

The Stretch Reflex

In Taiji we place great emphasis on Soft Limit. This means feeling for the place where relaxation and effort meet: having clear intention and commitment without striving, struggling or forcing things beyond their natural boundaries. This applies in the Forms, exercises, and ultimately, daily life.

Sports science has recently discovered the Stretch Reflex, which simply put, is a message sent from a muscle to the brain telling it that the muscle is under stress and may be in danger of damaging itself or surrounding joints if the stress continues. The brain responds by telling the muscle to contract. Any lengthening of the muscle intended by stretching is greatly reduced and the range of motion is diminished when the muscle is released.

If, however, you work within the Soft Limit, which is around 70% - 80% of the maximum effort that can be applied, no reflex signal is sent and the lengthening/softening of the muscles

and tendons increase. This in turn gives greater range of motion within the joints and more freedom of movement. This in turn allows improved circulation of blood and Qi (Ch'i).

So science now supports what Taiji practitioners have known for a long time – work to the Soft Limit and everything expands, use force and everything contracts.

Next time you hear someone say they will give 110%, know that they are not doing themselves or anyone else any favours.

Paradox (or apparent paradox) is quite common in Taiji. In this case it could be said that, to give 100% commitment you have to apply no more than 80% effort.