

Upper Body Load vs. Lower Body Load

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I was recently approached by a jumper who wanted to know why he felt the load from the boat more in his upper body than through his legs, and why he bent his arms through the wakes. This is a fairly common problem with jumpers, and I actually used to have this problem myself. Have you ever noticed how your best jumps usually feel easy? Obviously it has to do with efficiency and balance, but the answer to the questions lie in the turn.

In past articles I have emphasized the importance of creating direction across the lake so that you can get your right ski between you and the boat. If you get the right ski around between you and the boat, then it's easy to get the load through your lower body and get good lift out of the jump. So if we use step-back logic, we can figure that the reason the load is ending up in the upper body rather than through your legs is because you are doing something to stop the turning motion before it is finished. If you look at the pictures below

In this next sequence you can see the difference in balance from the start.

In this series of pictures you can see how keeping my left shoulder up keeps me balanced and allows me to get the load through my legs and keep my direction better.



you will notice that I am dropping my left shoulder in as I initiate my turn and because of that I end up leaning a bit. As I approach the wakes, my body will feel this sense of unbalance and I will in turn bend my arms to rebalance myself. All of this is causing the load from the boat to be run through my upper body, which will in turn cause my path to be more at the ramp and my impact on the ramp to be much more violent.

Now the question that you should probably be asking at this time is, "So keeping my left shoulder up keeps me balanced, but how does that help me get my right ski between me and the boat?"

The answer to that question is simple anatomy. Our bodies work in opposites. When you step with your right foot you swing your left arm and when you step with your left foot you swing your right arm. So by making sure that you keep your left shoulder up and level into and through your turn



your body is now allowed to use your right leg to make your turn. By using your right leg your ski will be on the short path through the turn and allow you to finish your turn with more direction and easily get the load through your lower body. If, instead, you allow your left shoulder to drop you will start to feel load from the boat and the natural response, because we work in opposites, is to start pushing on the right leg. This "pushing" will stop your turn and continue to build load through your upper body with bent arms because you didn't finish your turn.

The beautiful thing about all of this is when you really get it figured out, you will be in a position to hit the ramp and get your kick at any time. To illustrate this take a look at this photo below:

If you take this same picture and rotate it you can see that I am in fact in a position where I could kick the ramp

if I was to hit it at any time. If you take a picture of yourself at this same point and you aren't in a position to kick the ramp, then I will always have the advantage to be more consistent and get more lift since I only have to maintain my position and you have to find a better position before impact!

When people ski with me I rarely teach them by telling them how to stand on their skis. Instead, I choose to explain the theory and objectives a jumper should be trying to achieve. But this is one of the few times I will strongly encourage a jumper to learn these "movements" because I don't believe there is a more efficient way to achieve this type of consistency and control.

Freddy Krueger, who lives and trains in Winter Garden, Fla., is the current world record holder in men's jumping. He is sponsored by MasterCraft Boats, D3 Skis, Body Glove Wetsuits, OJ Props, Masterline Ropes and Zero Off GPS Speed Control. Visit his Web site – thenightmare13.com.

