Nutrition and Physical Activity State Action Plan 2005. The plan’s objectives and strategies are divided into five venues: worksites, schools, the built environment, families and communities and health care. The state plan is available at www.fitky.org.

**IN THE PHYSICIAN’S OFFICE**

Patients overwhelmingly would like their physician to talk to them about diet and physical activity. Each month an estimated 20% of the US population visits a physician’s office, placing the healthcare system in an ideal position to influence people. In order to have an impact healthcare providers need to maximize the time they have with patients and they need to refer them to existing programming in the healthcare setting as well as in the community.

**Before the Office Exam**

1) **Waiting Room:** Use the waiting room to share information about healthy eating and active living. Display information (posters, brochures, etc) about nutrition and physical activity resources available to families.
2) **Office Environment:** Create an office environment that supports the delivery of obesity care (eg, sturdy armless chairs, large arm and thigh blood pressure cuffs, large gowns, higher weight scales, sensitive and informed office staff, etc). Adopt nutrition guidelines for food and beverages available on the hospital and clinic campus. Co-locate a farmers’ market on the hospital and clinic campus for patients and staff.

3) **Questionnaires:** Have patients use their waiting time to complete a nutrition and activity self-assessment to bring into the exam.

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**In the Exam Room: Treatment Strategies/Resources and Information**

1) **Screen at least annually for overweight and obesity (using BMI for all patients).** Use the CDC guidelines offered for adults and children.

2) **Provide a physical activity and nutrition prescription for patients to follow.** A care plan written and agreed on collaboratively between medical staff and the patient will help patient adherence. Set small, achievable goals for the patient and family to start. Check on progress at the next office visit.

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**IN THE COMMUNITY: PREVENTION STRATEGIES/RESOURCES/ INFORMATION**

1) **Serve as a role model.** Health providers who “walk the talk” by making changes themselves will feel more comfortable advocating for healthy behaviors with their patients.

2) **Make the connection with community activities to strengthen buy-in.** Examples include:
   - Join your local coalition of the Partnership for a fit Kentucky to address nutrition and physical activity in a coordinated manner. Contact Wendy Carlin, Program Coordinator, for additional information at Wendy.Carlin@ky.gov.
   - Integrate healthcare activities with community, school, worksite and family initiatives. Form partnerships with community organizations to support or develop programs or tie into existing campaigns.

3) **Be an advocate**—Physicians can also successfully advocate for nutrition and physical activity policies in the community and area schools.
   - Enlist policy makers from local, state, and national organizations and schools to support a healthful lifestyle for all children, including proper diet and adequate opportunity for regular physical activity.
   - Encourage organizations that are responsible for health care and healthcare financing to provide coverage for effective obesity prevention and treatment strategies.
   - Encourage public and private sources to direct funding toward research for effective strategies to prevent overweight and obesity and to maximize limited family and community resources.
   - Help parents, teachers, coaches, and others who influence youth to discuss health habits as part of their efforts to control overweight and obesity. Integrate the family into healthy living initiatives by connecting healthcare activities to the whole family.

With the help of the Kentucky Medical Association (KMA) excellent resources are available on their Web site www.kma.org in the healthy lifestyles section. One of the most valuable is a Public Health Referral Guide listing registered dietitians, physical activity, and breastfeeding coordinators in every county of the state. Nutrition and physical activity counseling are available free or at minimal cost based on a sliding fee income scale. Referrals can be made directly from the physician’s office.

Additional resources are available on the Partnership for a Fit Kentucky Web site www.fitky.org. This Web site provides a listing of low-cost or free physical activity and nutrition programs by county. Each of the nine regional coalitions has a designated page to denote local classes, events, and resources to promote healthy eating and physical activity for all age groups. The date, time and location of the
Partnership’s regional coalition meetings is listed. A regional contact person for each coalition is also noted. Physicians may want to contact the regional leaders to find out what community initiatives are currently in place and how they can become involved.

Physicians are experts in the healthcare arena and are respected as such by the general public. Governor Fletcher and first lady Glenna Fletcher, a physician and nurse by training respectively, had first-hand awareness of the problems our state is facing. Physicians are key players to help Kentucky reverse this obesity epidemic. Get involved, be an advocate, and help us build communities where healthy eating, daily physical activity, and healthy body weights are the norm, not the exception.

For more information on the Partnership for a Fit Kentucky contact Wendy Carlin, Program Coordinator, at wendy.carlin@ky.gov.
**INTRODUCTION**

The issue of preventable health risks such as smoking and obesity is creating an environment in Kentucky as well as the country of worsening health indicators and increasing incidence of chronic disease. Appreciating that an individual has limited time with their primary care physician, the need for personal health awareness, education, and opportunities for health and wellness becomes critical. The Get Healthy Kentucky program was created to help Kentuckians improve their lifestyle and their literacy of health awareness. The Get Healthy Kentucky program can be an excellent compliment to care provided by physicians to encourage healthy personal behavior and improve the health status of Kentuckians.

