

Rx: exercise

Getting up, getting active can work medical miracles

By Connie Midey
THE ARIZONA REPUBLIC

Your doctor reaches for her prescription pad, scrawls something on the top sheet and hands it to you.

She has written a single medicine on the form, but it's a powerful one, capable of helping you prevent heart disease, diabetes, high blood pressure, high cholesterol and obesity.

"And those are just the big ones," says Phoenix cardiologist Renée Espinosa of the Heart and Vascular Center of Arizona.

The prescribed "medicine" is exercise.

Espinosa has offered to write just such a prescription for sedentary patients, but talking with them about the health benefits of moderate exercise usually is persuasive enough.

"Most people want to be well," she says. "Sometimes they just need a reason."

Mounting evidence about the power of physical activity provides an abundance of reasons, including its ability to sharpen mental acuity, prevent colon cancer, promote mental well-being and improve sexual function.

The 'magic bullet'

Virtually every part of the body responds positively to something as easy for most people as a daily walk, says Larry Woodruff, senior lecturer in the exercise and wellness department at Arizona State University Polytechnic in Mesa.

"Exercise comes closer to being the

magic bullet than anything else we know of," he says. "If you had to choose a single thing to improve your health and quality of life, exercise would be the most beneficial."

He still remembers the conference where he heard epidemiologist Ralph Paffenbarger of Harvard and Stanford universities present findings from a study of male Harvard graduates.

"The study determined that for every hour we exercise, we gain two hours in longevity," Woodruff says. "That's a great investment of our time."

Study subjects who increased their activity enough to burn an additional 1,250 calories a week, or about 180 more a day, had a 20 percent lower risk of death from any cause than men whose activity levels stayed the same. (A 150-pound person burns about 150 calories by walking two miles in 30 minutes.)

Woodruff sees proof of the benefits in his own life. He is 60 and credits regular physical activity, a healthful diet and sufficient sleep for his outliving the other men in his family. None has lived past 38.

Fighting family history

For Willis Daychild, 42, of Phoenix, the motivation to get moving comes from a family history of diabetes.

A former high school and college runner, he has escaped the disease so far. But hours in front of a computer — he's a budget analyst for the Indian Health Service — and lots of TV time after work were taking a

See **SEDENTARY** Page E3



SINS OF THE PAST
Banish bad habits and get healthy

Can you undo the damage of past indulgences? During 2006, we're devoting one day each month to reversing bad habits from your past (or present).

APRIL'S SIN: Sedentary living. E3

Damage and penance

Nine health consequences of inactivity and what you can do about them.

No more excuses

There's a quick fix for the many reasons you skimp on exercise.

Myth-busters

Is one long workout better than several short ones?

Making a change

When life's demands crowded out time for exercise, health problems arose for Kari Parker. Find out how she's turning things around.



Exercise can work wonders on health

SEDENTARY

Continued from E1

toll.

"I put on weight, and my doctor told me I needed to start doing something about it," Daychild says. "That kind of scared me, because I can see what's going on with my mom."

She has diabetes-related heart and circulation problems and trouble getting around.

"She's only 68, but it seems that it has aged her," he says.

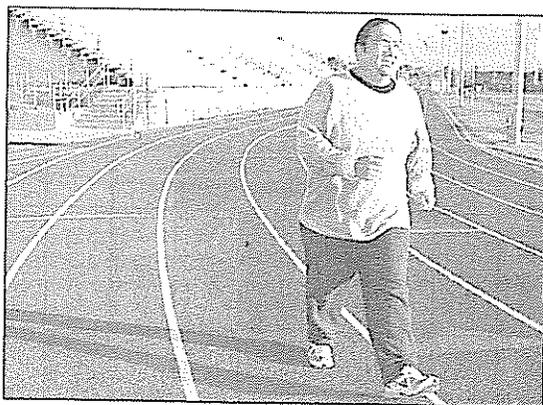
At her urging, Daychild has resumed the running that kept him fit for years, putting in time at Piestewa Peak and the track at Phoenix College. He also rides a stationary bike and lifts weights.

That energy expenditure is doing more than speed his weight loss. It's lowering his blood sugar, cholesterol and blood pressure, a recent physical exam revealed.

How exercise causes such improvements is not precisely understood in every case, ASU's Woodruff says.

In part, exercise stimulates circulation in the arteries and increases the amount of HDL, or "good," cholesterol in the body.

"As HDL molecules circulate in the blood," he says, "they pick up extra cholesterol hanging around in the artery walls and keep it from being deposited



Willis Daychild, 42, of Phoenix, a former runner, took it up again after a sedentary lifestyle led to weight gain. It has lowered his blood sugar, cholesterol and blood pressure.

MARK HENLE/THE ARIZONA REPUBLIC

there in the form of plaque."

Physician I-Min Lee, associate professor of medicine at Harvard Medical School, says improved blood flow through clear, supple arteries may explain why active people have less heart disease and better brain function later in life.

"There are many systems in the body affected in a good way by physical activity," she says. "I once heard a really good quote that everything that gets worse as we grow older gets better as we exercise."

Markers of aging that activity can correct include everything from badly controlled blood glucose to increased risk for chronic disease, she says.

Exercise also reduces clotting of the blood, further improving blood flow and reducing the risk of heart attack and stroke. And it

can stimulate the growth of new capillaries in the brain, heart and skeletal muscles.

"So if one part of a small vessel fails," Woodruff says, "we can, to a certain degree, develop collateral circulation that may take its place."

A leading cause of death

Reaping these rewards becomes more important as the consequences of our no-time-for-exercise lives catch up with us.

Physical inactivity and poor diet threaten to overtake tobacco as the No. 1 cause of death in the United States, researchers for the Centers for Disease Control and Prevention say.

They found that deaths attributed to sedentary lifestyles and unhealthy eating habits rose to 16.6 percent of the total in 2000

from 14 percent in 1990. Deaths from tobacco fell to 18.1 percent from 19 percent in the same period.

Little is needed to change these figures, Lee of Harvard says.

"You can just go out to walk for half an hour a day," she says, "and it doesn't even have to be done in a single shot. You can do it in two bouts of 15 minutes or three bouts of 10 minutes."

"That's really not a lot to be doing for such a great improvement in health."

Even better, "exercise" can mean anything from pushing a stroller (150 calories if you cover 1½ miles in 30 minutes) to raking leaves (150 calories for 32 minutes).

"The main thing is to make it fun," says the re-energized Daychild, who's looking forward to running in a half-marathon in January.

For the most part, it's never too late to regain the glee that being on the move gave us as children, and with it at least part of the vibrant health.

"Our bodies are pretty miraculous," ASU lecturer Woodruff says. "Up to a point, they can take a lot of abuse, and they'll still keep trying to correct it."

Reach the reporter at (602) 444-8120 or connie.midey@arizonarepublic.com.