

# QUESTIONS TO ESA UTRIANEN

Companion article to “Differences in Men’s and Women’s Training for the Javelin,” by the author.

By Esa Utrianen, Finland

*This article, originally published in “The Throws – Official Report of the European Athletic Coaches Association Congress, 1987” is a question – answer format directed to the Finnish javelin coach mostly in response to his article on the differences of men’s and women’s training in Finland. Re-printed with permission from the European Athletic Coaches Association.*

**Question: Can you tell us the percentage in a training sequence or period of work with light or heavy weights?**

**Utrianen:** *One cannot give a precise answer to such a question without knowing the athletes; one can only give general tendencies. .. Let’s say that at the beginning of the training period, in autumn, one will work with heavy weights, and during the competition period we throw lighter weights.*

*For a same sequence, the first throws will be performed with heavy weights, then at the end with lighter ones. But of course it all depends on the personality of the athlete. If it is someone who has strength problems, he will have to use heavy weights. On the contrary, if it is someone who has problems of speed, one will use in percentage lighter weights. Thus the use of heavy or light weights depends mainly and before all on the personality of the athlete.*

*If you make up a program for everybody, you will get something valuable for nobody.*

*Let’s see now the differences between men and women. Women will use an approximate percentage of 15 % of heavy weights, whereas for men this percentage would be higher.*

**Question: What kind of drills do you practice with 20 kg?**

**Utrianen :** *These are drills you make up to 20 kg for the strength training of javelin throwers. You take a 20 kg disk and you try and find the muscular tension, the movement of the hips, and you throw in a net or in a ditch.*

**Question: What kind of competition can we attend during the first training period?**

**Utrianen :** *Never forget that we proceed with two training periods : the first one ends at the end of March with the indoor championships for discus, javelin and weight.*

*In Finland however, we have for a long time a temperature of minus 30°; thus throws are performed indoors, and most throwers do not like it. We had thus to organize at the end of the winter training a competition. This brings a little interest to this period which should not only aim at a good physical condition, but also at giving solid bases for competition throws.*

**Question: Referring to the different diagrams you showed us, how do you use these results to make up your programmes?**

**Utrianen :** *We have been able to arrive at relatively sound conclusions. This has been used to organize equipment for experiments. Some people have been tested and it is still going on. This will enable us to come to interesting conclusions. This group is made of 17 to 28 years old throwers (24 in all). The capacity of these throwers is very high: girls are around 50m and boys of 17 years around 68m or more. For the time being the experiments and tests results are relatively limited, and one should not yet make quick conclusions. It seems that the main problems are in the upper torso but it is only an estimation.*

*It must be said that these tests are not conceived just like another University study in order to write a scientific article. These tests have been conceived to help the throwers to know where their javelins are going when there is snow. You should use this kind of tests to improve training and the flight speed. One does not want to find practical conclusions about throwers, the only thing which interests us is to know how for they throw at this period of the year.*

**Question: What are the conclusions you are making out of these experiments from a technical point of view?**

**Utrianen :** *I think that it is exactly what I have just explained. . . I can add that of course this experiment does not concern high level athletes although these tests could apply to any level. But for the time being, we do not have any appliances enabling us to do such an experiment. We only use it for the national team.*

**Question: On the diagrams you showed us, each position of the foot is linked to a recorder. Did you take measures in the throws with force platforms? And if yes, what were the results?**

**Utrianen :** *I think that I was not totally well understood: all the tests which have been performed with this system have been so for normal throws. As far as the results are concerned, it is too early, we do not have enough data.*

**Question: I'd like to know the relation between the left foot pressure, shoulders pressure and the release speed?**

**Utrianen :** *The importance is not to know the value of the pressure on the left foot, but to know at which speed the javelin will leave. Thus one measures what seems to be a good throw, i.e. that which leaves with the greater release speed. Then one*

*compares the results for the pressure level of the foot during this same throw. But again it is difficult to draw conclusions.*

