



Getting it Right **Effective Planning of Your Tae Kwon Do Training**

By Darryl Leech

When it comes to getting the most out of your training sessions there is a lot more to consider than just beating the traffic to make it to class on time. Tae Kwon Do is a great form of exercise and a great way to increase your freedom of movement, but only if you train correctly and listen to your body. Most training typically includes a warm-up and the main workout, how you go about each of these will have an impact on your ability and occurrence of overtraining injuries. The following will outline some important points to be aware of when it comes to planning your sessions and hopefully help in improving your ability.

Warm-ups:

The warm-up is an essential part of any workout. Its role is to lubricate the joints, warm connective tissues, and activate the nervous and circulatory systems. Basically to prepare the body for the load you are about to place upon it. The speed, power and responsiveness of your body is greatly dependant on how effectively you warm-up. It is at this part of your training session that you set up how your body will perform for the rest of the workout – so it's important to get it right.

Running around the training hall and pumping out sets of pushups, squats and crunches is a fairly common warm-up and is a great way to get your blood pumping and the sweat dripping off your face. However, just raising your heart rate doesn't necessarily mean you've effectively warmed and prepared your body. If you've ever studied exercise physiology then you may have come across the SAID principle. SAID stands for "Specific Adaptation to Imposed Demand." This principle implies that we must prepare the body specifically for the goal we wish to achieve. TKD contains a lot of jumping, twisting, explosive kicking, and fast changes in direction, the structure of your warm-up should bare this in mind and prepare the body accordingly. Although some gains may be made from pushups, squats and crunches, the movements don't really resemble anything a TKD practitioner would perform in kicks, sparring or forms. Your warm-ups should contain exercises that resemble the movements to be used in the workout and include dynamic stretches in the ranges of motion you intend to work through, twisting motions, and similar exercises that will free your body. Your warm-up should also include some loading patterns that will prepare the muscles and joints to brace and support the body during the main workout - multi directional lunges are quite good for TKD. All this will basically tell your brain what your body is about to go through waking up all the systems and muscles needed. Your warm-ups should be long enough to achieve freedom of movement in all the joints required for the overall goal of your workout, muscles should be flexible and responsive and you should be sweating (this will ensure that your working tissues are now warm). Remember that you don't want to be fatigued at the end of your warm-up you just want to be sweating, warm and ready to go.

The negative impacts of not following the SAID principle for your warm-ups are;

- Reduced responsiveness*
- Restriction of movement*
- Higher susceptibility to injury and future joint problems; and*
- Your body may adopt bad habits leading to faulty loading issues and other postural concerns.*

Another point I'll make about warm-ups is that static stretching is not an effective warm-up. Static stretching relaxes the nervous system and having a relaxed nervous system before performing a

tough workout is only going to make you more susceptible to injury. The only time I would recommend static stretches before a workout is if you have a muscle imbalance where the tight muscles are going to affect your posture or restrict your freedom of movement.

Here are some good warm-up exercises for Taekwondo:

Kneeling on Fitball:



This exercise is great to add to a warm-up routine as it will activate the internal stabilizers of the core and hip. Whilst performing this move be sure to keep your shoulders relaxed, if you find that you are bunching up your shoulders towards your neck then this may indicate core dysfunction; in which case begin with basic core activation exercises.

Progression: Moving knees from side-to-side or move knees in a circular motion.

Regression: Hold onto something for support.

Alternating Single Leg Toe Touches:



This is a great exercise to add to any Tae Kwon Do workout as it encourages mobility and strength in the hamstrings. This exercise should be used by every TKD class. Maintain a neutral spine and activate core stabilizers, raise one leg out behind you and touch the toes of your supporting foot with the opposite hand. In the finished position there should be a straight line from your heel to your shoulder. Bring yourself back to the start position by pressing the supporting heel into the floor and using your hamstrings.

Progression: Perform exercise on a Bosu ball, flat side first.

Regression: Halve the range of motion or perform 'Kneeling on Fitball' exercise.

Single Leg Bosu Lunge:



The Bosu (Both Sides Up) ball is great piece of equipment for balance and stability training. Again, be sure that you are able to maintain a neutral spine and activate your core stabilizers. Begin in a lunge position but with your rear knee on the floor. With only your front leg, push downwards onto the bosu as if you are trying to squash it into the floor – as if you are pushing the bosu away from you, not pushing yourself up. Don't use your back leg to lift your body. When straightening your body lift the knee of rear leg (can also add a kick). Use your supporting leg to lower your body back to the floor.

Progression: Turn Bosu ball over and perform exercise on rounded side.

Regression: Perform exercise on the floor.

