

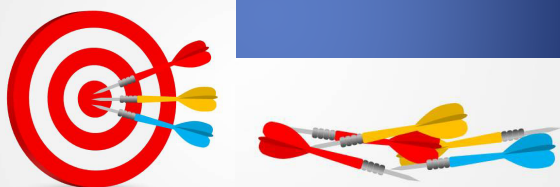
PRIMENA RAZLIČITIH REKVIZITA U KONDICIJSKOJ PRIPREMI

UVOD



- Različiti rekviziti su **deo alata** kond.trenera
- **Problem imenovanja treninga** prema rekvizitima...
 - **Trening zavisi od cilja** a ne od rekvizita
 - **Rekvizit je sredstvo**
- Korišćenje gomile rekvizita na treningu **ne znači da je trening kvalitetan!!!**

- Različiti rekviziti **moгу da ostvare isti cilj**
- **Ali ako nemamo jasan cilj...**



TRX

- TRX trake predstavljaju rekvizit koji je osmislio Rendi Hetrik zajedno sa svojim kolegama iz mornaričkih foka.
- TRX omogućava trening u više ravni kretanja (frontalna, sagitalna, transverzalna)
- Važnost **kraka sile** za nivo opterećenja



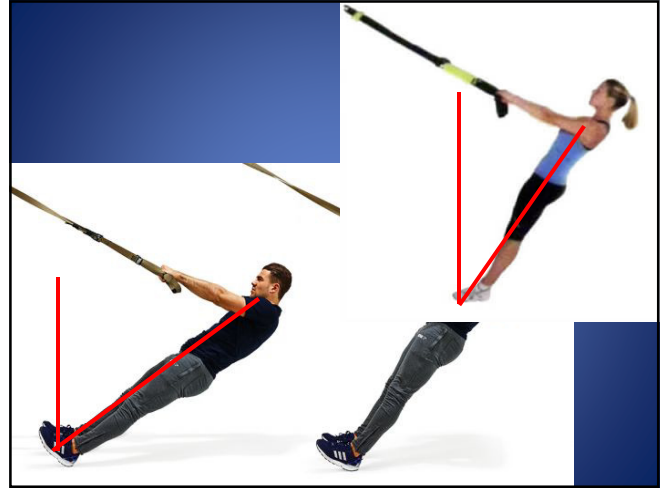


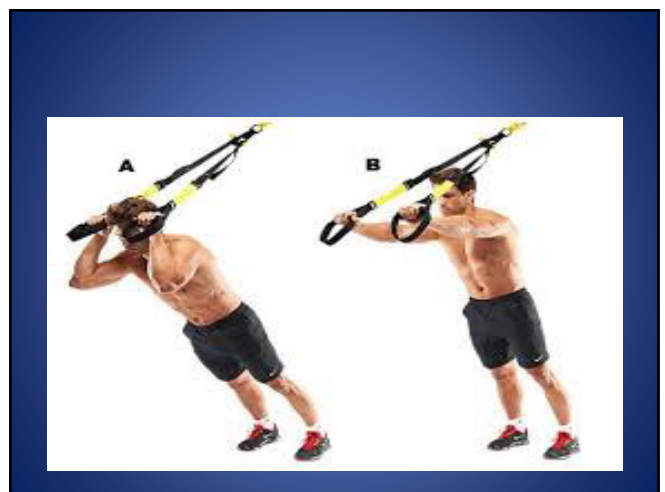
Fig. 4. Holding positions of the suspension workouts. (A) Hip abduction in plank; (B) Dead press; (C) 45° row; (D)

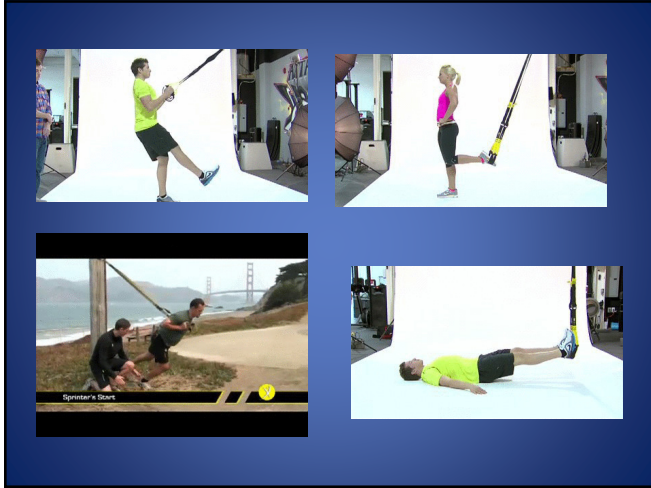
5. Conclusion

We found that the HAP most effectively activated the EO and IO/TrA, whereas the HC most effectively activated the LMF. Thus, these exercises could improve the strength of different muscle groups. Furthermore, suspension training may involve greater activation of core muscles than exercises on stable surfaces or Swiss balls.

