

Health & Fitness

HEALTHWISE

Plants eat pollutants

National Aeronautics and Space Administration tests have determined that some common houseplants are highly successful at reducing pollutants in the air we breathe at home or in the office.



The original research was part of the space program's need to know how the atmosphere of a spacecraft could be cleaned and made safe for travel.

Now NASA has teamed up with the Associated Landscape Contractors of America to further

this research, testing 10 plants to see how well they do alone and in combinations to remove pollutants like formaldehyde and carbon monoxide.

Poor eating haunts elderly

One-fifth of men older than 55 and a quarter of 55- to 64-year-old women who live alone have nutrition-poor diets, according to a University of California at San Francisco study.

Diets of men who lived alone became poorer as age increased, the study found. Men living with spouses were found to have much better diets, probably because older men are accustomed to have spouses cook for them, researchers speculated.

Yet women between 55 and 64 who lived alone also had poorer diets than those in the same age group who lived with spouses. Dietary quality also decreased with age. For older women, however, nutrition quality did not differ significantly between women who lived alone and those who did not.

The study also found that those with poor diets, particularly those who lived alone, ate less. At greatest risk are elderly with limited incomes.



Flatus found out

An offbeat but entirely serious cadre of physicians and scientists — with financing from the United States Public Health Service, the United States Agriculture Department and a number of state universities — has created a virtual explosion of knowledge about that ignominious bodily function: Flatulence.

For instance: A typical healthy American man passes gas an average of 14 times a day. (No researcher has been sufficiently nosy yet to conduct a similar study of women).

Normal, healthy people pass 200 to 2,000 milliliters of gas each day.

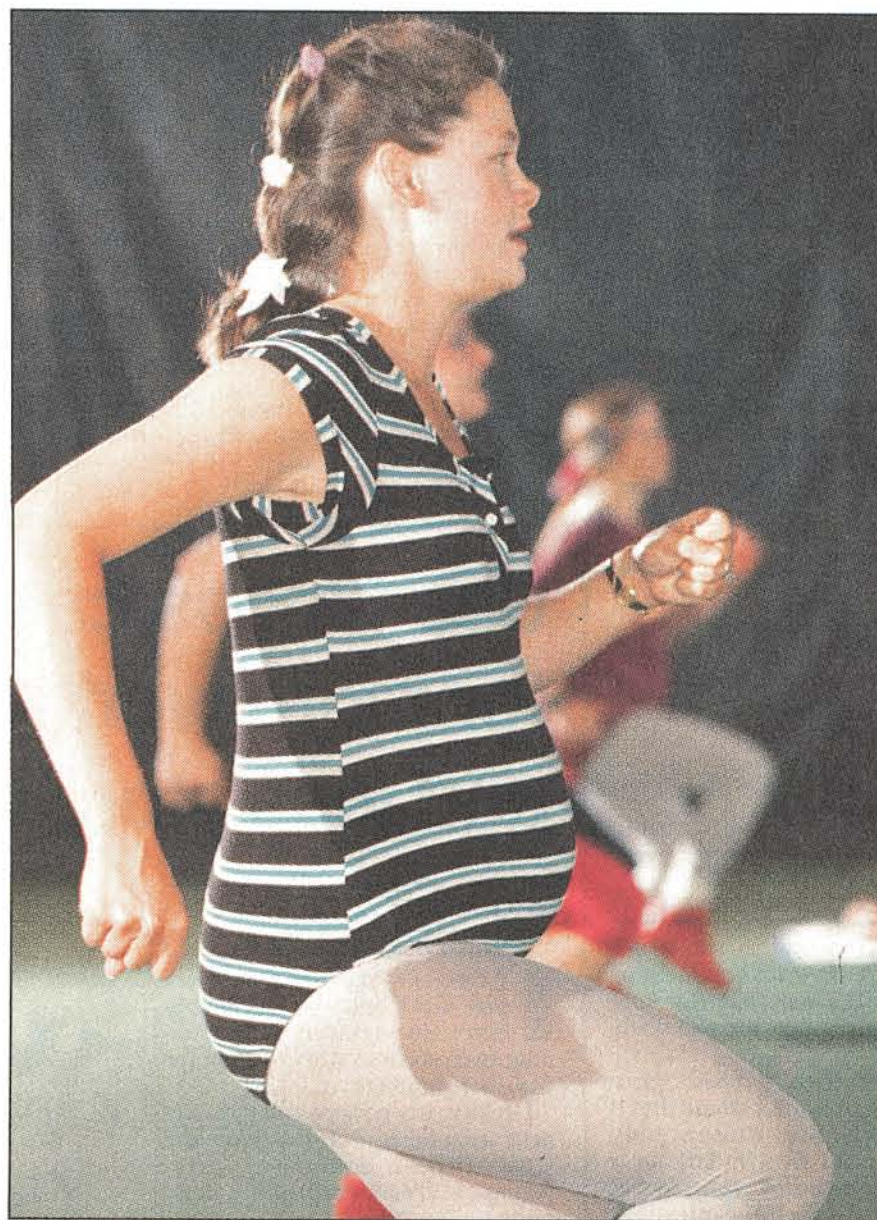
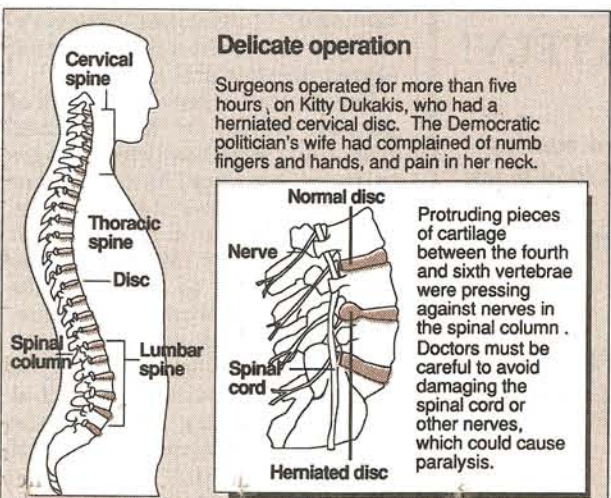
Nitrogen, oxygen, hydrogen, methane and carbon dioxide — all odorless — account for more than 99 per cent of intestinal gases. Flatus derives its notoriety from the remaining 1 per cent. That potent minority, known generically as "volatiles," consists of as-yet-undetermined gases that may include ammonia and sulphur compounds.

