

Eight-Week Total-Body Conditioning Workout

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THE 8-WEEK TOTAL-BODY CONDITIONING workout (8-week TBC) is a unique exercise routine that will successfully improve fitness levels and body compositional changes in men and women of all ages. The program combines aerobic exercise and circuit weight training (1) utilizing rest periods of 30–60 seconds between exercises. During aerobic sessions, target heart rates of 70–75% and 80–85% are maintained. During circuit weight training, target heart rates of 70–85% are maintained. Trainees wear heart rate monitors to insure fast and efficient readings. When trainees maintain a target heart rate throughout the program, the cumulative effect of additional calories expended may be an additional key element to elicit maximum changes in body composition and fat loss (2). Caloric intake should be constant and not increased; otherwise, a negative

caloric deficit will not be achieved and may reduce the effectiveness of changes in body composition and fat loss. Trainees are first educated on proper exercise technique involving the 8 exercises in the program. They are then educated on the importance of exercise frequency, intensity, duration, and exercise target heart rate, as well as the effects these factors have on maximizing changes in body composition and fat loss.

Starting an exercise program may be too overwhelming for some individuals to concurrently focus on both exercise and nutrition intervention. Therefore, trainees are instructed to concentrate on intensity levels and maintaining consistency in the exercise portion of the program during the first 8 weeks. Following the positive experience from the completion of the 8-week TBC program, counseling by a registered dietitian may

Table 1
Eight-week Total-body Conditioning Protocol

Monday	Aerobic	60 min at 70–75% THR
Tuesday	Aerobic/CWT	30 min at 80–85% and 30 min of CWT
Wednesday	Off	Recovery day
Thursday	Aerobic	60 min at 70–75% THR
Friday	Aerobic/CWT	30 min at 80–85% and 30 min of CWT
Saturday	Aerobic	60 min at 70–75%
Sunday	Off	Recovery day

be added during a second 8-week session of the program.

■ Fitness Assessment

To monitor progress, a baseline fitness assessment is completed at week 1, and a follow-up assessment at week 10. During week 1, the evaluation procedures are repeated twice involving 3 days of rest between testing days. The best scores represent the baseline measurements. Body composition measurements are taken by the same strength and conditioning specialist 3 times and averaged during pre- and posttesting. The same testing protocol is repeated during week 10 to measure progress (see assessment form, Appendix 1).

■ Aerobic Component

Trainees perform 5 aerobic sessions per week for 8 weeks. Three of the workouts are 60 minutes in duration at 70–75% of the predicted maximum heart rate ($220 - \text{age} \times 70\text{--}75\%$). The other 2 aerobic workouts are 30 minutes in duration at 80–85% of the predicted maximum heart rate (see Table 1). All sessions require the use of a heart rate monitor to ensure safe, accurate, and high-quality training sessions during all 40 workouts. The aerobic workouts can be split up and done throughout the day if there are time constraints. Aerobic work can also be done on more than one piece of equipment if desired (walking, hiking, running, biking, rowing, etc.)

■ Strength/Endurance Component

Participants perform two 30-minute workout sessions per week involving a series of 8 exercises with 30- to 60-second rest periods between sets. Multiple-joint movements are primarily

Table 2
Eight-week Total-body Conditioning Program

Week	Exercise	Sets	Repetitions	
1	Step-up	1	8	
	Chin-up	1	8	
	Bench press	1	8	
	Hanging abdominal	1	8	
	Push press	1	8	
	Bicep curl	1	8	
	Dip	1	8	
	Side-lying oblique	1	8	
	2	Step-up	2	8
Chin-up		2	8	
Bench press		2	8	
Hanging abdominal		2	8	
Push press		2	8	
Bicep curl		2	8	
Dip		2	8	
Side-lying oblique		2	8	
3		Step-up	2	10
	Chin-up	2	10	
	Bench press	2	10	
	Hanging abdominal with rotation	2	10	
	Push press	2	10	
	Bicep curl	2	10	
	Dip	2	10	
	Side-lying oblique	2	10	
	4	Step-up	2	12
		Chin-up	2	12
Bench press		2	12	
Hanging abdominal with rotation		2	12	
Push press		2	12	
Bicep curl		2	12	
Dip		2	12	
Side-lying oblique with 4-kg medicine ball		2	12	
5		Backward lunge	2	8
		Pull-up	2	8
	Incline bench press	2	8	
	Stability ball abs	2	8	
	Upright row	2	8	
	Bicep curl	2	8	
	Dip	2	8	
	Side-lying rotation with 4-kg medicine ball	2	8	
	6	Backward lunge	3	10
Pull-up		3	10	
Incline bench press		3	10	
Stability ball abs		3	15	
Upright row		3	10	
Bicep curl		3	10	
Dip		3	10	
Side-lying rotation with 4-kg medicine ball		3	10	
7		Backward lunge	3	12
	Pull-up	3	12	
	Incline bench press	3	12	
	Stability ball abs with rotation	3	20	
	Upright row	3	12	

