## Difference between Walking and Running

Calories Expended through Walking and Running
The relative Net Calories Burnt of running a mile in 9:30 versus walking the same mile in 19:00. Male subjects burned 105 calories running, 52 walking; the women, 91 and 43 . That is, running burns twice as many net calories per mile as walking. And since you can run two miles in the time it takes to walk one mile, running burns four times as many net calories per hour as walking.

Running burn twice the amount of calories than walking the same distance.

The walking formulas apply to speeds of 3 to 4 mph .

## At 5 mph and faster, walking burns more calories than running at the same speed.

Running is high impact and
strenuous compared to walking.
Ground reaction forces experienced running well exceec 2-3 times a person's body weight.

Compounded on this is that these forces are placed on one leg.

Running is also an intense form of exercise.
You can clearly understand this when looking an oxygen requirements during different running speeds. 1 MET is the amount of oxygen you need at rest. Running a slow mile is 9 METS; so you are doing $9 x$ the work as compared to a resting state. Walking is 3-6 METS unless going very fast as mentioned.

Running can be dangerous if you do not do it right.
The good thing is research suggest that may not cause arthritis. It actually may prevent it. (See article)

Recommend building up and keeping total miles below 15 to 18 miles per week to reduce injury research suggests. .


ACTIVITIES METS
REST1.0
BILLIARDS2.5
FISHING 2-4
BOWLING2-4
TABLE TENNIS3-5
WALKING3-6
EXERCISE BIKE ( LOW LEVELS ) 3-6
VOLLEYBALL3-6
LIGHT CONDITIONING EXERCISE 4-6
HANDBALL3-7
DANCING ( SOCIAL ) 4-7
SKIING ( WATER )5-7
SKIING ( DOWNHILL )5-8
BASKETBALL ( NON GAME ) 3 -9
TENNIS4-9
STAIR CLIMBING4-8
SWIMMING 4-8
AEROBIC DANCE6-9
CLIMBING HILLS5-10
HEAVY CONDITIONING EXERCISE 6-8
EXERCISE BIKE 6-12
SOCCER6-12
SKIING ( CROSS COUNTRY )6-12
BASKETBALL ( GAME )7-12
SQUASH/RACQUETBALL 8-12
SNOW SHOEING8-14
ROPE JUMPING ( $60-80$ SKIPS/MIN ) 9
RUNNING ( 12 MIN MILE ) 8.7
RUNNING ( 11 MIN MILE ) 9.4
RUNNING ( 10 MIN MILE )10.2
RUNNING ( 9 MIN MILE ) 11.2
RUNNING ( 8 MIN MILE ) 12.5
RUNNING ( 7 MIN MILE ) 14.1