Body fat comes on

A young man recently was overheard asking the attractive woman standing beside him, "So what's your body fat?"

If that sort of question leaves you flat-footed, you may need a body composition analysis. And this weekend at the Health and Fitness Fest in the Statehouse Convention Center you can have one done free, courtesy of Baptist Medical System.

All you need to do is present a bare right hand and foot — the electrodes cannot be attached to the skin through stockings or socks. What you'll get on an analysis tape is your weight, height and percentage of body fat — with fat and lean weight given in pounds. A clinical dietitian will explain the significance of all this and should you want further details a computer printout of the information — and implications — will be mailed to you in a couple of weeks.



Sherry Hall goes through aerobic workout.

—Staff Photos by Art Meripol

EXPECTANT MOMS: To aerobicize or not?

By Marilyn Myers
GAZETTE STAFF

Regions of women exercise to whittle down their waists. But an expanding number are watching their midsections swell even as they dance to the beat of low-impact aerobics. Most of these women simply are continuing fitness programs initiated long before becoming pregnant.

Terri Simpson taught traditional and then low-impact aerobics all through

her pregnancy. Now she's part of a For Mothers Only exercise class at West-side Tennis and Fitness Club, following her son Daniel's birth nine weeks ago.

Simpson said that doing aerobics while she was expecting kept her energized. And she finds that her son — who sits on the sidelines, kicking his legs — seems to like the workouts also. One of the instructors, Sheb Trotter, is convinced Daniel recognizes the music.

Sherry Hall, however, joined the class when she was already six months pregnant, adding this exercise to her

ongoing walking routine. "It's a nice structured workout that's not too demanding," Hall said. And she, too, plans to come back for the three months of postpartum that is considered part of the childbirth year.

Simply put, these women say the exercise makes them feel better no matter what phase of pregnancy they're in. Or as Mary Kathryn Hope said, "You don't feel like you're just sitting around getting bigger and bigger." And that's no small feat if, in fact, you're growing larger every day.

But exercise programs for pregnant women haven't always been popular. Victorian women who didn't have to work were expected to loll on sofas during their terms, stirring as little as possible. Something about movement was supposed to disrupt — or possibly prematurely dislodge — the fetus.

Even now the American College of Obstetricians and Gynecologists recommends that pregnant women not get their heart rates beyond 140 beats a minute, a number considered minimal aerobic capacity for a 20-year-old woman. More vigorous exertion is thought to change the fetus' heart rate and potentially reduce the fetal supply of oxygen.

Yet, that number may not be written in stone. A recent study in the *Journal of the American Medical Association* reports that heart rates of 150 beats a minute followed by a continuous slowing of effort during recovery causes no change in the fetal heart rate.

