ON THE COVER

Shock Method
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Edited by Natalia Verkhoshansky, Bryan Mann and Matt Thome
Translation of the book “Tutto sul Metodo d’Urto” Italian edition - Carlo Buzzichelli

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We wish to thank Bryan Mann and Matt Thome, for their precious work in reviewing and editing. Their contribution has been determinant for the whole editorial project.

We also would like to thank Carlo Buzzichelli for the translation of the book “Tutto sul metodo d’urto” which has been the basis of the editorial project.
For jumpers the Depth Jumps are like a sip of fresh water on a hot day. Moreover, they are an optimal method to evaluate the functional state of the athlete and to increase explosive muscle strength.

Vitali Petrov, trainer of the former world pole vault record holder Sergei Bubka.

I had not thought that Depth Jumps could be so useful for the weightlifter. I am very sorry that I did not know anything about these exercises before.

Yuri Kozin, former world weightlifting record holder.

The Depth Jump is one of the main means I use to increase explosive strength and muscle reactive capacity and to control my functional state.

Igor Palkin, former world high jump record holder.

I do not like exercises with barbell and jumping exercises. Only the Depth Jumps increase my strength.

Vladimir Jascenko, former world high jump record holder.

The Depth Jumps are an excellent means of training, but in using them you must use the brain.

Ianis Lusis, former world record holder in the javelin throw.

The Depth Jumps are daily bread for triple jumpers; they are what is most necessary for them, first of all.

Viktor Saneev, former world record holder in the triple jump.

The Depth Jumps replace the muscles with very elastic steel springs. Without them it is not possible to perform the jumps on ice, characterized by a high flight height.

Stanislav Guk, trainer of many world champions in figure skating on ice.
The Depth Jumps are the basis of the volleyball players' ability to jump.
Vladimir Patkin, general technician of the Soviet National Volleyball Team.

The Depth Jumps are the best way to make the muscles explosive, especially if they are used in a rational combination with the barbell exercises.
Ekkart Arbeit, general technician of the National Athletics Team of the former GDR.

Depth Jumps? It is a very effective means. If I had appreciated it before, Boston would not have won so easily in Rome.
Igor Ter-Ovanesian, former long-time jumper and general coach of the former USSR National Athletics Team.
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At the end of the 1950’s, I worked as a Track & Field coach at the Moscow Aeronautic Institute and trained a promising group of long, triple, and high jumpers. It was with them that I first tried to apply training exercises with a barbell. We enthusiastically practiced with a barbell and vividly felt the benefit of this work. Nevertheless, we wanted more. At that time, I was studying the biomechanics of the triple jump and I discovered that the magnitude of force effort applied in the final push off reaches a level of 300kg. None of my pupils were able to lift such a heavy weight in the Barbell Squat and they tried, at all costs, to get closer to that goal.

Once, I remember, I said to my athletes: “We usually use full barbell squats, with complete flexion of the legs, but what if we performed it differently, not squatting to full depth? The Half-Squat allows us to lift a heavier weight, therefore, in this way, it would be possible to increase the effect of training.”

So, we started to implement this “genius” idea… and a miracle happened! The athletes, who had barely been able to cope with a barbell of 120-130kg (which wasn't bad for us in those times), began easily squatting a barbell of 180-200kg. Although I noticed that their spines bent in various directions, nobody gave this great importance: Do you need to pay attention to such trifles when you make an important step towards sporting success? How-
ever, the backbones of the athletes did not share our enthusiasm… The next day none of
the athletes came to train; All suffered back pain and could not return to training until the
end of the following week.

I understood that a heavy barbell and the spines of my lanky guys are two incompatible
things. So, what should we do? I immediately invented a new exercise: lifting a barbell
with the legs while in a supine position. At that time, we did not have special equipment
for this exercise, so the barbell was placed on the feet and pressed vertically while two as-
sistants prevented the barbell from falling. The guys tried to do it and discovered that they
were able to lift much heavier weights than in the Half Squat. However, this also was trou-
ble: the assistants of the athlete who performed the exercise had great difficulty holding
the barbell on his feet and this was very dangerous.

And then I remembered another thing that surprised me in the biomechanics of the tri-
ple jump: the magnitude of force effort applied in the final push off reaches the level of
300kg in only 0.125 sec. Trying to figure out what provides such a high level of explosive
strength expression, I discovered that during the landing-take-off movement, the flexing-
extending leg assures the rotation of the body’s displacement vector at 28-30°, while the
speed of horizontal body displacement, before this rotation, arrives at 9.5 m/s (20-21
km/hour). Therefore, what assures the colossal load that acts on the athlete’s leg is the ki-
netic energy accumulated by the athlete’s body during the run-up.

In that moment, a new idea came to me: why not try to use a training exercise in which
the kinetic energy of the falling body will be applied as the external load instead of a bar-
bell?

Thus, the Shock Method was born.

In the early 1960s, my first publications about the Shock Method were adopted with
skepticism that eased my enthusiasm and strengthened the doubts. However, the publica-
tions did their work. While I indulged doubts, my first Shock Method exercise, the Depth
Jump, began to be successfully used in the training of leading soviet athletes in many
sports.

Later, Depth jumps were introduced in Europe, then in America, in Japan and in Aus-
tralia and, finally, through Finland and Italy, returned to Russia, but with another “nation-
ality:” Our sports journalists enthusiastically described its advantages as the “achievement
of foreign specialists.” Truly, “no man is a prophet in his own country.”

By the time of the “great return home” of the Depth Jump, I was wholly involved in
scientific work on issues that go far beyond any problem of applying a certain training
method. However, I noticed that most of coaches and sport scientists considered my
Shock Method only as applying the Depth Jump. The possibility of successful application
of this method for the upper body was not appreciated. In addition, in the rules of applying
Depth Jumps, there were so many misunderstandings that it could nullify all the benefits of this excellent exercise.

I was so worried by these circumstances that I decided to write this book.

Recently, one of my friends from Memphis, knowing that I am going to write a book about the Shock Method, exclaimed with surprise: “How is it possible to write a whole book about it?” I admit, I was somewhat taken aback by this question, but one recollection made me smile in response.

...It was in the late 1960’s: the time of the first Track & Field meets between the USSR and the USA. We were sitting on the tribune of Moscow’s stadium “Luszniki.” There were three of us: A Great Coach, my Great Mentor, and my great friend: Professor Vladimir Dyachkov, the magnificent John Tomas, who, at that time, was the best high jumper in the world, and I, a young coach and the pupil of Dyachkov. Certainly, we were talking about Track & Field high jumping. When Dyachkov casually mentioned his book dedicated to high jumping, Tomas had exclaimed with unconcealed surprise: “How is it possible to write a whole book about this?” Then I said to John Thomas, “Yes, to tell ALL about the high jump, you really need to write a whole book.”

Now, I can answer the question from my friend in Memphis the same way: “Yes, to tell ALL about the Shock method, you really need to write a whole book. Believe me, the Shock Method deserves it.”

I hope this book will help coaches objectively evaluate the possibilities of the Shock Method and successfully utilize its incredible training potential in their practice.

Sincerely yours,

Rome, 1997
EDITOR’S NOTE:
The preface has been integrally translated from the Italian book “Tutto sul Metodo d’Urto” (Yuri Verkhoshansky - 1997, Società Stampa Sportiva).
The following chapters have been translated from the original Russian manuscript of the author and integrated with the content of the Italian book.