For generations, our parents and grandparents have instilled in us the importance of prevention. Remember the saying “an apple a day keeps the doctor away”? Prevention remains one of the most important elements to maintaining good health and controlling the growth of healthcare costs. State government has long played an active role in efforts to improve the public health of our residents by encouraging prevention, and over time that role has evolved into a statewide wellness program inclusive to all residents of the commonwealth—Get Healthy Kentucky. This program encompasses a series of diverse programs, events and initiatives designed to achieve a single goal—to help Kentuckians get healthier.

Great strides have been made in recent years in promoting prevention and improving the health of residents. Kentucky has displayed repeated reductions in adult and teen smoking rates and is the only state in the country to receive a grade of A for school nutrition policy. Despite these key improvements, Kentucky residents display numerous risk factors linked to many chronic conditions such as diabetes, stroke, and heart disease, all of which are extremely prevalent in Kentucky. In 2003, 21% of Kentucky’s 10 to 17-year-olds were overweight, placing us with the third highest obesity rate in the nation, compared to the national average of 15%. Similarly, adults in Kentucky had the third highest overweight rate in the country with 62.5% of adults in Kentucky being overweight or obese, compared with the national average of 58.5%. Couple this with the highest adult smoking rate in the country, and it is no surprise that Kentucky ranks poorly on health conditions that have been attributed to obesity, as well as smoking. In 2005, Kentucky was ranked seventh highest for diagnosed diabetes and had the sixth highest heart disease death rate.

Aside from the clear quality-of-life and longevity issues, obesity and smoking are two pervasively problematic and expensive preventable conditions in Kentucky. This state spends over $1 billion annually on obesity-related illnesses and complications and $1.2 billion on illnesses caused or intensified by smoking and other tobacco use.

Physicians see firsthand the personal, emotional, and economic effects that chronic conditions have had on our adults and young people across the state as well as the outcomes; bold changes must be adopted and maintained.

Respect for physicians and the medical profession is innate in most people. As a result, the advice of one’s healthcare provider often carries a kind of reverence no other could elicit. Sadly, those words simply don’t come often enough. The vast majority of an individual’s time is spent outside of the doctor’s office, thus patient-re-
Responsibility and self care are crucial to carrying out the advice and charges of one’s physician.

In a perfect world, all patients would visit their physician a few times a year for preventive services, and in that same perfect world the doctor would be able to spend 30 minutes with each patient per visit. Even in this perfect scenario, the interaction of that patient visit only represents .03% of the conscious time of an individual’s year. What, then, can be done to help guide and manage a patient for the other 99.97% of the time he or she is not under the guidance of a physician? And what can an individual physician do to help their patients adopt and maintain healthy behaviors on their own?

This is where Get Healthy Kentucky comes in. Operated by the Governor’s Office of Wellness and Physical Activity, it was established by Governor Ernie Fletcher in 2006 with full bipartisan legislative support. Get Healthy Kentucky was designed to improve health indicators and provide the opportunity for all Kentuckians to make better choices to improve their health and overall wellness.

Get Healthy Kentucky serves as another source of support that individuals have in addition to their physician to improve and maintain their long-term health. Ultimately, responsibility for maintenance of medication regimens and monitoring of chronic diseases falls on the individual, not the physician. Get Healthy Kentucky hopes to work as a bridge and tool for physicians and patients, as a way to help implement physicians’ advice in increasing physical activity, improving nutrition, and making overall beneficial lifestyle changes.

Get Healthy Kentucky was founded on three simple guiding principles: increasing physical activity, improving nutrition, and helping people stop using tobacco, or better yet, encourage individuals to never start. Today more than ever, we are inundated with medical information on the Internet. With all of this information readily available, how does an individual know where to go, what information to trust? In January of 2007, the Get Healthy Kentucky Web site, www.GetHealthy.ky.gov, was launched and since that time the program has received tremendous support and praise from across the state.

With an increasing focus on better consumer information as well as individual responsibility for one’s health, the Get Healthy Kentucky Web site provides unbiased information to youth, adults, and seniors about steps to improve their health. There is a wealth of information on the site, including information customized for each age group based on their respective stages in life. There is information on how start a physical activity program; health tools such as body mass index calculators and guides to appropriate portion size; information about smoking cessation, including the Kentucky Tobacco Quitline (1-800 QUIT NOW); and other links to helpful Web sites and programs for healthier living.