Using two-dimensional ultrasonic imaging, the Brown University researchers measured maternal and fetal heart rates as 45 pregnant women pedaled stationary bicycles under conditions that were classified as submaximal and maximal. In maximal effort the women cycled against increasingly vigorous resistance until they were unable or unwilling to exercise further.

Monitoring found that the unborn baby's heart rate was stable during and a half hour after maternal exertion and independent of its intensity, though the researchers point out that exercise lasted less than 30 minutes. Slowing of the fetal heart rate was observed in only one instance of submaximal exercise.

The study notes, however, that maximum aerobic exertion — to the point of exhaustion — resulted in a slowing of the fetal heart rate in 15 out of 79 instances. In these cases the unborn baby's heart rate dropped when exercise stopped — possibly as a reflex reaction — and returned to normal within two to 12 minutes. Further, any slowing of

the fetal heart rate had no relationship to any physical problems following birth.



Terri Simpson with son, Daniel.

Working out worked out for these moms

Nell Weaver was pregnant when she wrote *Your Fit Pregnancy*.

So she understood how important it is to know how to stand, sit and recline with the greatest degree of comfort during that time when your center of gravity shifts forward.

Weaver also interviewed 50 women, most of whom had done some type of exercise during their pregnancy. A lot had walked, Weaver said. "But some had done a comprehensive exercise program and been very aware of their exercising — just as they had been before their pregnancy."

A runner and walker herself, Weaver isn't an advocate of women going out and attacking a pregnancy fitness program like they're attacking a marathon. "Especially in pregnancy, a woman has to practice moderation," Weaver said.

She does know, however, that continuing to exercise was the best thing for her to have done. "I've always loved walking," she said, and toward the end swimming was very important also, especially since her child was born in August when walking outdoors was nearly unbearable.

Eloise Patterson also appreciates the benefits of being in the water. Last summer she went to water aerobics classes at the YWCA until the day before she delivered.

Patterson was especially thankful for the energy it gave her, particularly when the extra weight combined with the heat can make one tired. It also took a load off her feet. "You get in the water," Patterson said, "and the water supports your body. You don't feel like your feet are holding up anything."

Possible selves: Visualizing what we can be

By Pamela Adelman
LOS ANGELES TIMES SYNDICATE

Perhaps you hope to become a better parent or work a little harder toward that promotion you think you deserve. Or maybe you'd like to take off the extra 20 pounds you've been carrying around a little too long.

Visualizing what you'd like to become, and also what you don't want to be, may help you attain your goals. University of Michigan psychologist Dr. Hazel Markus and her colleagues are discovering that the "possible selves" we envision can help us cope with the present.

Possible selves, Dr. Markus said, are "components of the self-concept that have to do with what I can be, what I would like to be and, very importantly, what I am afraid of becoming." They might include such hoped-for selves as the thin self, rich self or successful self, or they might be the lonely alcoholic or unemployed selves we fear

becoming. In a recent study, Dr. Markus and graduate student Ann Ruvolo asked students to imagine themselves as either highly successful or as failures in the future. The students created vivid images of themselves, such as one who thought of becoming a successful Southern California lawyer with her own swimming pool, and another who imagined working at a mindless job living in a rat-infested apartment.

The students then worked on difficult tasks, such as doing math problems mentally and writing with their nondominant hand. Students who had imagined future success, presumably activating their positive possible selves, outperformed those who imagined failure. The results, the researchers said, suggest that "possible selves are powerful motivators and are effective in guiding action."

Dr. Markus and her colleagues also found that possible selves can help people cope with a troubled present. They asked people who had experi-

enced a recent life crisis, such as the death of a loved one or the end of a long-term relationship, to choose descriptions of themselves for both the present and future, and then asked the participants to rate how well they were recovering from their recent crisis.

Not surprisingly, the crisis victims described their present selves in negative terms. Those who were coping poorly selected possible selves that were even more negative, such as being unpopular, weak or unimportant.

Those who were handling the crisis well, however, were positive about their future, selecting possibilities such as being rich, motivated, attractive and successful. This group saw these possibilities as more likely to come true than did a noncrisis comparison group. "It looks like the people who felt they were coping well were able to create new worlds, new ideas of themselves," Dr. Markus said,

(See SELVES on Page 4B.)

