THE NEWSLETTER FOR WINNERS

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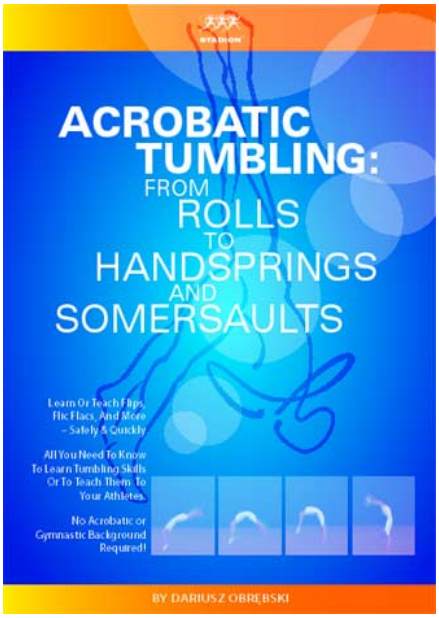
# New DVD on Acrobatic Tumbling Is Released




Now you can learn (or teach) flips, flic flacs, and more—safely and quickly!

Our newest product, the DVD *Acrobatic Tumbling: From Rolls to Handsprings and Somersaults* by Dariusz Obrebski, is completed and ready to ship.

On this DVD you will find all you need to know to learn tumbling skills or to teach them to your athletes—even if you have no acrobatic or gymnastic background.

The easy-to-follow, proven method of instruction presented on this DVD teaches tumbling skills without fear. Just follow the gradual progression of exercises and drills designed by Dariusz Obrebski, an outstanding coach of acrobatics. All you need is a few landing pads, a helper (if it is you who wants to learn tumbling), and for some exercises a small rebounder. No harnesses, ropes, or other gizmos.

The more you know about tumbling, the more you will appreciate coach Obrebski's method and depth of instruction. If you are a beginner, then you really must pay utmost attention to even the smallest things he says and shows. Here are some examples of such seemingly small things:

—The correct distances between spots for feet and for hands in the cartwheel, which make it more dynamic;

—Where to look and what to see in a half-squat at the beginning of the back handspring to get consistently clean landings;

—Position of feet versus buttocks in the breakdancers' back handspring ("getting the air" depends on it);

—What to feel at the moment just prior to turning in the air in the back flip, which makes back flips more steady and safe.

There are many more such important details that coach Obrebski shows and explains while teaching each tumbling technique.

View the *Acrobatic Tumbling* video trailer and learn more about this DVD at www.stadion.com/acrobatic_tumbling.html.

## Highlights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*Coach Obrebski, Thomas Kurz, and acrobats from the sports club Targówek get ready to demonstrate teaching and learning tumbling skills for the* Acrobatic Tumbling *DVD.*

# Don't Lose Your Cool: Dealing with Precompetition Stress

by Dariusz Nowicki

*You just entered the competition hall. You are watching other athletes as they get ready to compete, and you feel something worrisome happening to you. Muscles of your neck and shoulders tense; your thighs start to tremble. Your heart beats faster, while your breathing becomes shallow and rapid. Even though you haven't started your warm-up, your body is already warmer than usual, and sweat beads show on your forehead. Thousands of thoughts about competition are flying through your head, but when you try to focus on a single one of these thoughts, you have an impression that your head is empty—you cannot concentrate. You should start your warm-up, but you have forgotten the order of exercises. And now one thought is in your mind, brought on by the sudden signal from your body, and you frantically begin looking for a bathroom. What is going on with you?*

These feelings are nothing new for athletes. Our bodies react this way or similarly when facing difficult situations, such as participation in an important competition.

At this moment a simple question comes to mind: Is it good or bad to be stressed?

According to Hans Selye, a stress-theory expert, only a dead organism does not experience stress. Stress is, in a sense, a signal that your body is ready for action and a trigger to make your body start that action. Too much stress and mobilization that is too long and too intense leads to a state of overstimulation of the organism and interferes with your body's functions, and in extreme cases, it can lead to death.

If stress is so common in sports, what do we do to handle it?

