

TRAINING WITH T-BOW

Felipe Isidro-Donate / David Ribera-Nebot (2007) BODY LIFE - Spain - September 2007







The T-Bow is a multifunctional bow for training and therapy

Sandra Bonacina is the creator of the T-Bow, a training tool that was developed together with Victor Denoth, both university professors of different topics of physiotherapy, fitness and training in the Institute of Movement and Sports Sciences at the University of Zurich (Switzerland).

The T-Bow is very manageable, has a non-slip covery, is extraordinarily versatile (useable on both sides) and, besides, is stackable in a very small space of the gymnasium. This accessory offers excellent options for the development of integral training sessions in multiple fields: fitness, wellness, movement education, sports initiation, movement rehabilitation, sports training and leisure. The multifunctionality of the T-Bow permits the integral training of conditional, coordination and cognitive capacities. Additionally, the balance on the T-Bow generates special sensations and an incomparable welfare. There exist various types of differential training with the T-Bow, which can be grouped in the following contents: flexibility and relaxation, strength and postural stability, endurance and, finally, dynamic and static balance (coordination).

<u>Ejercicios con el T-Bow - Énfasis en la Flexibilidad y Relajación</u> <u>Exercises with the T-Bow - Emphasis on Flexibility and Relaxation</u> T-Bow Switzerland - T-Bow Fitness - ANEF - EEB (2007)



Flexibility and Relaxation

With the T-Bow efficient and comfortable positions can be achieved to apply different techniques (from the most passive to the most active) of muscular stretching, articular mobility and relaxation. The excellent adaptation to the spine, the lateral position of the waist and the abdominal position of the frontal zone of the trunk, as well as the possibility of a greater mobility -if it is compared with a flat surface- are some of the added values of this training tool. Likewise, the dynamic mobilizations of the back during balance with the T-Bow are extraordinarily efficient. Aside from several static relaxation techniques, during the adoption of different postural attitudes, the T-Bow allows interesting options of dynamic relaxation to both segmentary and global levels. An example, in this sense, is the immediate and successive change from a dynamic balance situation to a more static balance situation, or the alternative levels of tension in the arms by means of actions with the T-Bands (set of 1, 2 and 3 elastic bands) or another mobile tool (for example a ball) during a dynamic balance with the T-Bow.

Ejercicios con el T-Bow - Énfasis en la Fuerza y Estabilidad Postural Exercises with the T-Bow - Emphasis on Strength and Postural Stability T-Bow Switzerland - T-Bow Fitness - ANEF - EEB (2007)



Strength and Postural Stability

The T-Bow permits the creation of exercises of different levels of difficulty with the own body and combined with the T-Bands or other sport tools, with which the possibilities of load and stimulation on all muscular groups for strength training and postural stability are multiplied. The corporal disposition in relation to the T-Bow, the type of overload (own body / T-Bands/ mobile tools / free weights), the characteristics of execution and the number of repetitions / sets, will determine if the strength training type with the T-Bow is more oriented toward strength-speed, maximal strength or endurance-strength, with its variant infinities.

-Strength exercises with the own body and the T-Bow:

Great variety of push-ups by means of different types of supports and grips in its step position, as well as taking advantage of its more differential characteristic in its balance position; several leg push actions and jumps in its step position, using its different slops for the supports;

multitude of curl-extension and balance actions with legs, varying the height of the hip and the location of feet in its balance position; many alternatives of curls, lateral raises, extension and rotation of the trunk by means of selective corporal dispositions on the T-Bow in its step position.

On the other hand, the balance moves with the T-Bow activate strongly the back and the buttocks, train the functional load of the leg and strengthen the joints in a balanced way. By means of a regular training, the pains of the joints of the foot and knee can disappear.

-Strength exercises with the T-Bands combined with the T-Bow:

The possibility to use 1, 2 or 3 elastic bands permits to graduate 3 levels of tension with each T-Band, in conditions of decreasing and growing load (eccentric and concentric phase of the contraction) or constant load (isometric contraction or fixed dynamic maintaining the tension of the elastic band). Thus, the works with the T-Bands suppose an additional load for the own-body exercises, besides enabling other selective exercises of muscular strengthening of arms and legs, such as the extensions-curls, rows, raises, rotations, press and pull. Especially differential are the strength exercises with the T-Bands during a situation of dynamic and static equilibrium with the T-Bow (balance position).

-Strength exercises with mobile tools combined with the T-Bow:

According to the weight, the site of placement and the mobilization of the mobile tool that is combined with the T-Bow, it will impact more in certain muscular groups and in the level of overload for strength training.

When T-Bow is combined with tools, such as dumbbells, weightlifting bars and weighted balls, the strength training alternatives acquire an extraordinary richness and effectiveness for the application to sport actions and to the activities of the daily life. These workouts are extraordinarily special in conditions of dynamic and static balance with the T-Bow used in his balance position. The training of general strength with bar or dumbbell and the multi-throw actions during balance on the T-Bow are distinctive examples for fitness and for the development, varied and amusing, of basic performance capacities in many sports.

On the other hand, with the T-Bands and the T-Bow, individually without the help of another person, very selective eccentric exercises for the prevention of certain muscular injuries can be designed.

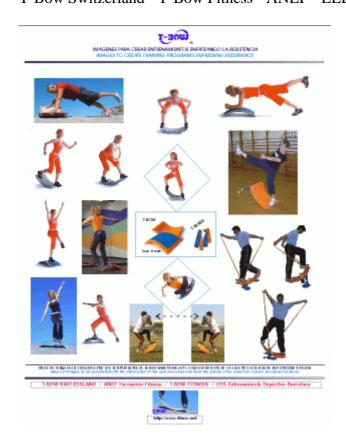
-Strength exercises with the T-Bow oriented to the postural stability:

As a complement of the mentioned strength exercises (support of the dynamic postural stability), other T-Bow exercises are proposed with special orientation to the improvement of the rest and pre-action muscular tone, so much to segmentary level as to global level, in order to preferably impact in the static postural stability.