Practical implications

- Suspension exercises strengthen core muscles in young and healthy adults.
- Lower limb workouts activate core muscles more than upper limb workouts.
- Suspension exercises may activate muscles more than similar exercises performed on stable surfaces and Swiss balls.





ANALYSIS OF PUSHING EXERCISES: MUSCLE ACTIVITY AND SPINE LOAD WHILE CONTRASTING TECHNIQUES ON STABLE SURFACES WITH A LABILE SUSPENSION STRAP TRAINING SYSTEM

STUART M. MCGILL, JORDAN CANNON, AND JORDAN T. ANDERSEN
 Department of Kinesiology, Spine Biomechanics Laboratory, University of Waterloo, Waterloo, Canada

Figure 2. A) Standard push-up, B) Bubble shoulder protection, C) TRX shoulder protection, D, E, F) TRX push-up at angles 1, 2, and 3, G) TRX strap push-up, H) Reverse fly.

TABLE 2. Rank of mean spine compression at the P-phase of each exercise.

Exercise	Rank	Mean spine compression (N)	SD
TRX push-angle 3	1	1,838.9	852.9
TRX push-up	2		
TRX push-angle 2	3		
Stable shoulder protraction (coached)	4		
TRX scapula push-up	5		
TRX shoulder protraction (coached)	6		
TRX push-angle 1	7		
TRX shoulder protraction (not coached)	8		
Standard push-up	9		
Stable shoulder protraction (not coached)	10		

Coaching movements had the greatest effect on spine motion with the "TRX exercises." In contrast, constrained "stable" exercises such as a standard push-up, there seems to be less chance to change body position compared with using the TRX training system. Thus, it would appear that coaching becomes more important with TRX exercises because users have more opportunity to compensate given the variable base of the support.

Coaching movements had the greatest effect on spine motion with the "TRX exercises." In contrast, constrained "stable" exercises such as a standard push-up, there seems to be less chance to change body position compared with using the TRX training system. Thus, it would appear that coaching becomes more important with TRX exercises because users have more opportunity to compensate given the variable base of the support.

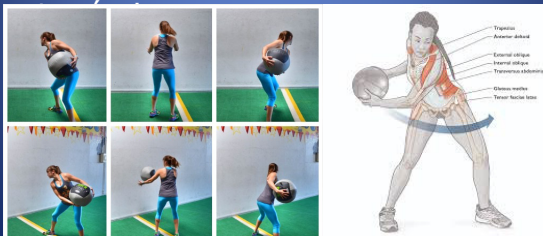
Coaching movements had the greatest effect on spine motion with the "TRX exercises." In contrast, constrained "stable" exercises such as a standard push-up, there seems to be less chance to change body position compared with using the TRX training system. Thus, it would appear that coaching becomes more important with TRX exercises because users have more opportunity to compensate given the variable base of the support.

MEDICINKA

- Specifičnost medicinke kao trenažnog sredstva ogleda se u tome što ona „simulira“ loptu
- Unapređenje brzinske snage (F_{xV}) pri različitom opterećenju
- Veliki dijapazon brzih pokreta



- Osnovne vežbe sa medicinkom su **različite vrste bacanja.**
- Loptasti oblik omogućava izvođenje velikog broja različitih efikasnih vežbi za razvoj **brzinske snage i koordinacije** u uslovima povećanog intenziteta



EFFECTS OF SIX WEEKS OF MEDICINE BALL TRAINING ON THROWING VELOCITY, THROWING PRECISION, AND ISOKINETIC STRENGTH OF SHOULDER ROTATORS IN FEMALE HANDBALL PLAYERS

CHRISTIAN RAEDER,¹ JAIME FERNANDEZ-FERNANDEZ,² AND ALEXANDER FERRAUTI¹

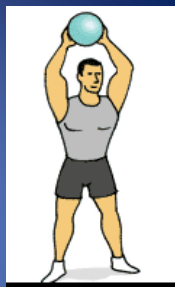
¹Department of Training and Exercise Science, Faculty of Sports Science, Ruhr-University Bochum, Bochum, Germany; and

²Sports Research Center, Miguel Hernandez University, Elche, Spain

In conclusion, the present results showed that 6 weeks of periodized MBT elicit significant improvements in functional performance (i.e., throwing velocity) and isokinetic strength of the shoulder rotators, whereas throwing precision remained unaffected. In addition, an "injury-preventive" warm-up for the shoulder complex using elastic resistance bands before MBT and regular handball throws as a coordinative transfer after MBT can be highly recommended. Future research is

- **Kvalitetan izbor vežbi**

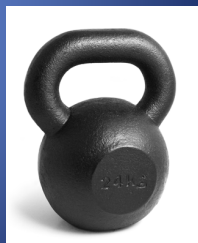
- Brzo izvođenje pokreta
- Dobri početni položaji!



