

CARDIOVASCULAR TRAINING

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When it comes to cardiovascular exercise, is it necessary to go all out or take it easy? Is it a necessary part of an exercise program or is it a waste of time?

With our current lifestyles, it is even more important to incorporate time for exercise into our daily lives. Technology, sedentary lifestyles, and poor nutrition are all a result of changing times.

Benefits: maintain weight, strengthen heart and lungs, reduce stress, reduce risk of disease, reduce blood pressure, improve moods, sleep better and have more energy.

How often? DAILY! 30-60 minutes of exercise. Include endurance exercise, balance and accuracy training daily. Additionally, two days of strength, power, stamina, coordination and agility training are recommended.

Can incorporate these by doing high intensity weight sessions, interval training, walking to work, or taking the stairs.

TRYING TO LOSE/GAIN WEIGHT:

BMR formula:

Women: $BMR = 655 + (4.35 \times \text{weight in pounds}) + (4.7 \times \text{height in inches}) - (4.7 \times \text{age in years})$

Men: $BMR = 66 + (6.23 \times \text{weight in pounds}) + (12.7 \times \text{height in inches}) - (6.8 \times \text{age in years})$

To determine your total daily calorie needs, multiply your BMR by the appropriate activity factor, as follows:

1. If you are sedentary (little or no exercise) : Calorie-Calculation = $BMR \times 1.2$
2. If you are lightly active (light exercise/sports 1-3 days/week) : Calorie-Calculation = $BMR \times 1.375$
3. If you are moderately active (moderate exercise/sports 3-5 days/week) : Calorie-Calculation = $BMR \times 1.55$
4. If you are very active (hard exercise/sports 6-7 days a week) : Calorie-Calculation = $BMR \times 1.725$
5. If you are extra active (very hard exercise/sports & physical job or 2x training) : Calorie-Calculation = $BMR \times 1.9$

Remember, one pound is equivalent to 3500 kCal.

Activity	90 lbs	100 lbs	110 lbs	120 lbs	130 lbs	140 lbs	150 lbs	160 lbs	170 lbs	180 lbs	190 lbs	200 lbs	220 lbs	240 lbs	260 lbs	280 lbs	300 lbs
Billiards	41	45	49	54	58	63	68	72	76	81	85	90	99	108	117	126	135
Ironing	45	50	55	60	65	70	75	80	85	90	95	100	110	120	130	140	150
Bowling	50	55	60	66	72	77	82	88	94	99	105	110	121	132	143	154	165
Dancing (slow)	50	55	60	66	72	77	82	88	94	99	105	110	121	132	143	154	165
Croquet	54	60	66	72	78	84	90	96	102	108	114	120	132	144	156	168	180
Shopping for groceries	54	60	66	72	78	84	90	96	102	108	114	120	132	144	156	168	180
Walking, 2 mph (30 min/mile)	54	60	66	72	78	84	90	96	102	108	114	120	132	144	156	168	180
Walking, 2.5 mph	63	70	77	84	91	98	105	112	119	126	133	140	154	168	182	196	210
Canoeing, 2.5 mph	63	70	77	84	91	98	105	112	119	126	133	140	154	168	182	196	210
Golfing (with a cart)	63	70	77	84	91	98	105	112	119	126	133	140	154	168	182	196	210
Volleyball (leisurely)	63	70	77	84	91	98	105	112	119	126	133	140	154	168	182	196	210
Raking	68	75	82	90	98	105	112	120	128	135	142	150	165	180	195	210	225
Rowing (leisurely)	68	75	82	90	98	105	112	120	128	135	142	150	165	180	195	210	225
Vacuuming	68	75	82	90	98	105	112	120	128	135	142	150	165	180	195	210	225
Washing the car	68	75	82	90	98	105	112	120	128	135	142	150	165	180	195	210	225
Window cleaning	68	75	82	90	98	105	112	120	128	135	142	150	165	180	195	210	225
Walking, 3mph (20 min/mile)	72	80	88	96	104	112	120	128	136	144	152	160	176	192	208	224	240
Mopping	77	85	94	102	111	119	128	136	144	153	162	170	187	204	221	238	255
Gardening, moderate	81	90	99	108	117	126	135	144	153	162	171	180	198	216	234	252	270
Housework	81	90	99	108	117	126	135	144	153	162	171	180	198	216	234	252	270
Ping Pong	81	90	99	108	117	126	135	144	153	162	171	180	198	216	234	252	270
Dancing (noncontact)	90	100	110	120	130	140	150	160	170	180	190	200	220	240	260	280	300
Golfing (walking, w/o cart)	90	100	110	120	130	140	150	160	170	180	190	200	220	240	260	280	300
Walking, 4 mph (15 min/mile)	90	100	110	120	130	140	150	160	170	180	190	200	220	240	260	280	300
Waxing the car	90	100	110	120	130	140	150	160	170	180	190	200	220	240	260	280	300
Weeding	90	100	110	120	130	140	150	160	170	180	190	200	220	240	260	280	300
Trimming the hedges	94	105	115	126	136	147	158	168	178	189	199	210	231	252	273	294	315
Tennis (doubles)	99	110	121	132	143	154	165	176	187	198	209	220	242	264	286	308	330
Aerobic dancing (low impact)	104	115	127	138	149	161	172	184	195	207	218	230	253	276	299	322	345
Swimming (25 yards/minute)	108	120	132	144	156	168	180	192	204	216	228	240	264	288	312	336	360
Volleyball (game)	108	120	132	144	156	168	180	192	204	216	228	240	264	288	312	336	360
Bicycling, 10 mph (6 minutes/mile)	112	125	138	150	162	175	188	200	213	225	237	250	275	300	325	350	375
Weight training (90 sec between sets)	112	125	138	150	162	175	188	200	213	225	237	250	275	300	325	350	375
Basketball (leisurely, nongame)	117	130	143	156	169	182	195	208	221	234	247	260	286	312	338	364	390
Snow skiing, downhill	117	130	143	156	169	182	195	208	221	234	247	260	286	312	338	364	390
Canoeing, 4.0 mph	122	135	149	162	175	189	202	216	230	243	257	270	297	324	351	378	405

