

Always Keep Your Clothes in the Car

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INTRODUCTION

Give about two hours a day to exercise, for health must not be sacrificed for learning. A strong body makes the mind strong.
—Thomas Jefferson, 1785

In helping to organize many different educational environments in the School of Medicine and the Department of Surgery at the University of Virginia over the last 30 years, my colleagues and I have long recognized that our students and trainees, while uniformly well prepared academically for their respective missions, often take inadequate care of themselves. Everyone who has flown on a plane will recall that the flight attendants tell passengers that if oxygen is needed, one must put one's own mask on first, before helping others put their masks on. And the obvious reason for that admonition is that you cannot help others if you, yourself, are impaired. This admonition applies equally to those who have committed their lives to helping others, in this case our protégés and ourselves through medicine and surgery.

To make this principle colorful and memorable, we often contrast the snowboarder's greeting ("sorry, dude") with the mountain biker's greeting ("do you have everything you need?"), the mountain biker's greeting being the one for which we have greater appreciation. In our observation, our trainees almost always have plenty of academic prowess, yet they frequently lack something just as essential—the skills and strategies for not just surviving the long trajectories through their education and training, but for prevailing both psychologically and physically.

We summarized many of these principles in a locally published treatise for our residents entitled *The Unvanquished: More than Survival in Surgical Training Programs*. I will summarize one of the basic tenets here, which is that staying fit is not a luxury but a necessity. The title of this current essay, *Always Keep Your Clothes in the Car*, is derived from a maxim espoused by one of my favorite former students and residents, who is now the Chief of Pediatric Surgery at the University of Virginia, Dr. Gene McGahren. He recognized that if one were going to get a bit of exercise on most days, one would have to stop off on the way home to accomplish

Received X, XX; accepted X, XX

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that goal. For once we get into the house, few, if any, of us will make it back out to exercise. And, if you're going to stop off at your favorite workout spot on the way home, you must have workout gear in your car.

In this essay I will outline some tips on ways to stay fit, including a few notes on diet, sleep, and how to deal with the physical challenges of standing beside operating room tables during long operations.

ILLEGITIMI NON CARBORUNDUM

Surgery is a contact sport. Don't let it wear you down.

Doug Mathisen, the former Chief of Thoracic Surgery at the Massachusetts General Hospital, once said that the phrase "surgery is a contact sport" described the contact between surgeon and patient in the operating room. He noted, as the years wore on, that this saying also applied to the inevitable accrual of time in contact with the operating room floor. All who have worked in operating rooms understand the truth of Dr. Mathisen's point.

Therefore, we need to keep the physical demands of performing surgery from grinding us down over the duration of our careers. First of all, one must pay attention to posture. One way to do this is to use operating loupes that allow one to stand up straight while working. Most surgeons' magnifying loupes are not adjusted to optimize posture, so it is incumbent on each surgeon to collaborate with the loupes distributors to make the necessary adjustments to allow one to stand up straight while operating. Next, one should consider using support stockings to keep blood and fluid from pooling in one's lower legs. Some surgeons use elastic wraps to achieve even more compression of the calves than support stockings will provide. Proper footwear is equally important, and the use of professionally fitted orthotics can be very helpful. Cooling vests can be very helpful in maintaining comfort in operating rooms that are kept warmer in modern times than they were in the past. Finally, some surgeons are advocating taking brief breaks during a long case to stretch a bit.

YOU ARE WHAT YOU EAT

And, most of us don't eat right.

There is certainly some truth in the adage, "you are what you eat." After all, a person with ample access to food will eat about 35 tons of food in an average lifetime. And, there is also the observation that many people gain weight when they're under some degree of stress. Most have heard of the Freshman 15, which refers to the 15 pounds that many pack on while in their first year of college, a fate that often repeats itself in residency

training. Even those who are fairly careful with their diets will gain about a pound a year after high school. One of the issues that many experts in nutrition are beginning to recognize is that the standard advice to avoid fats in the diet and to focus on grains and other carbohydrates may not only be unnecessary but may also lead to some of this weight gain. Some nutrition experts are now recommending that we focus on reducing insulin secretion, especially in ways that lessen cycles of spikes in blood sugar. The concept behind this advice is that when there is less insulin being secreted, we can burn more of our fat stores, while having fewer episodes of feeling hungry.

Therefore, we should do our best to get most of our carbs from fruits and vegetables, with plenty of nutrients and fiber, while avoiding starches and other refined carbohydrates. One easy way for busy physicians to follow this advice is to keep plenty of apples and nuts around. After all, an apple a day is said to keep the doctor away. A particularly useful device to make eating apples easy is a cutter that cores an apple and cuts it into 6 or 8 slices. Canned almonds are another very healthy and convenient source of fiber, protein, and other healthy nutrients. One can also keep a small refrigerator in one's office stocked with healthy foods that will not cause insulin spikes, such as cheese and boiled eggs.

To read more about these issues, see the articles and blogs by Mann, Malhotra, O'Connor, and Attia listed in the references.

WATER, THE MAGIC ELIXIR

A glass of water can sometimes be as invigorating as a cup of coffee or a soft drink.

