



## Pickup

### Breaking Domination from a kneeling position.

Yatskevich invented this pick up to unsettle opponent's relying on this typical Georgian style belt grip. Note how the leg is folded, using the forearm against the shin.



Photo: Andrew Moshanov

## Juji Gatame

### Escaping from Juji Gatame - leg push

This escape centres on attacking the controlling leg in juji-gatame. Once shifted, your opponent loses balance, power and control. It is possible to escape by turning inwards once the leg is trapped behind the head.



Photo: Andrew Moshanov

## News in Brief

### Insurance - Important

**Remember that it is a LEGAL REQUIREMENT that all clubs must keep an ACCIDENT BOOK.**

The format can be accessed on the BJA website but if in difficulty please contact your Development Officer. Accident Books can be purchased from a number of sources. A coach cannot escape liability if the club at which he is coaching does not have an Accident Book and could be prosecuted. It has been brought to our attention by our insurers that a club in another sport has recently received a claim in excess of £5 million as a result of an accident to a youngster at a club barbecue.

If any club is organizing a similar summer event you are covered under the BJA insurance policy provided you have carried out a risk assessment of the area where it is planned and have put in place plans to manage the risk.

In the case mentioned above, the risk was identified in the assessment but not actually guarded against at the event so that an area close to a river was not roped/fenced off and a youngster has been paralysed as a consequence of entering the river.

Clubs are not covered if mechanical /motorized vehicles are used at an event (e.g. Go-carts) – or if there is a firework display. If in doubt please ask before holding an event other than for judo activities.

### UKCC

The programme of forthcoming UK Coaching Certificate courses for Level 1 and Level 2 is now available. Courses have been organised North, Midland and South as defined by the Regional remits of the BJA Regional Development Officers with courses also being run in each of the Home Countries.

An expression of interest register is held at BJA Head Office and potential candidates should enter their details using the on-line registration form at the following web address: [www.britishjudo.org.uk/technical/coaching\\_ukcc\\_reg.php](http://www.britishjudo.org.uk/technical/coaching_ukcc_reg.php)

### GB World Cup

This year's GB Judo World Cup at the NIA in Birmingham during the weekend 20-21 September 2008. This is an event that judo coaches should not miss - for tickets, please call the NIA ticket factory on 0870 909 4144.

### 08 Technical Congress

The main theme of this year's Technical Congress, which will be held in the Henry Ford College, Loughborough on Saturday 15th November and Sunday 16th November 2008, is London 2012. The 2012 Olympic Games will generate massive publicity for sport and there will be many developmental opportunities for British Judo.

We have put together a varied and interesting programme to cater for the broad range of delegates who will attend but there is a strict limit on the number of places available for the Congress and these will be allocated to the first 195 applications received. Information pack is available on the BJA website: [www.britishjudo.org.uk](http://www.britishjudo.org.uk).

# Sports Science: Altitude Training For Judo

**Andrew Moshanov, PhD (Moscow State University of PE and Sports) outlines what is altitude training and discusses its benefits and problems.**



Although sports scientists have begun to investigate some practical questions frequently asked by coaches regarding specific training interventions and their effect on athletic performance, confusion still surrounds some of the ways athletes prepare for competition and why certain training techniques yield more successful results than others. An example of a training technique widely used by many endurance athletes and judo players is “altitude training”.

In this issue of “Matside Coach” I aim to acquaint coaches with some knowledge on this technique and its use in the preparation of elite Judo athletes in a “Q & A format”. These questions will cover questions that are most frequently asked by players and coaches regarding this topic.

**→ What is Altitude Training?**

It is a concept and training method pioneered by sports scientists from the USSR and East Germany. It was developed as a result of extensive research based on findings made during the preparation and participation in 1968 Mexico Olympic Games (where the contestants competed at the 2,300 meters above the sea level). Since its formation this method had been reinforced by scientific research support and accumulated sound practical evidence, all of which makes has made this an integral part of elite performance athletes training programme.