Activity	90 lbs	100 lbs	110 lbs	120 lbs	130 lbs	140 lbs	150 lbs	160 lbs	170 lbs	180 lbs	190 lbs	200 lbs	220 lbs	240 lbs	260 lbs	280 lbs	300 lbs
Mowing	122	135	149	162	175	189	202	216	230	243	257	270	297	324	351	378	405
Scrubbing the floor	126	140	154	168	182	196	210	224	238	252	266	280	308	336	364	392	420
Stair climber	126	140	154	168	182	196	210	224	238	252	266	280	308	336	364	392	420
Aerobic steep training, 4" step (beginner)	131	145	160	174	189	203	218	232	247	261	276	290	319	348	377	406	435
Aerobics, slide training (basic)	135	150	165	180	195	210	225	240	255	270	285	300	330	360	390	420	450
Badminton	135	150	165	180	195	210	225	240	255	270	285	300	330	360	390	420	450
Cross country snow skiing (leisurely)	140	155	171	186	202	217	232	248	263	279	294	310	341	372	403	434	465
Hiking, no load	140	155	171	186	202	217	232	248	263	279	294	310	341	372	403	434	465
Stair climber machine	144	160	176	192	208	224	240	256	272	288	304	320	352	384	416	448	480
Tennis	144	160	176	192	208	224	240	256	272	288	304	320	352	384	416	448	480
Waterskiing	144	160	176	192	208	224	240	256	272	288	304	320	352	384	416	448	480
Backpacking with 10 lb load	162	180	198	216	234	252	270	288	306	324	342	360	396	432	468	504	540
Hiking with 10 lb load	162	180	198	216	234	252	270	288	306	324	342	360	396	432	468	504	540
Rowing machine	162	180	198	216	234	252	270	288	306	324	342	360	396	432	468	504	540
Jogging, 5 mph (12 min/mile)	167	185	203	222	240	259	278	296	315	333	352	370	407	444	481	518	555
Scuba diving	171	190	209	228	247	266	285	304	323	342	361	380	418	456	494	532	570
Weight training (60 sec between sets)	171	190	209	228	247	266	285	304	323	342	361	380	418	456	494	532	570
Snow shoveling	176	195	215	234	253	273	292	312	332	351	371	390	429	468	507	546	585
Soccer	176	195	215	234	253	273	292	312	332	351	371	390	429	468	507	546	585
Backpacking with 20 lb load	180	200	220	240	260	280	300	320	340	360	380	400	440	480	520	560	600
Bicycling, 13 mph (4.6 minutes/mile)	180	200	220	240	260	280	300	320	340	360	380	400	440	480	520	560	600
Hiking with 20 lb load	180	200	220	240	260	280	300	320	340	360	380	400	440	480	520	560	600
Raquetball	185	205	225	246	266	287	308	328	349	369	389	410	451	492	533	574	615
Cross country snow skiing (moderate)	198	220	242	264	286	308	330	352	374	396	418	440	484	528	572	616	660
Basketball (game)	198	220	242	264	286	308	330	352	374	396	418	440	484	528	572	616	660
Swimming (50 yards/minute)	202	225	248	270	292	315	338	360	382	405	428	450	495	540	585	630	675
Handball	207	230	253	276	299	322	345	368	391	414	437	460	506	552	598	644	690
Jogging, 6mph (10 minute/mile)	207	230	253	276	299	322	345	368	391	414	437	460	506	552	598	644	690
Backpacking with 30 lb load	211	235	259	282	306	329	352	376	399	423	446	470	517	564	611	658	705
Weight training (40 sec between sets)	211	235	259	282	306	329	352	376	399	423	446	470	517	564	611	658	705
Skiing rope	257	285	313	342	370	399	428	456	484	513	541	570	627	684	741	798	855
Running 8mph (7.5 min/mile)	274	305	336	366	396	427	458	488	518	549	579	610	671	732	793	854	915
Cross country snow skiing (intense)	297	330	363	396	429	462	495	528	561	594	627	660	726	792	858	924	990
Running, 9 mph (6.7min/mile)	297	330	363	396	429	462	495	528	561	594	627	660	726	792	858	924	990
Running, 10 mph (6 min/mile)	315	350	385	420	455	490	525	560	595	630	665	700	770	840	910	980	1050