**Table 2
(Continued)**

	Bicep curl	3	12
	Dip	3	12
	Side-lying rotation with 5-kg medicine ball	3	12
8	Backward lunge	3	15
	Pull-up	3	12
	Incline bench press	3	15
	Stability ball abs with rotation	3	24
	Upright row	3	12
	Bicep curl	3	12
	Dip	3	12
	Side-lying rotation with 5-kg medicine ball	3	15

preferred, but some single-joint movements are used. The idea is to use the exercises in an order that keeps the trainee's heart rate in the appropriate target heart rate range. Other exercises may be substituted based on the trainee's fitness level. The strength/endurance component may be done either immediately before or following the 30-minute aerobic session. It may take 1–3 sessions to find the correct resistance to complete the desired number of repetitions. There will be 16 circuit weight-training sessions during the 8-week period (see Table 2). The rest periods (between 30 and 60 seconds) will depend on the condition of the trainee and the reading of the heart rate monitor. The intensity for circuit weight training workouts should be 70–85% of the predicted maximum heart rate. In some cases, for safety, rate of perceived exertion may also be used, especially with deconditioned trainees.

■ Conclusion

The 8-week TBC program uses a carefully monitored program of aerobic and circuit weight training

exercises to effectively achieve changes in body composition and fat loss. A well-designed circuit weight-training program, using primarily multiple-joint movements, keeps participants in their appropriate target heart rate ranges and may aid in total caloric expenditure. The use of heart rate monitors in the program can help ensure safe, accurate, and high-quality training sessions. Initial and follow-up fitness assessments will record progress and help keep motivation at an elevated level throughout the program. Athletes and general public exercisers whose goals include general fitness, changes in body composition, and fat loss may benefit from trying this program. ▲

■ References

1. Astrand, P.O., and R. Rodahl. *Textbook of Work Physiology: Physiological Basis of Exercise*. New York, NY: McGraw-Hill, Inc., 1986. pp. 447.
2. Hawley, J., and L. Burke. *Peak Performance: Training and Nutritional Strategies for Sport*. Australia: Allen and Unwin, 1998. pp. 243–246.



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Appendix 1 Eight-week Total Body Conditioning Fitness Assessment

Name Age Height

	Pre	Post	Change	Percent change	Comments
Date					
Weight					
Right arm (1)					Taken at midpoint of upper right arm
Waist (2)					Level of umbilicus (navel)
Hips (3)					Legs together, middle of buttock
Thigh (4)					Under the gluteal furrow
4-site sum (1-4)					Total of 4 sites—in inches (or cm)
WHR					Waist/hips—men < 0.90, women < 0.80
BMI					Weight (kg)/height (m) ²
Percent body fat					Jackson and Pollock 3-site formula
Fat weight					Body weight (lbs) × percent body fat
LBM (muscle)					Subtract fat weight from body weight
Tricep*					Midpoint of flexed right upper arm
Chest^					Between underarm and nipple
Suprailium*					Above iliac crest
Abdomen^					3-cm lateral to umbilicus
Thigh*^					Anterior thigh, midway point
3-site sum					Total mm of 3 sites
Step test					3-min aerobic test using post-HR
Sit-up					Maximum number in 1 min
Push-up					Maximum number
Stair climb					1 flight for time
RM bench					Most weight lifted (5-10 RM)
MB throw					Seated throw (4-5 kg ball)
Agility drill					Using shuttle run, cones, or bench jumps
Pull-ups					Pronated grip, maximum number
Chair stand					Time needed to complete 10 repetitions
Vertical jump					Jump height determined by Vertec
T-test					Test for acceleration, speed, and agility

*^ = Locations for skinfolds.
 * = Female skinfold sites (tricep, suprailium and thigh).
 ^ = Male skinfold sites (pectoral, abdomen, and thigh).