Their execution is very slow, static (maintenance of postures) and can include the combination of some static corporal zones with other slow dynamics. In these conditions there are proposed: exercises with the own body and T-Bow as a balance tool and as a step (if T-Bow balance is combined with a Fit Ball, a special increment of the instability is obtained and thus a greater level for the stabilization of the hip); exercises combining the action of arms and/or legs with the two sets of T-Bands and the T-Bow as a balance tool and as a step; dynamic balance exercises of legs with the T-Bow and static of posture maintenance exercises of the trunk and arms with the T-Bands; asymmetric exercises with action of one arm with the T-Band in support of feet or trunk on the T-Bow as a balance tool and as a step (very select and effective to impact the deep musculature of the back).

With a good selection of the workout combining the T-Bow with the own body, the T-Bands and the mobile tools, the methods of strength training are optimised.

Exercises with the T-Bow - Emphasis on Endurance T-Bow Switzerland - T-Bow Fitness - ANEF - EEB (2007)



Endurance

The multifunctionality of the T-Bow enables the design of multiple exercises and training methods (with intervals or continuous, with or without variations of rhythm) that are able to selectively activate the functional systems in order to improve all the endurance capacities.

In the field of fitness it is typical to give priority to endurance workouts that try to stimulate preferably the health of the heart and the cardiovascular system. With the T-Bow, as balance and as step, there are developed very diverse and effective trainings to achieve these objectives. Some pointed out are the lateral and frontal balance moves with the T-Bow to train the endurance with cardiovascular emphasis ("cardio-balance"). The greater the amplitude of the balance and the faster its execution, the greater will be the load and the activation of the cardiovascular system.

Additionally, the balance actions with the arms or combining arms and legs,

that also activate the global postural control, if they are well structured they add effectiveness and variety to the cardiovascular endurance workout.

The T-Bow balance moves (and also, in smaller measure, its step moves) combined simultaneously with the T-Band actions, train differential coordinative, postural and strength-endurance capacities which can also have an special effect in the cardiovascular system. Moreover, these combined exercises (highly differential) recruit a greater number of muscular groups simultaneously and thus the endurance training can have a more global orientation.

Stepping up and down, to cross in several directions, to step running and jogging, one and two-foot jumps, etc. The T-Bow in step position also permits to train the endurance efficiently. Besides, and significantly important, with the T-Bow are possible the supports and the lateral jumps in slope and in stair that the classical step does not permit; fact that adds other differential stimuli to endurance training.

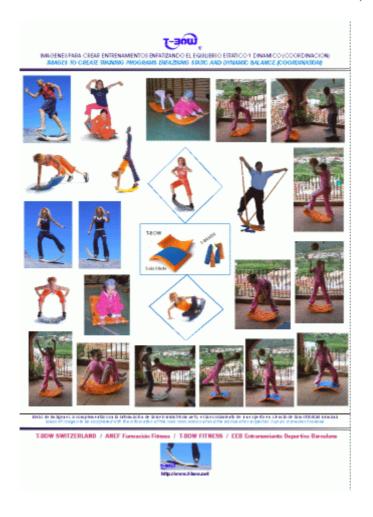
Likewise, the T-Bow allows the execution of typical aerobic and other dances choreographies.

On the other hand, with all these types of exercises, it should be mentioned that the circuit training is a very effective and motivating tool.

Ejercicios con el T-Bow - Énfasis en el Equilibrio Estático y Dinámico (coordinación)

Exercises with the T-Bow - Emphasis on Static and Dynamic Balance (coordination)

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Static and Dynamic Balance (coordination)

The unique and most distinctive alternatives of exercises with the T-Bow are the situations of balance in dynamic and static equilibrium, such as balance moves (frontal-longitudinal and lateral-cross) seated and with individual support of feet or hands, and balance moves in simultaneous support of feet and hands.

These proposals of exercises with the T-Bow are understood as a base of development for integrated and multi-level movements, that imply a joint acceleration, stabilization and deceleration with the intention to improve the ability of the movement, the strength of the "core" zone and the global neuromuscular efficiency. This development is justified also by its greater application to the natural and daily activities.

If, for example, is chosen or selected an smaller step, lower to the distance among both extremes of the T-Bow, one should place always a foot with the heel in an extreme. It is advised to pressure always with the knees outward and to not place both feet simultaneously inside the arch of the T-Bow, since it would suppose an inappropriate structural load for the articulations of the foot and the knee.

The situations of balance and re-balance with the T-Bow permit the development of some especially significant exercises, that can be combined among themselves:

- -Balance moves using different combinations of supports, leaps and turns of the extremities and parts of the body, in different postural dispositions.
- -Dynamic and static balance using supports, leaps and turns of the extremities and parts of the body on convex and concave surfaces, adopting multiple postures.
- -Combination of situations of balance moves and of balance and minidisplacements in convex and concave surface, with movements of special dynamic coordination; such as passes, throw and catching actions, bouncing, etc.

In addition to these types of exercises, different coordination emphasis can be associate in order to control the movement, to implement the movement in the space and to adapt the movement temporarily.

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The utilization of the **double T-Bow** (a T-Bow in balance position over another in step position) offers a greater velocity and amplitude of the balance, which supposes a different and additional load for all the strength, endurance and coordination training.

The multiple types of training proposed enable the development of a great variety of combinations to design structures of session oriented to the different fields of application of the T-Bow and to the needs of the different individuals.

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