- Greške u vežbama sa medicinkom?
- Koje ciljeve (ne)možemo da ostvarimo koristeći medicinku?
 - Komponente opterećenja za različite ciljeve

Kettlebell (Gira)

- Teg od livenog gvožđa koji izgleda kao kugla sa drškom
- Osnovna karakteristika - **središte mase nalazi se izvan šake**
- Osnovni pokreti su **različite vrste zamahivanja rukom**



- Kompleksni pokreti koji uključuju celokupnu telesnu muskulaturu uz kontrolu trupa omogućavaju veliku energetska potrošnju
- **Unapređenje izdržljivosti (AE i mišićne) i međumišićne koordinacije**
 - Vremensko trajanje serije (30s-45s-60s...)
 - Veliki raspon težina koje se mogu koristiti
- Nije namenjen za izolacione pokrete

EFFECTS OF KETTLEBELL TRAINING ON AEROBIC CAPACITY

J. ASHER FALATIC,¹ PEGGY A. PLATO,¹ CHRISTOPHER HOLDER,² DARYL FINCH,³ KYUNGMO HAN,¹ AND CRAIG J. CISAR¹

¹Department of Kinesiology, San José State University, San José, California; ²Intercollegiate Athletics, Cal Poly, San Luis Obispo, California; and ³Department of Athletics, Idaho State University, Pocatello, Idaho

ing program. The KB group performed the 15:15 MVO₂ protocol (20 minutes of kettlebell snatching with 15 seconds of work and rest intervals). The CWT group performed multiple free-weight and dynamic body-weight exercises as part of a continuous circuit program for 20 minutes. The 15:15 MVO₂ protocol significantly increased $\dot{V}O_{2\max}$ in the KB group. The average increase was 2.3 ml·kg⁻¹·min⁻¹, or approximately a 6% gain. There was no significant change in $\dot{V}O_{2\max}$ in the CWT control group. Thus, the 4-week 15:15 MVO₂ kettlebell protocol, using high-intensity kettlebell snatches, significantly improved aerobic capacity in female intercollegiate soccer players and could be used as an alternative mode to maintain or improve cardiovascular conditioning.

Acute Hormonal Response to Kettlebell Swing Exercise Differs Depending on Load, Even When Total Work Is Normalized

Leanne Raymond;Derek Renshaw;Michael Duncan;

the 16-kg load compared with the 8-kg load ($p = 0.002$). The present findings suggest that KB swing exercise produces an acute increase in hormones involved in muscle adaptation, but that KB load influences this response, even when total work completed is the same.

- Kompleksni pokreti zahtevaju maksimalno kvalitetno izvođenje – **u suprotnom je veliki rizik od povreda!**
- Naučiti osnovne vežbe maksimalno pravilno!!!
- [Basic kettlebell exercises.mp4](#)



- Kettlebell video Pavel Tsatsouline
- [Enter the Kettlebell - Pavel Tsatsouline.mp4](#)

ZADATAK

- Primena kettlebella
 - **Svestrana priprema sportista**
 - Osmislite program treninga u kome će se dominantno koristiti kettlebell (rad u grupama)
 - **Rekreacija**
 - Osmislite kako bi mogao da izgleda jedan program rekreativnog vežbanja sa kettlebelom (rad u grupama)

Sand Bag & Aqua Bag



- Relativno novi rekviziti u čijoj osnovi je primena **nestabilnog i neujednačenog opterećenja** u višezglobnim pokretima
- Multifunkcionalni rekviziti, relativno jeftini lako prenosivi
- Izuzetno korisni u cilju svestrane pripreme, naročito u boričkim sportovima