*Now, the tension at the level of the shoulders has not yet been relativized because it is a very complicated problem, and we are only at the beginning of our experiments. Moreover, we do not want to over-complicate our study with supplementary parameters.*

*In any case, the test shows clearly that there are heavy tensions at the level of the shoulder-muscles. You have to produce a maximum tension in the shortest time. If this power is developed in too long a time, the result is bad. You must thus have a very short peak of power.*

**Question: How do you measure the tension at the level of these shoulder-muscles?**

**Utrianen :** *In fact we haven't yet measured the muscular-intermuscular tensions. Sorry to disappoint you, but we haven't any results yet.*

**Question: How can your studies influence the development of the technique?**

**Utrianen :** *One cannot say anything yet because the results are much too insufficient.*

*If you want to know the practical influence, you should look at the video film taken at the same time.*

*With both the film and the results, one can think with the athletes: see whether the technique is good, if it gives the hoped-for results. The problem is the explanation of the results and until now we have not had deep conclusions. However some indications are available: it seems for instance that the tension of the muscles and their contraction are premature for the bad throws. The javelin is not accelerated at the right moment. But all this, is just a first approach.*

**Question: Are your goals the same for women as for men if you take into consideration the physical differences you just talked about?**

**Utrianen :** *You should remember that the training group is made up of high level 17 years old young people belonging to the national team. The technical goals are not to perform aesthetical throws but to adapt the technique to the athlete.*

*There are no specific differences between men and women. You should thus not train athletes in accordance with an ideal model, whether man or woman. We noticed that it was really negative to re-organized the technique of an athlete simply to conform to a model.*

**Question: What kind of appliances do you use indoor?**

**Utrianen :** *We use javelins, any kind of javelins. I do not know how it is in other countries. . . It is difficult to use anything else. We have a room where the winter championships take place, which has the same dimensions as a football ground, covered with gravel and sand, under a nylon bubble about 100m long.*

*The first winner of these championships last winter threw 109 m... and there were holes in the nylon. The mayor then compelled us to have a small protective ball at the end of the javelin (it has anyway not a great influence on the javelin).*

*The main appliance is thus the javelin. We use 800 g javelins for the boys and 600g for the girls. We have stopped using the 700g, and boys over 16 use the 800g. Girls use the 600g whatever their age.*

**Question (from M. Ritzenthaler): Do you have a personal point of view as far as the technique for the javelin is concerned?**

**Utrianen :** *The main changes are not yet clearly perceived. May be there aren't any! I refer to what D. Ottley said, and I have the impression that it is the end of the phase which is important.*

*The speed of the javelin must be increased during the last steps.*

*The main problem of most Finish throwers was that they had a tendency to throw too high. It was thus not a problem of change of technique.*

*The release should be as rectilinear as possible and the force should be applied in the direction of the throw instead of perpendicularly. If an athlete has rotation as a natural movement, you should use this possibility. But you should not teach rotation like that, because for some it is a very unnatural movement which may destroy the quality of the throw. If the movement is not natural, you should stick to the technique in a straight line.*

**Question: Don't you think that it would be a good idea to change the specifications of the javelin for women as it has been done for men?**

**Utrianen :** *I hope that women will throw as far as men. There is always a natural rivalry between men and women, even if the appliances are different. When the present grounds become too small for women, then we will change their javelins.*

**Question: This brutal transition from 600 g to 800 g for the championship javelin, is it not negative from the point of view of the technique and speed?**

**Utrianen :** *For championships we do not use 700g, we left it 7 or 8 years ago. For most boys, 700g was becoming too short; it was the main problem. Holding it also by the face showed a danger: it might pierce the cheek instead of passing along. One should thus use longer appliances...!*

The experiment showed no problem with this 200g transition. Many young people in your countries also throw 800 g javelins and teach their elders. The 700g was disastrous in many cases: its take off capacities were less good, and some boys threw further with 800g than with a 700g.