

Develop the Habit of Mindful Movement

By Deepak Chopra, M.D. and Rudolph Tanzi, Ph.D.

The secret to exercise can be told in a single phrase: keep going, don't stop. It's better to be active all of your life at any level, including engaging in mild activity, than to play sports in high school and college, only to sit back as the years advance. Consistency is the main goal, not breaking a sweat. But this requires a conscious choice, one you are willing to stick with. The good news is that the more you keep moving your body, the more you'll want to. Physical activity becomes a habit you adapt to rather quickly, and it helps create new pathways in the brain.

Modern life has made exercise a blessing and a curse. The blessing is that we are no longer slaves to backbreaking physical labor; the curse is that the blessing has gone too far. Modern life for most people is physically too soft, yet despite the price our bodies pay, we seem to prefer it that way. Given a choice, most people choose:

- Sitting still instead of moving around
- Sedentary distractions (TV, video games, the Internet) instead of playing sports
- Mental work instead of physical work
- Letting machines perform physical tasks instead of using one's muscles
- Letting their children spend more time on electronic devices and less time playing outside

These are all modern choices, and the trend hasn't stopped moving in their direction. As long as it does, the drawbacks of a sedentary life, such as increased obesity and type 2 diabetes, will plague society, while the benefits of exercise, in terms of greater cardiovascular health, avoidance of some types of cancers, and improved mental well-being, will be missed opportunities. As of 2013, only 20 percent of American adults got the recommended amount of regular exercise, which is 2.5 hours of moderate aerobic exercise per week or half that time spent in vigorous aerobic exercise. Someone between the ages of eighteen and twenty-four is twice as likely to exercise as someone over sixty-five—31 percent versus 16 percent—even though it's evident that the two groups that benefit the most from physical activity are the very young and the very old.

For our ancestors, rest was a luxury; for most of us, finding the time to go to the gym is the luxury. At the turn of the twentieth century, around 80 percent of the calories expended to run a farm still came from farmers using their muscles. This was true despite the invention of farm machinery and the widespread use of horses to draw plows, harvesters, and wagons. Such a life, where physical activity was hard and constant, was how we evolved. Our bodies are well adapted to much more activity than you'd suppose. There is evidence that primitive hunter-gatherers had a life span as long as seventy years. What shortened their lives were external conditions—disease, childhood mortality, and exposure to the elements—not the built-in frailty of the body.

Since most of us don't have to hunt, gather, till the soil, fork hay into the hayloft, or make our own bread—the list can be extended ad infinitum—there's almost no essential physical work left. Therefore, no matter how often we hear the drumbeat of exercise, good intentions can easily outweigh action.

We are realists, and we know that scolding will never motivate people to change their ways. Guilt only leads to unused gym memberships. Nor will the balance of pain and pleasure serve as motivation. Anyone who enjoys exercise is highly likely to have been running, lifting weights, or playing sports since childhood. Their bodies are conditioned to it, and the feedback loop that leads to the runner's high or to the "good tired" of a workout is a source of pleasure. For someone who isn't in the habit of exercising, though, the reverse is true. Exercise affects the body like physical labor, leading (at the beginning) to fatigue and sore muscles. The body of someone who doesn't exercise is habituated to sitting still, the ill effects of which are mostly long term. It can take years before the reality of heart disease, type 2 diabetes, and excessive weight actually begins to dawn.

Our goal, then, is to provide easy choices that can change the feedback loop, which means that a little activity leads to wanting more. In addition, the recommended changes must be maintained for a lifetime. Getting active in spurts with long periods of no activity in between isn't good for you. Adaptation comes naturally when it's regular and steady. Better to walk up a flight of stairs every day than to shovel snow off the driveway six times a winter.

The Menu of Choices

If like so many people you've been living a sedentary lifestyle, making the change to enjoy more physical activity requires clear intentions and a strategy. The goal is to condition your mind and your body to experience exercise as a pleasure rather than as a source of pain and fatigue. You can do this by beginning with easy choices that increase your activity level a little and lead you to want more. Adaptation comes naturally when it's regular and steady. The following menu of choices that will help you start with easy actions and learn to love physical activity.