**→ What is the purpose?**

Put simply, altitude training tops up the working capacity of a body. It is true that elite performance judo players could well benefit from it by increasing their general endurance capacity up to 12-15 %. Such gains are possible with altitude training at the 2200-2400 meters for a continuous period of no less than 21 day.

**→ What does an “extra 12-15 % of work capacity” mean for a judo player?**

Let us assume that a player commits 15-18 attacks on average during a 5-minutes contest, which means approximately 1 attack per every 15 seconds. With an additional functional capacity of 12-15% the player may well produce an attack every 10 seconds continuously, and such a condition places an individual in a very favourable position against his counterparts and rivals.

**→ How high to go, how long to stay?**

Extended data has accumulated on this question and the Eastern European Judo teams indicate that a specific 21-day training camp held at the 1600 meters altitude could top up an endurance capacity of 5-7%, while an 18 day camp at the 1200 meters altitude will help to achieve no more than 3-5 % gains. Simply, the higher you go, the bigger the gains are, however, there is a definite limit in the height determined by a time needed for one’s “acclimatisation to the altitude”.

**→ What are the feelings upon a comeback? Or for how long is it possible to keep “the batteries extra-charged”?**

Using the example of the training camp held at 2200 meters altitude, the athlete will experience several peaks in increasing the general endurance capacity upon his return to their normal training environment (see table below).

**→ What if a doping-test reveals a high haemoglobin level in a blood, which occurs as a result of altitude training. How legal is to use altitude training to enhance the physical capacity? Is there any perspective for a doping-test result to be regarded as “positive” and for an athlete to be disqualified on such ground?**

There is no opportunity for a doping test to be misinterpreted and for an individual to be disqualified, as long as the gains in endurance (literally, increased bloanterventions or methods of invasive medicine lead to a deformation of “natural structure” of haemoglobin cells, which then will be unerringly traced, if it has been a case. Other words, it means, that once the red cells were naturally built (via legal training methods, as above) one has nothing to worry about.

**→ Is it possible to build any gains with training on the “moderate altitude”, for example, at the 1200 meters?**

Moderate altitude produces ‘moderate’ effect, which totally disappears by 35-40 day following a return to the athlete’s normal altitude.

**→ How long does it take to get used (or acclimatised) to the particular altitude and start training there?**

This is a very important question while looking at this training method. A few variables need to be considered before we answer such a question. First, what is the athlete’s initial fitness level? The better starting condition of an athlete the sooner he/she will become accustomed to an altitude. Secondly, what is the athlete’s weight

category? The heavier a player is, the longer it takes him/her to acclimatise. There is a large level of evidence that Judo heavyweights find it difficult to acclimatise to the altitude and it can often take between 10-12 days for successful acclimatisation. However, light and middleweight judo players can acclimatise to the altitude in 4-7 days.

**→ Are the players, who were born, permanently live and train in the highlands, in advantage comparing with the others?**

Yes, in general, they have a better developed cardio-vascular system and particularly more capable system of oxygen transportation (which, if put simply, very much pre-determines a given level of endurance). This gives these particular athletes a good advantage over their counterparts. Countries that have been successfully using such an advantage of their geographic location are for example Georgia, Azerbaijan, and Kazakhstan to name a few.

## Summary

Altitude training has been established already as a proven method of training in Judo, however, it should be made clear for every high performance coach, that it is a form of training which should be supplemented with full judo training program. Such a powerful training method requires precision planning and permanent monitoring of a current athletes’ state so that early stages of abuse are identified. Moreover, it is dangerous when presented by an inexperienced coach as it can totally destroy an athlete by creating a wrong response from his body’s functions.

1st Peak	high increase in capacity appears 1st to 3rd day after altitude training
2nd Peak	average increase in capacity appears 12th - 22nd day after altitude training
3rd Peak	sustained average increase appears 30th - 38th day after altitude training
4th Peak	sustained average increase appears 45th - 55th day after altitude training