

## TECHNIQUE

Reversal  
of Fortune

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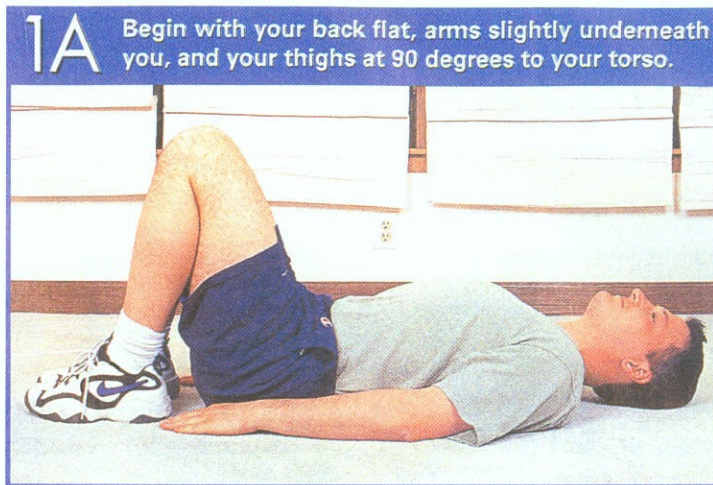
As a personal trainer, I'm frequently asked by my female clients to show them an exercise that will flatten their lower tummy, a troublesome spot. Male clients, for their part, frequently complain about lower-back pain. I prescribe the same exercise in both cases: the reverse crunch. Whereas the traditional crunch emphasizes the upper portion of the abs as it exercises the entire group of abdominal muscles, the reverse crunch places a more strenuous demand on the lower segment of the abs.

Women like it because it helps strengthen the "lower" abs, which, in connection with regular aerobic exercise, can flatten the tummy. Men like it because it helps correct weakness in the lower midsection that often leads to lower-back pain.

To perform this exercise, begin by lying with your back flat on the floor and your hands slightly underneath and to the sides of your buttocks [figure 1A]. Bend your knees and position your thighs so they form a 90-degree angle with your torso. Pressing your arms into the floor, lift your buttocks off your hands while slowly curling your pelvis toward your chest [figure 1B]. Concentrate on making the lower ab muscles do the work. Exhale during this phase of the exercise. Once your lower back has cleared the floor, slowly begin to lower your pelvis back to the starting position. Inhale during this phase of the exercise.

## Key Pointers

● Do not swing the thighs or lower legs during the exercise to create momentum. This causes you to move your hips rather than



exercise the ab muscles.

- Keep the movement smooth and controlled. Perform the curling-up movement to a two-count and the return to a four-count.
- Do not hold your breath. This is a common problem, especially as you start to fatigue.
- Perform only two sets of five to seven repetitions each twice a week to start. Work up to two to three sets of 15 to 20 reps each.
- To make the exercise a little easier at first, position yourself lying in a doorway with your arms nearly straight out from your body and each forearm pressing against the wall on either side of the door. Do not push with the arms, but use them for stability as you curl up.
- Discontinue the exercise or consult with a physical therapist or competent fitness professional if performing this exercise causes lower-back pain.

No article on training the lower abs would be complete without a mention of the exercises you commonly see people performing in the gym in an attempt to strengthen this area. These include

## MOTIVATION

Forget the  
Scale—Just  
Use the Eyes

Just because a scale tells the truth doesn't mean you have to ask it. Too many exercisers judge the success of their workout program by the incremental gains or losses in weight they note each morning. Stop it, say many experts.

The reason is, the scale's "truth" doesn't tell the whole

story. One of the reasons is that muscle tissue weighs more than fat tissue. If you're following a workout regimen of aerobic and strength work, your weight may stay the same even as you shed pounds of fat and gain pounds of muscle. In fact, your weight may even go up. If you used your scale as the only judge of your progress, you'd assume you weren't progressing at all.

Try these two assessment methods instead. The first: note how your clothes fit. Yes,

it's unscientific, but you'd be surprised at how sensitive you are to the fit of your clothes. If your scale says you haven't lost weight, but your clothes seem a pinch looser, you know you're losing pounds, adding muscle, and redistributing your weight more healthily.

Second, turn up the thermostat and work out in your underwear—seriously. As you work out, watch yourself in the mirror. The numerous positions you assume will allow you to note changes in shape,

and over time you'll become quite aware of the gains in muscle and the reshaping of your figure. Muscles will begin to appear where a thin layer of fat existed before, and the gain in definition is a definite positive reinforcement.

There's another benefit to working out before a mirror: You can pay close attention to your form. Take advantage of the privacy of working out at home and indulge in some vanity; you'll enjoy the results.

—Reginald Tork

hanging knee raises or straight-leg raises done from a lying position—so-called “leg lifts.” Both *seem* to work since they create a burning sensation in the lower abs. Sounds effective, right?

The fact is, the abdominal muscles span from your ribs to the top brim of your pelvis and thus are functionally capable of moving the chest toward the pelvis or the pelvis toward the chest. But since the abs do not cross the hip joints and attach into the legs, they are functionally incapable of raising your legs. Thus bent knee raises and leg lifts don't work the abs.