Blood pressure: Numbers bad for many blacks

By Lynne C. McCarty
LOS ANGELES TIMES SYNDICATE

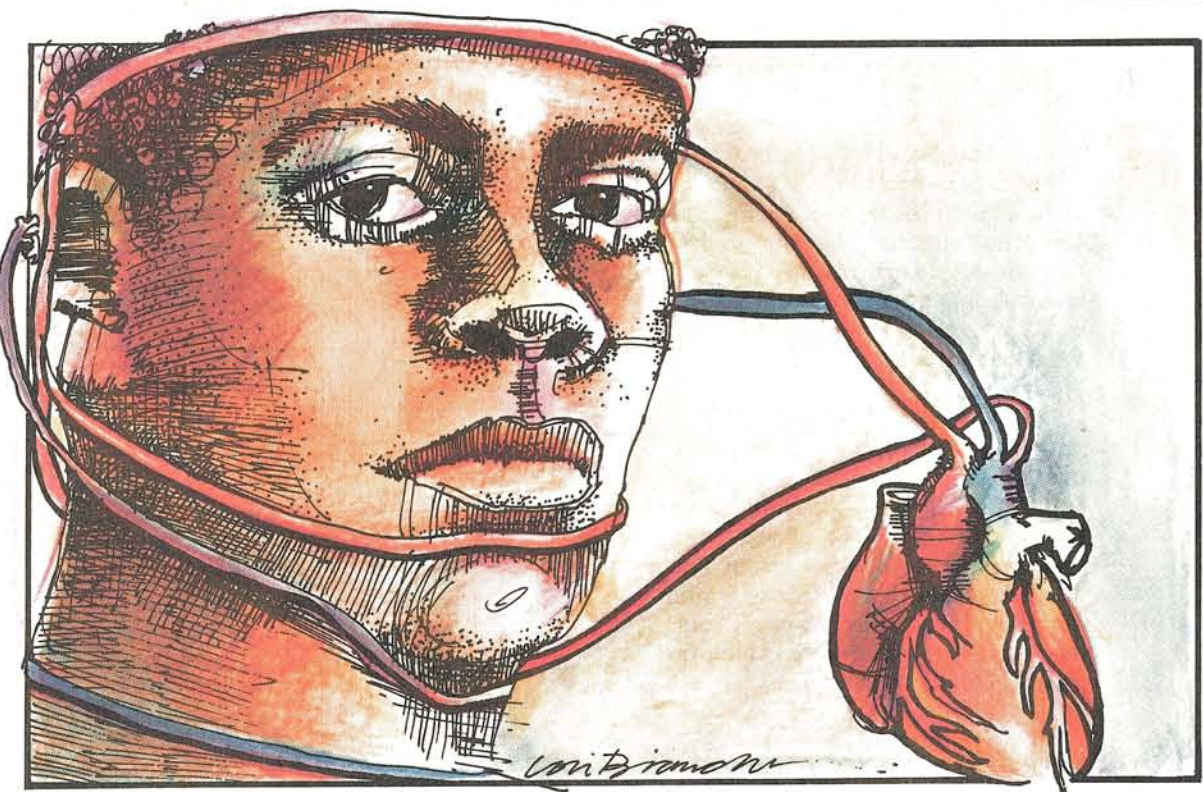
High blood pressure is a serious problem for blacks even before they're born, according to Dr. Clarence E. Grim.

Dr. Grim, who is director of the hypertension research center at Charles R. Drew University of Medicine and Science at Los Angeles, is a long-time researcher of high blood pressure. So many black Americans are affected by high blood pressure that Dr. Grim calls it an epidemic.

Blood pressure is the push of blood against the walls of arteries, the vessels that carry oxygenated blood to the body. Blood pressure is measured in two numbers. The higher (systolic) number gauges the pressure in arteries when the heart contracts with each beat. The systolic blood pressure should measure lower than 140 millimeters of mercury.

The lower (diastolic) number measures the pressure in arteries while the heart rests between beats. It should measure lower than 90. Blood pressure repeatedly measured at 140/90 or more is considered high.

High blood pressure affects about two of three black Americans above age 50. But being younger is no defense. Nearly one of three blacks over 18 suffer from this problem, and it is the leading cause of death in black women during pregnancy.



"The greatest risk of dying if you're pregnant is from high blood pressure, whether you're black or white," Dr. Grim said. "But it's considerably greater if you're black."

Unborn babies also suffer the consequences, Dr. Grim said. "High blood pressure in the mother decreases blood flow to the baby, and the babies of hypertensive mothers tend to be smaller. Blacks tend to have much smaller babies on average than

white and other ethnic groups" and a higher death rate in newborns.

High blood pressure is also the major risk factor for stroke, a sudden, often severe, attack caused by insufficient blood supply to part of the brain, which may affect the black population nearly twice as much as whites, according to Dr. Edward S.

(See PRESSURE on Page 4B.)