Shoulder Stability and Bend:



Do not perform this exercise if you have a shoulder injury or soreness. Also be sure that you can correctly maintain a neutral spine and activate core stabilizers. This exercise is great for both shoulder and core stability and mobility. Include this in your warm-ups for workouts that involve twisting of the waist and even punching and other hand strikes. Only a light weight is needed, remember the goal of a warm-up is to prepare the body, not fatigue it.

The Workout:

Now that you are pumped from your warm-up it's time for the workout – the point at which the main goal of the training session is realised. How you carry out your training can have long-term

effects on your performance and susceptibility to injury, thus it is important to plan your training so that you have adequate time to both adapt to and recover from the workload. Periodisation refers to the long-term planning of training goals and the cycling of various aspects of a training program in order to achieve peak performance at a specific time. Periodisation is especially beneficial to TKD practitioners who regularly compete in tournaments but can also be applied to those aiming for their next grading or those wanting to improve a certain technique. Learning TKD (or any martial art style) is generally a long term commitment, thus it is important to ensure you are getting the most out of your body in each session and avoiding injuries from overtraining.

It is common for schools to perform the same workout structure for each session, which usually includes multiple components of TKD – i.e. warm-up, technique drills, sparring, forms/patterns, and a cool-down. While training in this way gives all the physical parameters of TKD equal attention it is less efficient than a periodised approach as this it does not give your body sufficient opportunity to adapt to the workload. By planning training so that it is arranged into phases (4-6 weeks) where time is spent on individual components of TKD – speed, strength, agility, techniques etc – anatomical adaptation can be achieved with much more speed and efficiency. This is because your body's ability to adapt to a training load will not be interrupted by the simultaneous adaptation of others. With a periodised training program the body will be able to adapt more readily, have adequate recovery time and significantly reduce the risks of overtraining injuries. Your TKD sessions should be structured to accommodate this.

TKD contains many aspects of fitness, many techniques and multiple ways to apply them, because of this it can be difficult to plan your sessions. You have to consider not wanting to lose certain techniques whilst learning others and also that a base level of ability must be maintained in case it is needed in a life threatening situation. While it's important to plan specific training phases to focus on certain skills, it is equally important to include a 'general skill and reflex' phase at regular intervals to keep basic skills functional.

A training plan could look something like this:

Phase 1: General Skills	Phase 2: Kicking Strength and Accuracy
Phase 3: Kicking Speed	Phase 4: General Skills
Phase 5: Agility...etc.	

Note that the gains made from the training phases leading up to the 'General Skill' phases will carry over. This means the ability to perform the "general skills" will improve as training continues. The 'General Skill' phases could be used as both a form of recovery and practical application of new technical and fitness gains.

Planning each individual training session is also important. You must consider the overall goal of the training phase in order correctly load the body to achieve the desired results. The following variables need to be considered:

- Choice of exercises; are they specific?
- Order of exercises; should be performed from most difficult to easiest.
- Resistance or load; body weight, external weight?
- Number of sets per exercise; consider gains to be achieved.
- Number of exercises per muscle group; consider gains.
- Range of motion; full or halfway?
- Repetition range; endurance, strength, power?
- Type of contraction; is it specific?
- Speed of movement; again, is it specific?
- Rest periods; between sets and training sessions.

Different results require different training loads, training to increase your speed will require different stimulus than training to increase the height of your jump. Remember the SAID principle?

Overtraining:

As mentioned earlier, training in an unstructured/non-specific way that doesn't allow for correct adaptation of skills and training loads can lead your body to become over-trained. Overtraining is generally defined as an induced state of fatigue caused by a prolonged periods of high volume/intensity training with inadequate recovery time. Overtraining affects many TKD practitioners due to the often monotonous nature of training. The negative impacts of overtraining are usually noticed in the long-term (years) because the body is great at compensating for the stressed placed upon it. Here are a few ways to tell if you are becoming over-trained;

- *Decreased performance*
- *Decreased coordination*
- *Increased technical faults*
- *Muscle soreness and damage*
- *Joint aches and pains*
- *Decreased self-esteem*
- *Lack of motivation*
- *Increased occurrence of illness*
- *Increased occurrence of injury*

Aside from periodising your training you can help avoid overtraining by monitoring how you train:

- *Keep yourself balanced and avoid constantly favouring the strongest side your body.*
- *Avoid training and learning new techniques when tired and or fatigued.*
- *Don't train with an injury.*
- *Get adequate rest between training sessions and monitor nutrition.*

Remember, good workouts aren't always the ones that will drill your body into the ground but more so the ones that will see you improve in performance and fitness without injury or harm to your body.

If you are interested in learning more about how to effectively periodise your training or, if you run a school, how to implement this into your syllabus, please keep reading Australasian Tae Kwon Do for future articles. Alternatively you can contact me via email on darryl@activered.com.au.