Humans lose more water through sweat and insensible losses than most animals, an adaptation that allowed humans to have the most endurance of any land animal known to have existed.

This evolutionary adaptation can frequently lead to dehydration for many working in the dry, climate-controlled hospital environment. While some overemphasize how much water one needs to drink, most surgeons and surgical residents are often working in a state of being about a quart low for various



Peaceful mountaintop pastures on the Appalachian Trail.

reasons, including lack of access to water and the practical issue of not always being able to take bathroom breaks during long operations. One can avoid this state by getting water when feasible. Many find that getting a glass or bottle of water when feeling tired can be surprisingly rejuvenating. Some have found that having a water dispenser in one's office will lead to an appropriate, and invigorating, increase in water consumption.

SOME MUST WATCH WHILE OTHERS SLEEP

So, there are many sleepless nights for surgeons.

Needless to say, busy physicians, especially surgeons, will need to be able to work when they are tired, in spite of various work hour restrictions. First of all, it's worth noting that there are a number of studies of surgical outcomes that suggest that working on less than normal amounts of sleep may not significantly affect surgical outcomes.

Second, at least for those who like coffee, it's comforting to know that this wonderful substance is not only not bad for us, it can actually be thought of as a health food. In fact, a recent article in *Circulation* concluded that "moderate coffee consumption was inversely significantly associated with cardiovascular disease (CVD) risk, with the lowest CVD risk at 3 to 5 cups per day, and heavy coffee consumption was not associated with elevated CVD risk.

Third, judicious use of napping can be a valuable strategy. Anyone familiar with special forces military training will be aware that during training, candidates are taught to figure out how to use various periods of napping to restore their ability to carry on when the time available for sleeping is limited. But the ability to nap can be compromised by an inability to transiently clear one's mind, a skill that can be learned. One approach to gaining this ability is to focus on a peaceful place and to use this same mental picture over and over, which can be likened to using a mantra when meditating. One can even think of this approach as a form of self-hypnosis. I myself stumbled onto this approach by chance many decades ago. I found myself recalling a peaceful mountaintop pasture on the Appalachian Trail near Sam's Gap in North Carolina that my brothers and I had reached at the end of a long day of hiking. On that particular day, we decided to stop a bit earlier than planned because of the beauty of the spot, so we unrolled our sleeping pads, pushed them up to a suitable log, broke out a bit of some suitable potion, and just rested for awhile. Recalling that scene over and over in the ensuing years has consistently helped me clear my mind enough to allow a short period of sleeping hard, a phrase one of my colleagues was fond of using for this type of napping.

Finally, when it's show time, there is some energy that can be summoned by focusing on the mission at hand. I am reminded of a simple example of this reality, which was when my oldest son, then about 5 years old, and I had agreed that we would get up at about 4am one morning to head up to the top of the mountain we lived beside to watch the sun rise. My son announced, as we were getting our cold-weather gear on, "I am pretty sure that we're the only guys awake in Charlottesville right now." There is energy to be derived from such thoughts.

THE AGING ATHLETE

It's not the years, it's the mileage.
—*Raiders of the Lost Ark*, 1981
I'm much too young to feel this damn old.
—Garth Brooks

Obviously, by the completion of their training, surgeons are older than most professional athletes are when they retire from their respective sports. Thus, it's fair to consider surgeons during the span of their expected careers in the operating room as aging athletes, and, therefore, we must search for strategies for maintaining health that deal with that reality.

Some of our University of Virginia colleagues who ran the sports psychology program developed a concept that they called “the hardy personality.” They asserted that the most successful people, including athletes, learn to distinguish between anxiety and arousal, despite the physiological similarities between these two states. In other words, one can learn to channel the energy that can arise from states of anxiety into states of arousal. This concept can help us recognize the opportunity to channel the potentially debilitating energy of anxiety into the useful energy of arousal for getting things done, including staying fit.

MAKE A PLAN, KEEP A LOG

If you don't write it down, it didn't, or won't, happen.

To achieve great things, two things are needed: a plan and not quite enough time.
—Leonard Bernstein
Experience is communicated by small details intimately observed.
—Ernest Hemingway

Most surgeons are quite organized about their education and their work. We need to be equally organized and disciplined about maintaining our health and fitness. Scheduling time for fitness, rather than hoping that opportunities will arise on their own, makes it much more likely that activities and workouts will actually occur. And, keeping a log of your exercise and activities can be quite inspiring, reminding you of your accomplishments and, occasionally, shaming you into not letting days lead to weeks of physical inactivity. You can also record other bits of health and wellness information, such as your weight, resting heart rate, and blood pressure.

THE BAG ROOM: EVERYTHING IN ITS RIGHT PLACE

Who moved my stuff?

Each type of activity in which one might engage requires a distinctive set of clothing and gear. Once you have sorted out the essential clothing and gear required for any given activity, you should create a bag to keep those supplies in, ready to be used on a moment's notice. It's best to have a bag for each activity that one participates

in. Ideally, you will be able to cordon off an area in a garage, closet, or mud room, where these bags are ready to be put in the trunk of your car in anticipation of what you might have a chance to do in the coming day or days on your way in or out of work. Another practical suggestion is to keep this gear near a washer and dryer, where your clothes can be washed immediately upon your return home, which also prevents your gear from spreading all over the house and mixing with the clothes of others in the household.