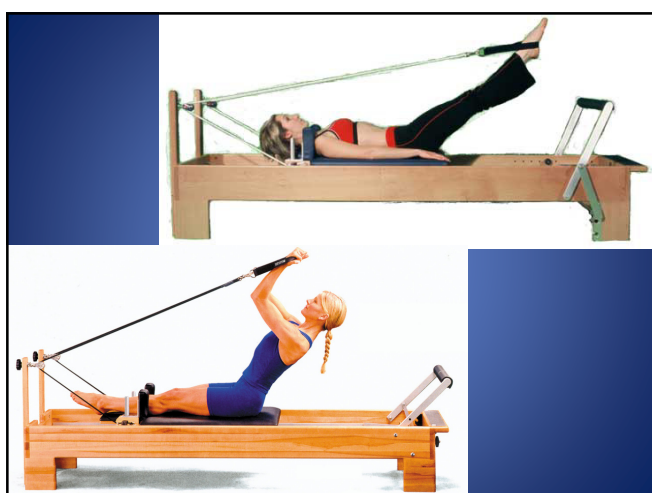
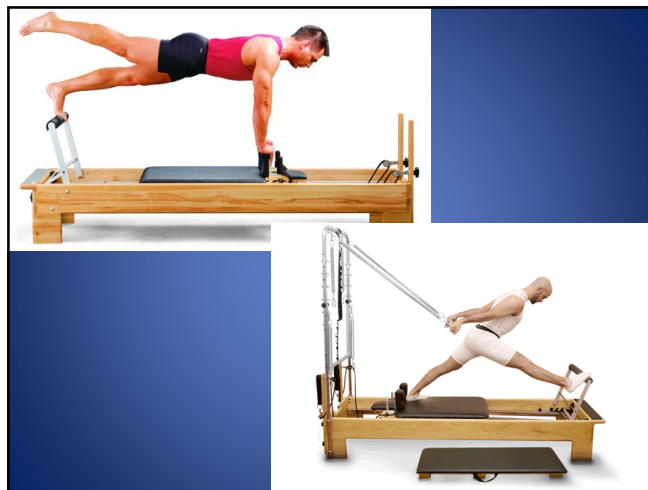
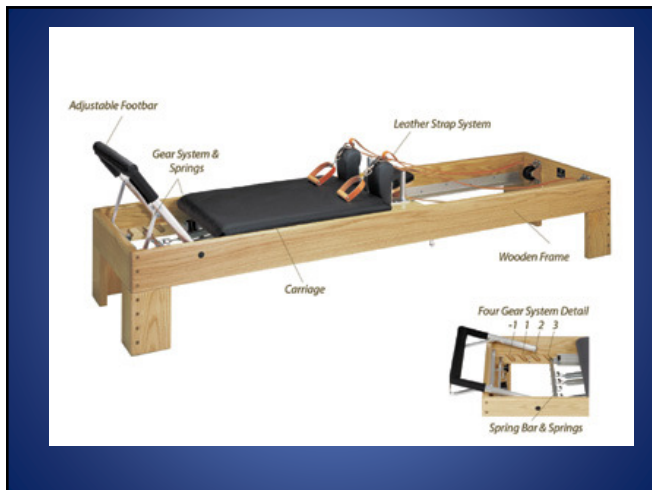


- Pogodni za poboljšanje **izdržljivosti u snazi** i za total body **HIIT**
- Ne zaboravite zadatak u praktikumu!

- [Sand Bag Exercise Combo.mp4](#)
- [Aqua bag Exercise Combo.mp4](#)

SPRAVE IZ PROGRAMA PILATES

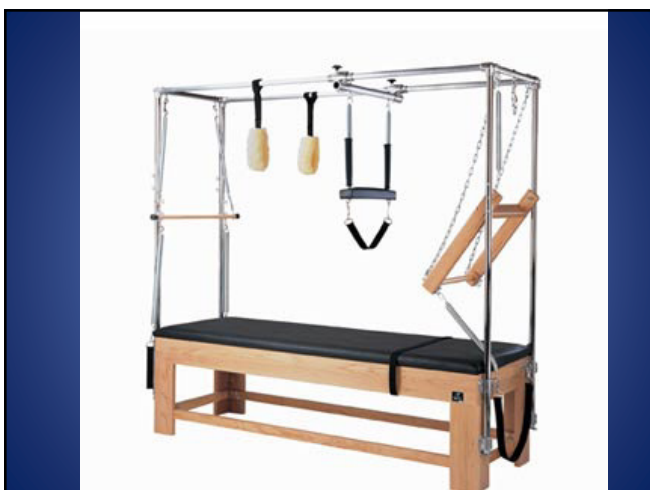
- Usmerene na **poboljšanje posture tela**, jačanje jezgra tela u kontrolisanim uslovima
- **Reformer** - omogućuje vežbanje sa izuzetno preciznim opterećenjem u specifičnim položajima
- Telo se postavlja na klizač koji klizi kroz ram pod uticajem odgurivanja pomoću nogu ili vučenjem sajli na gornjoj strani.



- **Wunda Chair** - jedna od naprednijih sprava sprava Jozefa Pilatesa za trening pod opterećenjem.
- Kutija na kojoj jedna strana može da se gura na dole pod opterećenjem opruga.



- **Cadillac** - kompleksna, velika, multifunkcionalna sprava sa mnogo elemenata, dizajniran za vežbanje pacijenata u krevetima u bolnici.
- Omogućava izolaciju svakog mišića, podelu jednog pokreta na više manjih, da bi se unapredio obrazac pokreta.
- Može se koristiti u različitim amplitudama pokreta uz optimalnu kontrolu mišića.



- [Pilates_cadillac.mp4](#)
- [Pilates_reformer.mp4](#)
- [Pilates_reformer_1.mp4](#)

Mnogo trenažnih sredstava postoji...

Naučite:

kako, zašto i **kada** ih primenjujete!