But what about that “burn”? Since these exercises do require a

## REGIMEN

### Pain: Is It Fatigue or Is It Injury?

Exercise inherently increases the demand on your body's musculoskeletal and cardiovascular systems. The same increased stress that causes the muscles or heart to grow stronger has the potential to overload the body structures and cause injury. Furthermore, an anatomical feature such as flat arches may not

result in pain with walking, but with running and the vast increase of biomechanical stress, they may lead to injury and pain. How do you know when the sensation you're feeling is a soreness related to fatigue or an injury?

If the pain is sharp and occurs early during an exercise or workout or shows up within an hour or two after, it is most likely associated with injury. A general, dull pain during the last few repetitions of an exercise or at the end of a cardiovascular workout is usually muscle fatigue. General muscle soreness is greatest 36 to 48 hours after working out and most frequently is not related to muscle injury.

If you experience the onset of pain you think is associated with muscle or joint injury, stop exercising immediately. Apply a cold pack to the area for 15 to 20 minutes, four to five times a day, placing the pack on a towel wetted with warm water or in a pillow case. Even a bag of frozen vegetables will do in a pinch. Apply light compression to the injury if possible by wrapping the ice pack in an elastic bandage, and raise the injured area if possible. Follow this protocol approximately.

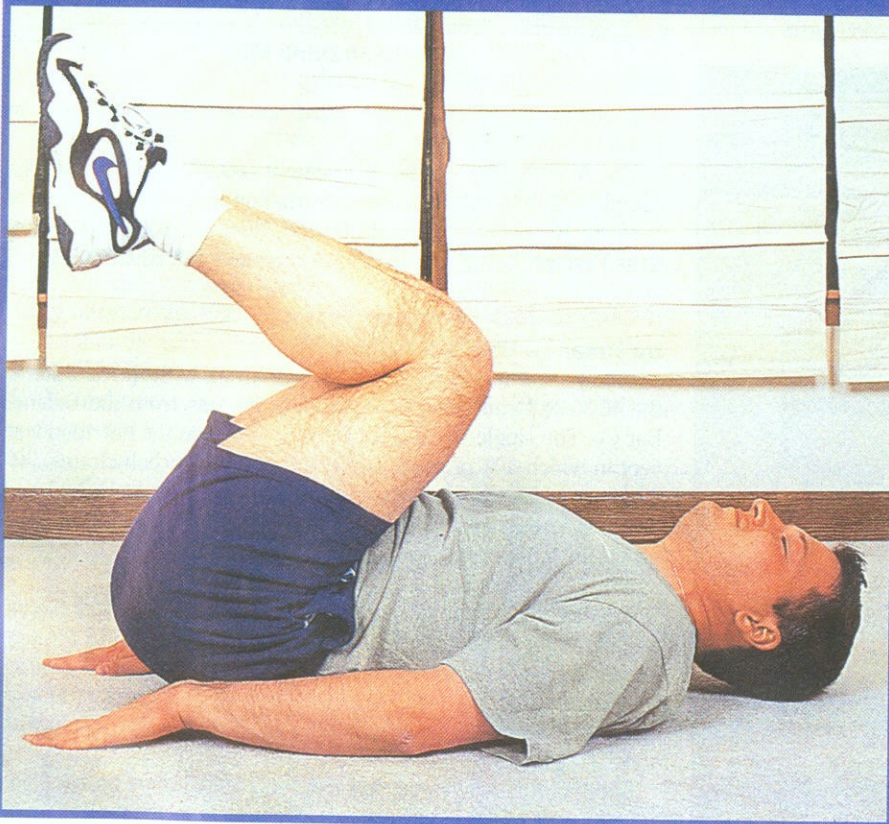
Never apply heat to the injured area until at least four or five days after the injury, as it can increase tissue damage. An anti-inflammatory medication, such as aspirin or ibuprofen, may be beneficial,

but you should consult your physician or pharmacist first. If the pain persists longer than a week, have it evaluated by your doctor.

Two points of interest: Some research has shown that a diet high in omega-3 fatty acids, such as found in salmon and tuna, will decrease the body's inflammatory response. This may translate into decreased intensity and duration of an injury. Second, there are numerous newly developed devices for snugly holding a cold pack to an injured body part. They're made of Lycra and can be found at pharmacies and fitness specialty stores.—G.G.

*Gerald Greenspan is founder of Columbus (Ohio) Fitness Consultants.*

**TB** Slowly contract your ab muscles and imagine you're pulling your hips toward your rib cage. You'll feel it in your lower abs.



stable pelvis to provide the legs something to move against, your abs are isometrically contracted during the entire course of these exercises.

Muscles sustaining isometric contractions experience much-diminished blood flow, which deprives them of oxygen and nutrients and prevents the disposal of metabolic waste products. In short, your abs are being suffocated, and they're screaming out—thus the burn.

By performing reverse crunches with the proper technique, you will feel the burn as well, but from the lower abs fatiguing rather than suffocating. Your gains will be better as a result.