First of all, don't eliminate stress. Stress is necessary, and if it is maintained at the correct level, it helps athletes gather strength for their rush to the finish line or for the final barrage of punches in a boxing match. So how does one manage the stress to keep it at a beneficial level?

Let's go back for a moment to our athlete from the opening paragraph. Are his feelings beneficial to him or not? At first glance, we would say no. These types of feelings block his capability of normal functioning. Agreed, but we can look at his situation from another point of view. A natural reaction in a difficult, and thus stressful, situation, inherited from our ancestors, is to fight or to flee. So, we either prepare to get away from danger (sometimes, in such situations, we become immobile, so as not to be noticed) or we prepare for a life-or-death battle. Whatever happens with our physiology after so many thousands of years of civilization is still the same, even though those stressful situations rarely involve life-or-death struggle.

Thus the following series of changes in your body makes sense. Muscles tense because the movement apparatus is ready to act, and if this action doesn't happen right away, the muscles begin to tremble in order to release tension. The heart speeds up in order to deliver more blood to the muscles. The same thing happens with the respiratory system so that more oxygen is delivered to the blood and muscles. Body temperature rises because warmed-up muscles are more efficient than cold ones. The athletes will go to the bathroom more frequently because it makes them feel lighter, more mobile. And lastly, psychological changes: being unable to think allows an athlete to use his or her natural instincts and reflexive reactions, which are necessary in a fight for life. So all of this, which is going on inside the athlete and causes him or her to feel unpleasantness, paradoxically will benefit the athlete. It is the athlete's misunderstanding that these changes are due to the lack of good preparation that leads to an excessively increased level of tension, and therefore excessive stress, which then begins to interfere with proper functioning.

So, what can the athlete or his trainer do to keep stress at an optimal level so that the athlete performs at least at the same level in competition as he does during training?

First of all, the athlete must know his optimal level of performance. Therefore, the athlete must keep a training log in which he documents all situations in training or competition in which he felt he had performed optimally. In his mind, the athlete should often recall his successes. In this way, the athlete establishes in his mind an image or a model of a success.

The trainer and athlete design a competition plan based on this model, and from this plan, they build precompetition and competition routines. This means that the athlete and trainer recreate, step by step, the circumstances of the optimal performances. The athlete ought to be able to recognize the conditions that lead to excessive nervous tension, as well as the signs of the excessive tension. Thanks to that he can quickly prevent occurrence of excessive stress or decrease it using learned relaxation techniques.

Of course, this is not enough if the athlete won't learn how to control his level of stress or won't adapt to a stress level that is higher than usual. In order for this to happen, the trainer should incorporate into the athlete's training program as many elements that occur in competition as possible. For example, during training the sound of crowds yelling and cheering should be played from a recording. Another example: The athlete should partake in many well-planned and thought-out control competitions during which the athlete gains confidence in himself and learns how to deal with stress.

In addition, through mental exercises, the athlete may lower or heighten his level of stress, depending on the demands of the situation. It is enough for the athlete to subconsciously know the following:

- Concentration on exhaling lowers tension (it relaxes muscles and calms the mind).
- Concentration on inhaling increases tension and prepares the athlete for action.

Lastly, the athlete must learn to think positively and to positively reflect on competitive situations. This is possible only when the athlete feels he was optimally prepared by his coach for the competition. Positive thinking and good expectations will be maintained throughout competition, thanks to concentrating on what the athlete must do (competition plan and precompetition routine) and not on the competition's outcome. The athlete who begins to think *Will I win?* may subconsciously react with the thought *What if I lose?* This in turn will lower the athlete's confidence and trigger excessive stress.