Kentuckians can also take the Governor’s Challenge, which promotes physical activity and has a tracking device where individuals and groups can earn free recognition awards based on goal completion. According to 2005 data, Kentucky adults had the fourth lowest activity rates in the country, with 31.5% of people reporting having had no physical activity within the past month.2

All physicians are uniquely positioned to help in the collective health of our state, and by prescribing Get Healthy Kentucky along with expert medical care we will halt the slide of poor health. Wellness isn’t just the absence of sickness; it is also the avoidance and prevention of sickness. An apple a day keeps the doctor away? A more appropriate contemporary adage could be “an apple a day and listen to what the doctors say.”

REFERENCES
1. All data taken in paragraph from Kaiser State Health Facts, www.statehealthfacts.org
In my internal medicine practice, I encounter both positive and negative outcomes rendered from my patients’ long-term health habits. Not surprising, those who incorporate exercise and follow sound dietary guidelines into their routines generally live longer, more productive lives. As an athletic role model practicing in the Norton Healthcare system and as a flight surgeon with the Kentucky Air National Guard, I am an extremely powerful influence for my patients to become more health-conscious. As physicians, our actions speak louder than words.

The disease state of overweightness (BMI 25-29.9) and obesity (BMI ≥30) is epidemic in the United States, with roughly two thirds of our population spanning either category. More than 25% of our population in Kentucky is obese—5th highest in the nation. Overweightness/Obesity poses significant risks for cardiovascular morbidity and mortality. Unfortunately, I see a large number of overweight or obese individuals in Louisville who have illnesses that could have been avoided if they simply took the time to live more healthily. Adequate time spent in exercise, replenishing sleep, and proper nutritional intake logarithmically improves our quality of life, even in later years. Regular exercise is unquestionably good for all of us: patient or healthcare provider.

Many of my patients are interested in current, scientifically based exercise recommendations in addition to dietary counseling. The American Heart Association recommends 30 minutes to 1 hour of aerobic activity three to six times weekly. The American College of Sports Medicine has a similar recommendation. In my practice, I advise progressive, moderate to strenuous walking for a total of five hours weekly.

I conscientiously practice what I preach. An integral part of my life centers on maintaining the fitness level that I have enjoyed since my youth. A healthy, balanced diet and daily exercise have kept me in optimum health, even with a chronic illness. Being physically fit has helped immensely with enduring the rigors of life, including periodic dips in my own health. A decade ago, I developed Crohn’s colitis and my health rapidly deteriorated, reflected by a gaunt BMI of 18. By intensifying an already existent weight training and running program, in addition to medical treatment, I have avoided the past Crohn’s flares that required recurrent hospitalizations that spanned four years. My BMI is now stabilized at a healthy 22 with most of the weight gain attributed to muscle mass. I currently run 55-60 miles, cycle 2-3 hours, and lift weights 4 hours weekly. I feel and look great. How can I expect my patients to take my medical recommendations seriously unless I am living my own advice?

In response, living the example does make the difference. Here are two patients who are getting the “fitness” message. One of my patients lost 29 pounds over 3 months by meal portion control and walking one hour daily...everyday. Another patient, at 83 years of age, maintains a healthy weight by walking 20 minutes daily. Many other patients have lost weight by following the same daily regimen—consuming less food and incorporating more purposeful activity.

Each patient has the same response when queried about my advice regarding weight loss: they would have been much less likely to follow my advice if I appeared unhealthy and unfit. As physicians, we are taught that if we counsel patients to cease smoking, there is a significant chance that they might, in fact, stop. This holds true for weight loss. What do we have to lose by not only asking our patients to consider dietary and exercise modifications but also improving a few habits of our own?

Christan Stewart, MD
Louisville, KY
Medical school has proven to be one of the most rewarding and stressful experiences of my life. Throughout the first two years, implementing a healthy lifestyle has become increasingly important, not only to maintain my health but also to control the stress associated with medical school. I have always been active, participating in sports during high school and exercising on a regular basis during college. Yet, upon entering medical school, I found it very difficult to incorporate exercise and a healthy diet into my everyday routine. It seemed that the more stress I experienced with my courses and the more time I spent studying, the less time I took to make it to the gym and eat properly. In fact, I increasingly overlooked this aspect of my life in order to make time for studying and other activities. I became increasingly fatigued, kept getting minor colds, and began gaining weight as I sacrificed my own personal health to make more time for studying.

Over time, it became increasingly apparent that I needed to reestablish an exercise regimen and nutritional diet into my routine in order to both maintain my health and to aid in coping with the stresses of medical school. I realized that unless I was as healthy as I possibly could be, I would never be able to handle the strain and physical demands of internship and residency. Therefore, in the last six months I have committed myself to exercise and making healthy food choices a top priority in my life.

For me, exercise serves as a reprieve from the day, a way to get away from school and all of the other stresses in life for a few hours. It is amazing how you can go to the gym after a long, bad day feeling terrible and leave a few hours later feeling refreshed and ready to tackle life again. Exercise also serves as a way for me to stay healthy, to maintain my weight, and to improve my overall fitness level. I now go to the gym three-four times per week, eat a nutritional diet complete with lots of fruits and vegetables, and try to get at least six hours of sleep per night.