MAINTAINING FLEXIBILITY

Flexibility is one of the few things at which one can continue to get better throughout life.

An essential principle of fitness is that one must maintain flexibility and limberness. There are many ways of achieving and maintaining flexibility. A series of books by Jerry Robinson and his associates at a now defunct organization called Health for Life contained a great deal of succinct and useful advice about healthy approaches to fitness and performance. One of their publications on flexibility, entitled Syner-Stretch, can be found on the web at openlibrary.org/publishers/Health_for_Life.

Many find yoga to be a very useful addition to their workout routines. As a very popular teacher of yoga, David Swenson, has said, “Yoga may be the only physical activity at which you can continue to get better at throughout your life.” Once you learn some of the fundamentals of yoga, you can maintain your own practice without committing inordinate amounts of time to going to group sessions, though many find such sessions educational and quite engaging. Learn more at ashtanga.net.

WE WERE ALL RUNNERS ONCE

The mountains are calling and I must go.
—John Muir

People say that what we're all seeking is a meaning for life. I don't think that's what we're really seeking. I think that what we're seeking is an experience of being alive, so that our life experiences on the purely physical plane will have resonances within our own innermost being and reality, so that we actually feel the rapture of being alive.

—Joseph Campbell

One of the most efficient ways to maintain some level of fitness is to walk or run. I like to say I was once a runner, but am now more of a wanderer. More specifically, I am a 10-minute-per-mile explorer of the Ragged Mountains, which are foothills on the sunrise side of the Blue Ridge Mountains in Virginia. They have been colorfully described by Edgar Allan Poe in “A Tale of the Ragged Mountains,” written when he was a student at the

University of Virginia. If one is to venture into such off-road meanderings, especially with a rate-limiting joint or two (as I too have), an amazingly useful accoutrement is a set of trekking poles. These poles not only provide stability on uneven ground, but also provide more of a total body workout since they require the use of your upper body and core along with your legs and feet. Finally, never underestimate the value of a good dog to provide companionship and inspiration when planning your on-the-hoof excursions.

Being outside has the added value of satisfying the nearly universal human urge to be out in nature, commonly referred to as biophilia. This urge was beautifully described by Emily Dickinson in her poem “To Make a Prairie.”

*To make a prairie, it takes a clover and one bee,
One clover, and a bee.
And revery.
The revery alone will do,
If bees are few.*

If mountains, hills, prairies, or stadiums are challenging to regularly access, you can walk the always-plentiful stairs in your hospital. Just remember to record each trip up a substantial stairwell in your exercise log, giving yourself the credit you’ll be due. And, as an aside, plan your daily routes when you’re in the big house, so that you get to look out the best windows—even these fleeting glances at the outside world can be refreshing.

And, lest you find the concept of running, or even walking, somewhat daunting, remember the wise advice of Walt Stack, featured in the first of the ‘Just Do It’ Nike ads back in the 1970s: start slow, then taper off.

Finally, as further evidence that at least some exercise is not a luxury, recent research shows that it’s also important for optimal brain function.

A BALLET WITH THE WATER

Swimming does not have to be a struggle; it should be a ballet with the water, as gold medal winner Jeff Rouse has said.

Almost everyone can swim, at least a bit, though many who haven’t swum for exercise fear that getting in a pool may lead to a near death experience. While few of us will ever be mistaken for Olympic swimmer Michael Phelps, there are some very simple ways to make fitness swimming comfortable. For starters, one of the best bits of advice I have come across is that one absolutely must find goggles that fit and that the way to do that is to go to your local sports store and buy one set of most of the available goggles. Test them all out and you will eventually find just the right type for you. Furthermore, since most of us don’t have size 14 feet like many elite swimmers, snag some short swimming fins like Zoomers, which not only make your feet roughly equivalent to those of the best swimmers, but also allow you to get a total body workout while moving through the water expeditiously enough to breath comfortably.

OTHER POTENTIAL PARTS OF A COMPREHENSIVE EXERCISE REGIMEN FOR THE AGING ATHLETE

Other activities to consider adding to your workout repertoire include weight training, biking, rowing, cross-country skiing, snowshoeing, rollerblading, and tennis, all of which have played prominent roles in my own, sometimes amateurish, efforts to maintain a reasonable level of fitness. Space does not permit offering admonitions, aphorisms, and advice about each of these activities, but there are most certainly ways to make each of these activities safe, enjoyable, practical, affordable, and—perhaps most importantly—efficient.

Some additional parting principles to keep in mind, especially when starting a new activity, include recruiting friends and family who can make the activity more fun, or finding trainers or advisors who can provide advice to help you be more efficient and avoid injury.

In Conclusion: U.O.U.

Start where you are. Use what you have. Do what you can.
—Arthur Ashe

You owe it to yourself, your family, and your patients to maintain your health and fitness so that you can give your best to all.

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