*You just entered the competition hall. You look at the other athletes preparing to compete, and you feel that you are excellently prepared for this competition. This is your day and place of success. You clear your mind of all thoughts and let your reactions, automatized through long training, take over. You act as if in a trance, and your body and mind are ready for every challenge.*

# Interview on Stretching

by Thomas Kurz

Some time ago I gave an interview to a freelance writer for *Muscle & Fitness* magazine. A small excerpt from that interview was run in the magazine, and here are the actual writer's questions and my answers. Questions are set in *italics.*

*Can a person actually improve flexibility, or is it just a matter of genetic luck as far as how flexible you are?*

Every feature of any living being is genetically determined and thus limited. Your eye color, your hair, your height, your body type, your ratio of fast-twitch to slow-twitch muscle fibers, your bone structure, even your temperament are all determined by your genes. Bone structure of your joints, which—barring effects of injuries—is genetically determined, limits your range of motion. This is why I show the *Test of Flexibility Potential* at www.stadion.com/catalog&test.html—so athletes can find out if the structure of their hip joints will keep them from achieving splits. So, yes, flexibility (just like all our abilities) is genetically limited, and yes, flexibility and other abilities can be improved—within those genetic limits.

By the way, there are many more simple, noninvasive tests for other abilities, so people can see if they are suitable for a given sport before undertaking training. For example, tests of fast-twitch muscle fiber proportion, balance, kinesthetic differentiation, hand-eye coordination, and more are described in *Science of Sports Training*.

*Is improving your flexibility important for athleticism, and why?*

That depends on the sport. Certain sports—for example, gymnastics, javelin throw, kickboxing—require a near maximal development of flexibility in all or some of the major joints just for the execution of their basic techniques. Just the reverse is true in some others. The greater the flexibility of some joints, the worse the performance. For example, long-distance runners lose running economy with greater dorsiflexion of the foot and external rotation in the hip joint (Craib et al. 1996).

Poor flexibility of some muscles may contribute to injuries in some activities or sports. For example, in a study by Witvrouw et al. (2001), athletes with patellar tendinitis (jumper's knee) tended to have lower flexibility of their quadriceps than athletes without patellar tendinitis.

You should be careful in choosing your stretches, however, because too much flexibility in some parts of the body can be detrimental to your sports performance or just unhealthy. For example, even though swimmers need more than a normal range of motion in the shoulders, their internal rotator stretches should not go beyond the frontal plane of the body to avoid damaging the joint capsule and cartilage at the front of the shoulder joint, which would lead to shoulder instability (Bak and Magnusson 1997). Excessive mobility in the joints diminishes stability of the body, causing scattering of the forces acting on it. This in turn necessitates additional muscular tension in movements where parts of the body need to be stabilized to support heavy loads (Raczek 1991). Such scattering of forces—for example, caused by an excessively loose trunk at the moment of takeoff—reduces performance in jumping (Wazny 1981b).

*What tips would you have for the weightlifter looking to improve flexibility?*

Do most of your resistance exercises throughout your full ROM. Do not do static passive stretches before lifting weights, running, or doing any other intense dynamic activity.

A tip for strengthening and stretching your back: Do not do intense back stretches, such as back bridges, on the same day you do heavy back lifts (back extensions, good morning lifts, deadlifts) or heavy squats, and especially do not do these stretches before lifts. Standing back extensions such as those of Liangong exercises are OK (for an explanation of what Liangong is, see Books on Injuries and Health Maintenance at the Athlete's Bookshelf).

*Should a person stretch before, during, or after activity?*

This depends on the kind of stretches and on the kind of activity that is to follow them. Generally, do dynamic (not ballistic!) stretches before dynamic activity and static stretches after the activity. Do not do static passive stretches before dynamic activity.

*How often should a person stretch, and for how long (keeping in mind that the readers aren't pro or elite athletes)?*

If one needs to stretch (which depends on the person and on demands of the sport or other activity), then for best results, one should do it every day, preferably twice per day. An experiment, showing that this is the most effective schedule, is described in the book *Stretching Scientifically*.

*Is stretching between sets during weightlifting a good idea? Why?*

Some East European sports training authorities consider alternating stretches with sets of resistance exercises (for either maximal strength or for muscular endurance) a very effective means for developing both flexibility and strength (Platonov 1997; Platonov and Fesenko 1990). You have to keep in mind that (a) exercises developing maximal strength need not involve overcoming maximal resistance nor moving at a high velocity, and (b) an athlete who wants to alternate resistance exercises with stretches needs to be well attuned to the effects of either of these exercises on his or her muscles. In such alternating work, each set of stretches causes an increase of the range of motion over the initial value, and each following set of resistance exercises causes a reduction in the range of motion, but the increases are larger than the reductions, so the final range of motion is considerably greater than the initial range (Platonov 1997).

