



Introduction to Body weight Exercise

You are Your own GYM

The popularity of Gym machine and Training with machine and fad died is mostly the result of marketing –not a genuine attempt to help a generally out of shape society for attaining higher levels of fitness and wellness. Our homes and Gyms are flooded with fitness gadget but this simplest and most effective methods for developing strength and losing fat / weight has been over overlooked i.e. Knowing how to train using nothing more than your body.

Most exercises done with resistance/weight training machine isolate only certain muscles, involving a fairly small portion of our body's total muscle mass, where as bodyweight exercises involves many muscle groups at once. Body weight exercise also use motion that keep us safe from the many chronic injuries, like joint problems, that came over time with resistance machines ,weight lifting and unnatural exercises which have little functional value.

The performance demands of the average persons consists mainly of using their own body weight through out the day. So what could be more functional for developing better strength in day to day activities than body weight movements.

These exercise have gone largely unnoticed by exercise culture shifting toward costly gym or equipment. These is a misconception that body weight exercise options are limited i.e. push ups, pull ups, sit ups.The fact is that there's a for long list of exercises using body weight with simple equipment compared to the machines in any gym in the word.

Therefore, we have kept object of this morning and evening session of the workshop to use our own body weight and inexpensive equipment like medicine ball, body weight suspension trainer, battle rope, elastic cords and unstable surfaces like woggle board, Bosu ball, swiss ball etc. for improving fitness components such as dynamic flexibility/mobility, endurance (fat/weight reduction), strength and power.

These modalities of exercise can also be tailor made or customized for many sports specific conditioning training which can be more functional i.e. directly related to the sports specific movements.



FOUR PILLARS OF HUMAN MOVEMENT

Human movement can be classified into four categories.

- 1- Locomotion : single leg stabilizing and rotation
- 2- Pushing & pulling :
- 3- Level changes : movement of trunk and lower extremities to raise or lower centre of gravity.
- 4- Rotation : in daily activities and is sports

THREE PLANES OF MOTIONS

Every day we operate in an environment that has 360 degrees of movement capability in 3 planes of motion , These are:

- 1- **Sagittal plane**- sagittal plane divides the body into left and right movements of body parts forward or backward occurs in this plane i.e. walking running, lifting, extensions and flexion of Ankle, knee, hip, elbow. wrist shoulder joint occurs in this plane.
- 2- **Coronal/frontal** : separates the body into anterior and posterior regions. i.e. into front & back. Adduction and abduction are movements along this plane.
- 3- **Horizontal plane**: separates the body into top and bottom rotation, wood chaping are the example of movements in this plane.

As such most of the physical activity, daily human movements and sports movements occurs in 3 planes of motions. However, it requires to train combining the four pillars of human movement which takes place is the 3 planes for developing dynamic flexibility /mobility/endurance/strength and power for improving fitness and sports conditioning. This modality of training using four basic movements in 3 planes is called **functional training** .

Now, in the following session we will learn functional training exercise using body weight medicine ball, suspension trainer, battle rope and adding unstable surfaces to these equipment/implements to train for different components of fitness. i.e. flexibility/mobility , endurance , strength and power.



BODY WEIGHT EXERCISES

- 1- Pushup
- 2- Pull ups/pulling/body weight row
- 3- Squat
- 4- Single leg squat-split squat lateral squat
- 5- Sumo dead lift
- 6- Single leg dead lift
- 7- Lunges
- 8- Step ups
- 9- Planks
- 10- Sit ups
- 11- Crawling
- 12- Bridge
- 13- Buspees
- 14- Turkis get up
- 15- Mountain climber
- 16- Good morning
- 17- Calf raise



MEDICINE BALL TRAINING

2.1 Why medicine ball training : it is safe, relatively inexpensive method of training. It can be used for rehabilitation, general physical, preparation can be adopted specifically for ingarious sports movements. it is appropriate for all levels of ability front beginner to the elite athletes. It can be used in all training environments i.e Indoor and outdoors . It is equally effective for the male, female and is excellent for the young developing athletes. It is completely portable . Most important benefit of the medicine ball training is that of it targets the core or the centre of the body. The core is the centre of power and balance .

2.2 Type of medicine ball –

- Leather medicine ball
- Rubber medicine ball
- Bouncing (polyurethane) Medicine ball
- Double handle Medicine ball
- Tornado ball

2.3 Physical qualities development by medicine ball training

- Dynamic flexibility /mobility
- Strength – General Strength ,
Special strength
Specific strength
- Strength endurance :
- Power
- Can be used for fat/ weight reduction throw mixed aerobic and anaerobic exercise programs
- Learning various sports skills.

2.4 Selecting a medicine ball –

- Type- (a) Leather/rubber ball are used for exercise movements without dropping the ball to the ground
- (b) Bouncing ball- for throwing exercise
- (c) Double handle- for exercise such as crunches, dead lift, twisting movement squats, lunges
- (d) Tornado ball : for power exercises



Weight : 2 to 4 kg for beginners
6 to 8 kg for advance athletes

2.5 Delivery positions

- Straddle standing
- Stride stand
- kneeling : on two or one knee
- Sitting
- Lying- Supine –on back
Prone –on the stomach
- Front support

2.6 Movement Classification

- Throws
- Toss/pass
- Swings
- Twists
- Any combination of the above
- With jump- i.e. plyometric movements
- Sports specific movement
- Testing

2.7 warm up

- Torso circle
- Side bends
- Good morning
- Wood chopper
- Russian twists

2.8 Exercises

- Soccer throws
- Chess pass
- Step and throw
- Two arm put
- Two arm overhead throw
- Two arm chop
- Two medicine ball push up
- M B throw With Push Ups - cross over push ups
- Situp & throw
- Prone back extension
- Back extension & throw



- Rocky half twist
- Rocky full twist
- Standing side to side pass
- M.B. Goblet squat
- Over head back throw
- Forward through legs
- Step up and throw
- Hamstring curl
- Lunges with medicine ball
- Lateral shuffle and pass
- Bull is a ring
- Finger of 8 in the legs
- Squat throw bounce and catch

Conditioning Games

- Slam ball
- Head ball shuffle velay
- Med balls shuffle run
- Crab soccer
- Indian fighting

Testing

- Over head backward throw
- Forward through the legs
- Seated two arms put
- Seated two arm overhead throw
- Throwing two arms with a step
- Throwing- one arm with a step
- Jump & throw, forward
- Over head back



BATTLING ROPE TRAINING SYSTEM

Build Muscle, Lose Fat/ Weight, Increase Strength and Endurance

With

Battling Rope workouts

- 1 **Battling Ropes :** Length varies from 30 feet to 50 feet
Thickness 1” to 2”
Weight 12 kg – 40 kg
- 2 **Anchoring the rope ;** Vertical Post or Beam ,
Trees ,
Floor secured Power System
- 3 **Training Systems :** Wave System
Pole System
Push – Pull System
- 4 **Benefits of Battling Ropes Training Include:**
 - Increased aerobic and anaerobic capacity
 - Lose fat / Reduce weight
 - Increased power and strength
 - Increased power and strength for longer durations
 - Increased motivation and mental endurance
- 5 **Grip ;** Over hand grip
Under hand grip
- 6 **Exercises :** Wave Training System
 - Double wave
 - Alternate wave
 - Low Alternate wave
 - Shoulder Circle
 - Snake on the floor
 - Alternate wave with forward backward movement



- Alternate wave with lateral movement

Pole Training System

- Front Pull bent over
- Backward pull bent over
- Seated over the shoulder
- Side pull standing

Push – Pull Training System

- Standing Push -Pull
- Prone Push Pull