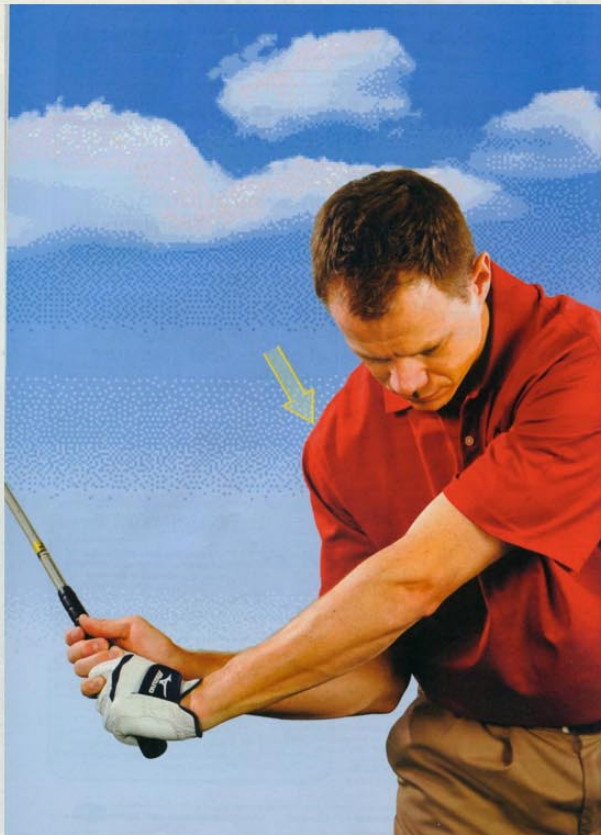


1.8 MILLION LESSONS PROVE . . .

THIS MOVE WILL CURE YOUR SLICE



NEW RESEARCH FROM 180,000 AMATEURS AND 150 TOUR PLAYERS UNCOVERS WHAT THEY DO DIFFERENTLY—AND WHY YOU HIT A SLICE BY STEVE ATHERTON

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The move that really separates pros and amateurs happens literally in the blink of an eye. Starting down incorrectly—even for a millisecond—is the reason most golfers slice.

The pro's shoulder action at the transition from backswing to downswing helps to create a solid, straight hit, but the slicer's transition starts with the shoulders working the wrong way—and from there the slice is almost impossible to avoid.

At GolfTEC during the past 14 years, we've studied the swings of 180,000 amateurs and 150 tour pros in the course of giving almost two million lessons at our learning centers. Using our g-SWING motion-capture and video system to dissect those swings at 60 frames per second with sensors that are accurate to one-tenth of a degree, the numbers show that

the most significant difference between the two groups comes at the transition: Simply put, the pros tilt their shoulders downward (*left*); amateurs turn them toward the target.

The measurements actually show big differences early in the backswing as well. Our analysis of the angles of the hips and shoulders reveals that getting the club in the proper position starts with an upper-body turn in the takeaway; amateurs tend

to start back with only the hands and arms. This leads to differences at the top and, in turn, the first move down. By then the faults are tough to overcome, leading to poor impact. So the problems start early, but the biggest one is in the transition.

Here we'll show you the key numbers for pros and amateurs, and how to start the process of beating your slice.

TAKEAWAY

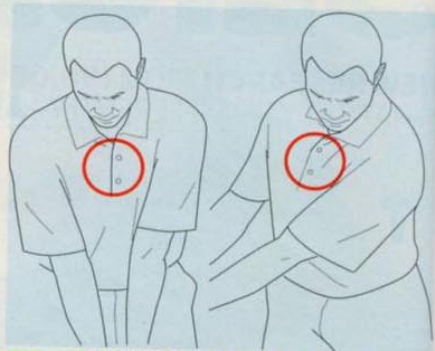
FIGHTING A SLICE STARTS WITH TURNING THE UPPER BODY EARLY



If you're going to overcome a slice, you have to address what sets up that first move down. To make a good swing, you need to make a full shoulder turn, at least 80 degrees according to our measurement system. Our data says there's one key difference in the backswings of tour pros and slicers: Pros get the majority of their shoulder turn done early; slicers do it late. The pro achieves approximately 55 degrees of shoulder turn by the time the club reaches parallel to the ground (above, left); good players know it's easier to turn when the club is moving slowly than later in the

backswing. A typical amateur, however, averages 30 degrees of shoulder turn at this point (above, right).

The more you can turn early, the more you're prepared to make the correct shoulder move at the start of the downswing. Because amateurs don't turn in the takeaway, they need to make two-thirds of their shoulder turn in the last half of the backswing. The problem is, if you turn late, you're likely to turn early in the downswing—and that works against the proper shoulder tilt you need to avoid a slice.



TIP THE FIRST MOVE BACK SHOULD NOT

be using your hands to lift and rotate the club away from the ball. Instead, you should feel that the club moves off the ball in response to the turning of your shoulders and upper body. Ideally, you'll want your left shoulder turned behind the ball when you reach the top. Here's a checkpoint: Pay attention to the buttons of your shirt. Make them point past your right toe by the time the club is parallel to the ground, and you'll have an excellent start to your backswing.

STEVE ATHERTON, a PGA master professional, is vice president of instruction for GolfTEC, which has more than 140 facilities in the U.S. He is one of Golf Digest's Top 20 Teachers Under 40.

