

Step Conversion

How many steps in a mile? One mile is equal to 5280 feet. The average person's stride length is approximately 2.5 feet long. That means it takes just over 2,000 steps to walk one mile, and 10,000 steps is close to 5 miles.

Converting walking for transportation to other fitness activities is tricky. The 10,000 step idea has to do with increasing basic activity levels and not so much getting out and exercising. Parking your car further from the grocery store or mall or walking to the store instead of driving is a great idea and will be beneficial to all that incorporate this but it is still not as intense of an activity as exercise. The average fitness walking pace is about 15 minute per mile, or 4 miles per hour. The normal transportation pace is a little more than half of the fitness pace. This would equate to 4000 to 5000 steps an hour for the average sized person. According to ACSM's Walking equation, a 150 pound person walking at a pace of 2.5 miles per hour for one hour you will burn 3.57 kcal/min or 214 kcal/hour, remember that would equate to 5000 steps. This can be converted to calories per step by dividing 214 calories by 5000 steps which would be 0.04 kcal/step. Now that this conversion is done other activities can be equated to steps based on calories burned per unit time. The following is a list of activities and the number of steps that they equal using this equation.

125 lb Person

Activity (30 minutes)	Calories	Steps
Stationary Bike - moderate	238	5950
Stationary Bike - vigorous	387	9675
Elliptical trainer	322	8050
Swimming - moderate	207	5175
Swimming - vigorous	333	8325
Aerobics - low impact	172	4300
Aerobics - high impact	199	4975
Step Aerobics - low impact	199	4975
Step Aerobics - high impact	300	7500
Dancing - ballroom slow	86	2150
Dancing - ballroom fast	158	3950
Skateboarding	142	3550
Water Skiing	169	4225

150 lb Person

Activity (30 minutes)	Calories	Steps
Stationary Bike - moderate	238	5950
Stationary Bike - vigorous	387	9675
Elliptical trainer	387	9675
Swimming - moderate	207	5175
Swimming - vigorous	333	8325
Aerobics - low impact	207	5175
Aerobics - high impact	238	5950
Step Aerobics - low impact	238	5950
Step Aerobics - high impact	360	9000
Dancing - ballroom slow	103	2575
Dancing - ballroom fast	189	4725
Skateboarding	171	4275
Water Skiing	202	5050

175 lb Person

Activity (30 minutes)	Calories	Steps
Stationary Bike - moderate	238	5950
Stationary Bike - vigorous	387	9675
Elliptical trainer	451	11,275
Swimming - moderate	207	5175
Swimming - vigorous	333	8325
Aerobics - low impact	242	6050
Aerobics - high impact	278	6950
Step Aerobics - low impact	278	6950
Step Aerobics - high impact	420	10,500
Dancing - ballroom slow	121	3025
Dancing - ballroom fast	221	5525
Skateboarding	199	4975
Water Skiing	236	5900

200 lb Person

Activity (30 minutes)	Calories	Steps
Stationary Bike - moderate	238	5950
Stationary Bike - vigorous	387	9675
Elliptical trainer	516	12,900
Swimming - moderate	207	5175
Swimming - vigorous	333	8325
Aerobics - low impact	276	6900
Aerobics - high impact	318	7950
Step Aerobics - low impact	318	7950
Step Aerobics - high impact	480	12,000
Dancing - ballroom slow	138	3450
Dancing - ballroom fast	252	6300
Skateboarding	228	5700
Water Skiing	270	6750

References:

<http://www.thewalkingsite.com/10000steps.html>

<http://www.healthstatus.com/cbc.html>