Start by choosing two to five changes that would be easy to make given your current level of physical activity. The harder choices should follow after you have adopted the easy choices. Begin by focusing on one easy choice per week, then add another choice the next week.

Part 1: Easy Exercise Choices

- Get up and move around once an hour.
- When taking an elevator, take the stairs to the second floor before continuing on the elevator.
- Do your own housework instead of hiring a cleaner (if it's more do-able, you can start by doing half of the chores yourself).

- Take a brisk walk after dinner.
- Choose the far corner of a parking lot so you can get a little extra walking in (as long as it's safe and well lit).
- If you already walk your dog every day, make the walk longer and brisker.
- If a destination is less than half a mile away, walk instead of driving.
- Buy an exercise step and use it for 15 minutes every day as you watch TV or listen to music.
- Go outside for 5 to 10 minutes three times a day.
- Take up gardening, golf, or a similar activity that you actually enjoy.
- Set aside 5 to 10 minutes a day for calisthenics.
- Work with light weights as you watch TV.

Part 2: More Challenging Exercise Choices

- Make more active friends and join them in their activities.
- Devote half of your lunch hour to exercise.
- If you take children to the park, play with them instead of watching.
- When using an elevator, take the stairs to the third or fourth floor before continuing on the elevator.
- Plan a shared exercise activity with your partner or spouse twice a week.
- Buy an exercise step and use it for at least 30 minutes every day as you watch TV or listen to music.
- Resume a sport you used to love.
- Do 5 to 10 minutes of calisthenics twice a day.
- Walk for a total of three hours a week.
- Do all of your own yardwork.
- Volunteer to help someone in need with housecleaning, painting, and repairs.

- Take hikes every weekend in good weather.
- Work with a trainer at the gym.

Part 3: Experimental Exercise Choices

- Join an exercise class.
- Take up yoga.
- Lead or join a hiking group.
- Train for a competitive sport and keep at it.
- Find a regular exercise buddy.
- Take up tennis or another vigorous sport.

Explaining the Choices

The easy choices require little effort. They would have to accumulate quite a lot to equal the official recommendations of 2.5 hours of moderate aerobic activity every week, combined with some additional time for weight training. But those recommendations might as well come from another planet if you lead an inactive life. The good news is this: getting up out of your chair brings the most benefit. Moving away from a completely sedentary life is the major step in preventing the bad effects of getting no exercise. The risk of disease rises sharply as you age if you don't move your body. Drastic inactivity eventually leads to a 30 percent higher mortality rate for men, and double the mortality rate for women. The "new old age," in which seniors remain active and vital well beyond sixty-five, reversed one of the unhealthiest trends in social life.

The more activity you add, the better your body will respond. If you go from walking a mile to jogging a mile, the good effects will increase. What your heart, brain, circulatory system, blood fats, and blood sugar need most is some activity, after which you can think about adding more.

In middle age, getting physical activity decreases the risk of chronic illness. Statistical measurement has proved the point over and over. Unlike other risk factors, however, exercising is more than statistical. It improves every individual life, at every level of activity. In very old people, eighty and above, weight training for a few minutes with minimal effort (using only a five-pound weight, for example), can double or triple muscle tone.

Our focus isn't on how much weight you can lift or how fast you can run. We want to level the curve so that physical activity isn't mostly for the young, with a sharp falling off in middle and old age. Leveling the curve is much more important than being really active in your youth and inactive

in old age. Your body adapts to what you do *all the time*, not what you do every once in a while. This is also the secret for making exercise pleasurable—the feedback loop between muscles and brain gets enlivened the more you use it. Just like biceps or abdominal muscle that atrophies with disuse, the body’s feedback loops need to be utilized, and the more messages they transmit, the livelier they become.

Of course, we hope that you will move on to the more challenging choices. Give it time. If you spend two months taking the stairs to the second floor before pushing the elevator button, the next step—walking to the third or fourth floor—becomes effortless. But if you decide tomorrow to walk to the fourth floor, you are likely to feel exhausted, and your body will get the message “This is work.” It’s not the right message if you intend to make taking the stairs a pleasurable choice.

