

# Swiss Ball Exercise on Core Muscles Fitness of Gym Enroll Peoples

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**Abstract** - The purpose of this study was to examine the “Swiss ball exercise on core muscles fitness of gym enroll peoples”. It was an experimental study in which pre-test & post-test non equivalent groups design was used. In this study gym enrolled and regularly exercise session attended 40 peoples mean of age (32.17±4.10) were selected as sample by used simple random sampling technique from fitness gym, Shrigonda. Gym exercise peoples were selected into, male (n=25) and female (n=15). Sit-ups, trunk flexor, plank hold core muscles fitness and endurance test was conducted on both the groups obtained data was analyzed by using paired sample t-test. The results showed that statistics change of pre and post tests performance of subjects on sit-ups, trunk flexor & plank hold test for core muscles fitness was significant effect find out. It was also researcher concludes that there was significant improvement of core muscles fitness performance of male and female gym enroll peoples as compared to pre-test and post-test performance due to the Swiss ball exercise given.

**Keywords** - Swiss ball exercise, Core muscles fitness and Gym enroll peoples.

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## INTRODUCTION

Swiss ball exercises for core muscles fitness are most popular workout pattern to strength and conditioning plan for core part. Benefits of Swiss ball core exercise that facilitate spinal stability and balance have often been emphasized by researchers to develop strength, endurance, flexibility and core muscles. Core muscles exercises program emphasizes abdominal muscles that work together to stabilize the spine muscle includes rectus abdomens (upper, lower and middle), oblique, latissimus, and erector spinae. In this work most of studies conducted so far focused on static exercises performed on Swiss ball that increase facilitation and activation of the spinal stabilizers because of the unstable characteristic of the Swiss ball exercises.

## MATERIAL AND METHOD

The purpose of this study was to examine the “Swiss ball exercise on core muscles fitness of gym enroll peoples”. It was an experimental study in which pre-test & post-test non equivalent groups design was used to testing the hypothesis. In this study gym enrolled and regularly exercise session attended 40 peoples mean of age (32.17±4.10) were selected as sample by used simple random sampling technique from fitness gym, Shrigonda. Gym exercise peoples were selected into, male (n=25) and female (n=15)

category. The study was selected the variables of core muscle fitness. The selected subjects were conducted the pre & post test by sit-ups, trunk flexor & plank hold tests and six weeks Swiss ball exercises program which was given four days in a week was implemented on male and female gym enroll peoples. After Swiss ball exercises program was conducted post test and obtained data collected. After data collection, data compared by paired sample t-test and interpretation were drawn.

## Swiss Ball Exercises Program

Exercise	Sets	Reps	Rest
Warm-ups (8-12 minutes)			
Russian twist	2	8-10	1 min
Pike crunches	2	8-10	1 min
Twisting knee tuck	2	8-10	1 min
Oblique crunch	2	8-10	1 min
Raised feet sit ups	2	8-10	1 min
Crunch	2	8-10	1 min
Plank	2	8-10	1 min
Twist crunch	2	8-10	1 min
Plank shoulder tap	2	8-10	1 min
Knee raise	2	8-10	1 min
Ball leg lift	2	8-10	1 min
Back extension	2	8-10	1 min
Cooling-Down (5-10 minutes)			

**RESULTS OF THE STUDY**

The obtained results are present in the following table which descriptive analysis and paired sample t-test to compare the pre-post test mean of male and female gym enroll peoples.

**Table 1: Paired sample t-test**

Test	N	Group		't' value	Sig. (2-tailed)
Sit-Ups Male	25	Pre-test	19.50	4.52	0.00
	25	Post-test	21.70		
Sit-Ups Female	15	Pre-test	15.50	3.93	0.00
	15	Post-test	17.60		
Trunk Flexor Male	25	Pre-test	14.20	4.50	0.00
	25	Post-test	16.50		
Trunk Flexor Female	15	Pre-test	12.20	4.84	0.00
	15	Post-test	13.30		
Plank Hold Male	25	Pre-test	45.50	7.34	0.00
	25	Post-test	55.70		
Plank Hold Female	15	Pre-test	40.10	8.25	0.00
	15	Post-test	45.30		

**DISCUSSION OF FINDINGS**

Discussion on the results of core muscles fitness test consists of sit-ups, trunk flexor and plank hold which indicate the significant improvement on post test performance of test It was observed from the finding that the effect of Swiss ball exercises program on improving core muscles fitness of male and female

gym enroll peoples from table No. 1 shows that there was a significant improvement between pre-test and post-test of subjects regarding to test items. This indicates that Swiss ball exercise program had been positive effects on core muscles fitness of male and female gym enroll peoples. Therefore the set hypothesis that there was significant effect of the swiss ball exercises program on improved core muscles fitness of male and female gym enroll peoples was accepted.

This finding was supported by **Singh, K., et al (2010)** studied the effect of Suryanamaskar on core muscular endurance and flexibility among inter college student the results shows that core muscular endurance and flexibility was significantly improved in group A compared with the control one, and it was also concluded that Suryanamaskar may be recommended to improve core muscular endurance and flexibility.

**CONCLUSION**

On the basis of the result obtained in the study the researcher made the concluded that six weeks Swiss ball exercise program was significantly effective on core muscles fitness improved of male and female gym enroll peoples which indicate the core muscles strength and endurance and fitness also the findings of this study may be helpful to the male and female gym enroll peoples to useful Swiss ball exercises practice to improve their core muscles fitness.

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