MANY AMATEURS MAKE A FULL TURN, BUT IN THE WRONG SEQUENCE

TOP OF BACKSWING



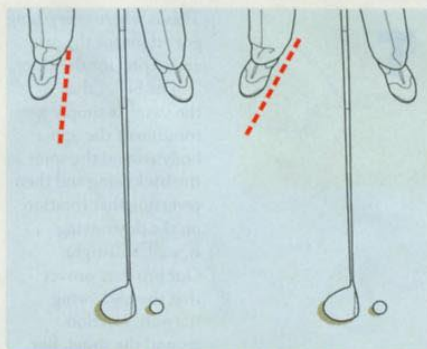
It might sound a little strange, but an average tour pro and an average slicer both turn their shoulders more than 80 degrees, and both tilt their shoulders downward about 35 degrees (*above*). It would seem they'd have the same chances of success on the downswing.

But they don't.

Because the average slicer has to do so much work late in the backswing to get that kind of shoulder turn, it will be a struggle with the sequence of motion to start the downswing, especially when it comes to the shoulders. That's why the slicer is more likely to swing out to in: The right shoulder stays

too high starting down, which moves the club to the outside.

Many golfers focus on their position at the top, but it's more important to see how they got there. You can look like a tour pro at the top but still be set up to hit a big slice. That's because you have to recover from a bad start by speeding up your body turn to match your arms. You'll be less likely to make the correct move starting down because you're out of sequence. Swinging back in sequence sets up the critical shoulder move that starts the downswing.



TIP VERY FEW OF US ARE AS FLEXIBLE

as we'd like to be, and flexibility is one crucial element to making the ideal turn to the top of the backswing. You can't make yourself more flexible overnight, but there is one thing you can do that will instantly help you make a proper turn. Instead of standing with a square right foot at address, try slightly flaring out that foot (*above, right*). A square right foot could restrict your turn, but with the right foot flared, you'll turn back earlier and fuller.

FIRST MOVE DOWN

THE RIGHT SHOULDER MUST MOVE DOWNWARD FROM THE TOP



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This is where everything goes right for the pro, and wrong for the slicer.

The belief that the swing is simply a rotation of the upper body around the spine in the backswing and then reversing that rotation on the downswing is, well, half-right. Our pro data proves that the backswing is a pure rotation around the spine. But to avoid a slice, the downswing *must be a completely different motion*. It begins with the shoulders tilting downward.

When the club starts down, the left shoulder is tilted toward the ground, but the pros immediately start tilting

the right shoulder downward. At halfway down, a pro's shoulders are tilted nearly 20 degrees more to his right than a slicer's (above). The pro's hips are rotated 10 degrees open to the target at this point, and the slicer's are 10 degrees closed.

These pro moves allow the right shoulder to drop underneath its backswing position, ensuring a powerful inside track to the ball. The slicer starts the downswing by rotating the shoulders around the spine, which sets up an out-to-in swing and promotes a slice.



DRILL PRACTICING THIS PUMP DRILL CAN help you feel how the shoulders should work during the transition from backswing to downswing. Start with a good position at the top of the backswing, then rock your right shoulder downward a couple of times—without rotating it toward the target. Feel how your right elbow tucks close to your side. Simply dropping the club straight down with your arms won't cut it. Your arms and the club should move in response to your right shoulder tilting downward.

MAKE ME BETTER
TO ACCESS TIPS BY TOPIC AND TO GET YOUR SWING ANALYZED ONLINE, CHECK OUT GOLF DIGEST'S MAKE ME BETTER PROGRAM. GO TO GOLFDIGEST.COM/MAKEMEBETTER.



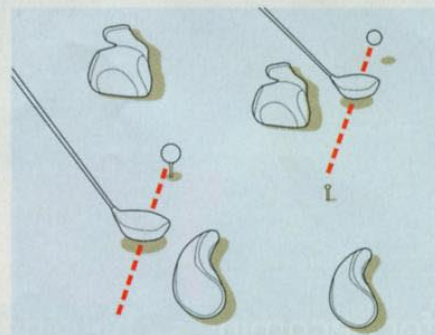
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The slicer's downswing is littered with compensations. Nowhere is that more obvious than in the shoulder tilt and hip turn at impact. Our research shows that the body at impact should not ideally return to where it was at address. An amateur's shoulder tilt and hip turn at impact are often similar to the setup position, but a pro's are not.

Here's what causes the difference: Because the slicer's shoulders start the club down on such a severe outside-to-in path, the turn coming into the ball must slow down—or you risk hitting the ball off your left ankle!

The slicer's shoulder tilt and hip turn at impact are much less than that of a pro, and the 20-degree difference mirrors the difference seen in the first move down. So although there might be time for a slicer to regain the proper sequence getting to the top, there isn't time in the downswing.

One more challenge: Once you improve your transition—the right shoulder tilting down instead of turning—you must release your right arm over your left through the ball. That will give you the draw you've always wanted.



DRILL **LEARNING THE RIGHT DOWNSWING** starts with seeing the proper inside path. Set up a pair of headcovers as guardrails to guide your downswing. Put one just short and outside the ball and the second just beyond and inside the ball. Practice hitting drives without touching the headcovers. Another drill to help straighten your slice is to stick a shaft in the ground about 10 yards in front of the ball on the target line. If you're swinging on an inside path, your shots should start right of the shaft. ■

TIP + FOR A VIDEO LESSON, CLICK GOLFDIGEST.COM/GO/TIPSPUS.