I have noticed that I now have more energy than ever before, have been much less fatigued, and am better able to handle the stressful situations I face on a daily basis. I simply feel better as a whole, and I know that my current lifestyle will continue to improve my quality of life into the future.

Many other students in my class have also incorporated exercise into their lives. In fact, in a recent survey conducted among 55 students in the University of Louisville School of Medicine Class of 2009, results indicate that 16.7% exercise once per week, 21.8% exercise twice per week, 40% exercise three-four times per week, and 21.8% exercise five or more times per week. Of those surveyed, 70.9% exercise more now than they did before entering medical school.

Students also reported that the most common types of exercise they perform include lifting weights and running, jogging, swimming, or hiking. Also, most students reported that they exercise to improve their health/fitness level, reduce stress, and for enjoyment. Many of the third-year medical students at U of L have developed an exercise plan that can fit into their hectic schedules, realizing that exercise and a healthy lifestyle are imperative to maintaining good wellbeing and overall mental and physical fitness.

The students surveyed were also found to perform other healthy lifestyle practices. For example, out of 55 students surveyed, only one person reported that they smoked cigarettes; 58.2% reported having a healthy diet, including drinking sufficient amounts of water; and 61.8% of students denied using food as a coping mechanism. Students are taking their health seriously, making it a top priority in their lives to stay healthy.

It is also important for physicians, in general, to maintain a healthy lifestyle, including exercise and a well-balanced diet. When recommending diet and exercise to patients, I think that it is more efficient if the physician...
serves as a good example of the changes he or she is recommending. In my opinion, patients are more likely to implement the lifestyle changes I am recommending if I serve as a testimony to those same healthy lifestyle choices. In addition, the incorporation of a well-balanced diet and exercise into my life will improve my overall fitness and health, decreasing illness and diseases that could possibly impair my ability to care for patients in the future.

Exercising has become more than a mere activity to me, it has become a way of life—a way to balance all of the competing forces in my life, a way to escape after a long day, a way to stay grounded in reality. Adopting a healthy lifestyle has vastly improved every aspect of my life and will continue to positively influence my well-being long into the future, helping me to cope with the many demands placed on the life of a medical student, resident, and physician.

Amy L. Spencer
UL Medical Student

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**Survey Results**

1) How many times per week do you exercise for at least 30 minutes? (55)
   a.) One (9) **16.7%**
   b.) Two (12) **21.8%**
   c.) Three-four (22) **40%**
   d.) Five or more (12) **21.8%**

2) Do you exercise more often now or more often before entering medical school?
   a.) now (16) **29.1%**
   b.) before (39) **70.9%**

3) Why do you exercise? (Please select all that apply)
   a.) Lose weight (25)
   b.) Improve Health/fitness (43)
   c.) Reduce Stress (35)
   d.) Enjoyment (32)

4) What type of exercise do you do?
   a.) Free Weights (32)
   b.) Cardio (run/jog/swim/hike) (46)
   c.) Play sports (17)

5) Do you smoke?
   a.) yes (1) **1.8%**
   b.) no (54) **98.2%**

6) Do you consider yourself to have a healthy diet, including drinking sufficient amounts of water?
   a.) yes (32) **58.2%**
   b.) no (23) **41.8%**

7) Are you planning on making any changes to your diet or exerciseroutine?
   a.) yes (26)
   b.) no (29)
   If yes, please specify.
   - I plan to cook more meals at home, to try to do some form of CV exercise 3x/wk
   - I want to exercise, it is just difficult to fit it into my schedule.
   - Lots of sitting, I have been eating less lately and I want to get back to eating less carbs.
   - My diet got much worse as boards rolled around, I started to eat more comfort foods and didn’t care.
   - I have to stop eating as much junk food and fast food.

8) Do you use food as a coping mechanism?
   a.) yes (21) **38.2%**
   b.) no (34) **61.8%**

9) Please list any other comments you may have concerning these issues.
   Since I’ve started wards, I hardly have any time or energy to exercise. It really sucks.
   —Daniel Ambrus
   Why are there so many unhealthy and so few healthy options available in the hospital cafeteria?
   —Logan Mast
   There is a lot of sitting in Medical School. Plus, nearly all of the free lunches are Pizza or some other equally bad food. We are supposed to tell our patients the benefit of dieting/exercise but I feel that often, our body takes a back seat to many other options/activities.
   —Jonathan Walters
   Working out is the only thing that keeps me sane!
   —Jason Reynolds
   My exercise routine in med school has been so sporadic. I might have a really good few months where I’m at the gym or out running 3-4 days a week and then it will get really busy and I might go a month only exercising once or twice.
   —Eileen Duggan