The Benefits of Hatha Yoga

If we had to choose the single activity that does the most for body and mind together, it would be yoga. The correct term is *hatha yoga*, which is only one limb of the ancient tradition of yoga, which has eight limbs in all. The others have to do with mind and behavior, but the body cannot be excluded in the pursuit of higher consciousness. In Sanskrit, *yoga* means “union” and is related to the English word *yoke*. As mysterious as the concept of enlightenment may seem, yoga makes sense in its goal of bringing the mind, body, and spirit into harmony.

Each asana (posture) that’s taught in yoga is about focusing the mind to direct the flow of physical energy in the body. Not that the two are separate. When consciousness moves, so does energy. The teachings of hatha yoga can be quite subtle and even esoteric. The flow of life energy (prana) that is regulated by the breath can be trained in exquisitely precise ways. The flow of life energy connected directly by the mind (*shakti*) is even more precise and exact. In the yogic tradition, it’s taught that a single syllable in a mantra, for example, has influences that extend from mind and body throughout the entire environment. Hatha yoga improves body awareness, strengthens your health, sharpens your focus, and tones your muscles at the same time.

About the Authors

Deepak Chopra, M.D., F.A.C.P.

Deepak Chopra, M.D., F.A.C.P., is the co-founder of the Chopra Center for Wellbeing, the founder of the Chopra Foundation, and a world-renowned pioneer in integrative medicine and personal transformation. He is board certified in internal medicine, endocrinology, and metabolism. He is a Fellow of the American College of Physicians, a member of the American Association of Clinical Endocrinologists, and a clinical professor in the Family Medicine and Public Health Department at the University of California, San Diego.

He is the author of more than 85 books translated into over 43 languages, including numerous *New York Times* bestsellers. His recent books include *You Are the Universe*, co-authored with Menas Kafatos, Ph.D.; and *Quantum Healing (Revised and Updated): Exploring the Frontiers of Mind/Body Medicine*; and *The Healing Self*, co-authored with Rudolph Tanzi, Ph.D.

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Rudolph Tanzi, Ph.D.

Dr. Rudolph Tanzi is the Vice-Chair of Neurology, Director of the Genetics and Aging Research Unit, and Co-Director of the McCance Center for Brain Health at Massachusetts General Hospital, and serves as the Joseph P. and Rose F. Kennedy Professor of Neurology at Harvard Medical School.

Dr. Tanzi received his B.S. (microbiology) and B.A. (history) at the University of Rochester in 1980 and his Ph.D. (neurobiology) at Harvard Medical School in 1990. In his research achievements, Dr. Tanzi served on the team that was the first to find a disease gene (Huntington's disease) using human genetic markers, helping to launch the field of neurogenetics. Dr. Tanzi then went on to co-discover all three early-onset familial Alzheimer's disease genes. He has identified several other AD genes as leader of the Alzheimer's Genome Project supported by the Cure Alzheimer's Fund. Dr. Tanzi also discovered the Wilson's disease gene and several other neurological disease genes.

More recently, Dr. Tanzi and his team used Alzheimer's genes and human stem cells to create "Alzheimer's-in-a-Dish" - a three-dimensional human stem cell-derived neural culture system that was the first to recapitulate both pathological hallmarks of Alzheimer's disease: plaques and tangles. This model has made drug screening for Alzheimer's disease considerably faster and more effective. Using this system, Dr. Tanzi has developed several novel therapies for AD including gamma secretase modulators aimed at plaque pathology.

Most recently, Dr. Tanzi and his team have discovered that beta-amyloid, the main component of senile plaques, may play a role in the innate immune system of the brain operating as an anti-microbial peptide, suggesting a possible role for infection in the etiology and pathogenesis of AD.

Dr. Tanzi has published over 500 research papers and has received the highest awards in his field, including the Metropolitan Life Foundation Award, Potamkin Prize, Ronald Reagan Award, Silver Innovator Award, and the Smithsonian American Ingenuity Award, the top national award for invention and innovation. He serves on dozens of editorial boards and scientific advisory boards and was named to *TIME* magazine's list of TIME100 Most Influential People in the World. He also co-authored the books *Decoding Darkness*, (and with Dr. Deepak Chopra), the international bestsellers, *Super Brain* and *Super Genes*, and most recently, *The Healing Self*.