Caution: If you try to make a fast, dynamic movement immediately after a strenuous static stretch, you may injure the stretched muscles.

*What are three or four stretches that will give people "the most bang for the buck"?*

For the general population: For lower limbs—lunges and leans to an extended leg while in a crouch. For arms, trunk, and even neck—beginning and ending positions of a Hindu push-up. For arms—stretches with a stick, towel, or rope as shown on p. 58 of *Stretching Scientifically*.

For athletes in sports requiring high overall flexibility: Stretches in the deep and wide horse-riding stance (in Chinese martial arts called mabu, in Japanese kiba-dachi, see *Stretching Scientifically* pp. 61-63), deep lunges and leans to an extended leg while in a crouch, and back bridges—both gymnastic and wrestling.

**For full references quoted in this article, see my book *Stretching Scientifically* (www.stadion.com/stretch.html).**

# Q and A on TRAINING

Study these typical questions on stretching and training carefully. You may find information that relates to questions of yours. Questions are in ***italic boldface.***

■ ***I think I may have a sport psychology problem, but I am unsure. I am 35 years old and have recently taken up taekwondo. I enjoy it immensely but am having repeated trouble at small tournaments.***

***When it is my turn to compete, the same thing happens to me over and over again. As I step up to spar, I feel completely exhausted. My legs and arms feel like lead, and the sparring match just becomes one of survival for me, with me doing one basic kick over and over. Anything I learned, any strategies and previous training, is totally lost. I have been in four tournaments, and this has happened four 4 times.***

***Now some things that may be affecting me. The tournaments start first thing in the morning, but I usually have to wait hours before competing. It seems to be a lot of waiting and waiting.***

***There are also forms and demonstrations before the sparring, and I am wondering if this could be taxing me in some way.***

***Do you have any suggestions, or could you suggest a product that will help me?***

If you are in good physical shape and eat healthy meals or snacks (with good fats, protein, and very little high-glycemic carbs) while waiting for your competition, then very likely your problem can be remedied by our *Gold Medal Mental Workout.*

A typical sign of poor mental preparation is when an athlete does well in practice but gets tense, loses concentration, and fights well below his or her skill in a competition.

If you are in poor shape or let your blood sugar drop before competition, then the mental training alone will not help. You need to be in good physical shape to benefit from any mental training, and the whole process of physical and mental training is explained in the book *Science of Sports Training.*

■ ***I am 43; can I learn acrobatics from the DVD [Acrobatic Tumbling]?***

My short, off-the-cuff answer is yes. That is what I designed the *Acrobatic Tumbling* DVD for—so people can learn acrobatic tumbling from it. And because the correct technique is not very hard on the body, especially if taught by the instructor I chose, your age (43) should not be a problem.

Now, the specifics. The DVD shows and explains all the important details of techniques and their lead-up exercises that let you learn them well and quickly. Simultaneously, it teaches how to spot and to help at all stages of learning all shown techniques. So, if you have an exercise partner who is willing to help you, you could progress very quickly.

If you exercise alone, then your progress will be much slower than with a spotter, but you can do without spotting.

The only technique on *Acrobatic Tumbling* that is difficult to learn without a spotter's help is the standard gymnastic back handspring (flic flac). But, because I know that many people want to learn alone, I included another form of the back handspring, not the pure gymnastic form but still a back handspring. This form can be learned alone, but it requires more flexibility in the back and shoulders than the gymnastic form. If you have a decent back bridge, you can learn it easily. If not, start bridging now.

Another technique that most people need a spotter for is the back somersault. It is actually easier than the back handspring. Learning it alone, however, takes a little more inventiveness—the first few steps (which, by the way, do not require a spotter) are the same as those you will see on the DVD. Then you will need to find a way to "shorten" the width of the pile of mattresses you jump on and roll over, and then to lower that pile. You will understand what I mean when you see the DVD *Acrobatic Tumbling.*