

# Physical Activity Assessment at Work

## Measures of Physical Activity



Measure	Validated questions	[measurement]	Recommendations																																																									
<b>Aerobic Physical Activity</b>	<b>“On average, how many days per week do you engage in moderate to strenuous exercise?”</b> <i>These are activities that cause a light or heavy sweat, such as walking fast, running, jogging, dancing, swimming, biking.</i>	[days]	≥ 150–300 min. of moderate-intensity aerobic physical activity <b>OR</b> ≥ 75–150 min. of vigorous-intensity aerobic physical activity <b>OR</b> equivalent combination of moderate and vigorous-intensity activity <b>throughout the week</b>																																																									
	<b>“On average, how many minutes do you engage in exercise at this level?”</b>	[minutes] [days x minutes]																																																										
<b>Muscle Strength</b>	<b>“During the past month, how many times per week did you do physical activities or exercises to STRENGTHEN your muscles?”</b> <i>Count activities using your own body weight, such as sit-ups or push-ups, and those using weight machines, free weights, or elastic bands. DO NOT count aerobic activities such as walking or running.</i>	[days/week]	≥ 2 days a week of muscle-strengthening activities at moderate or greater intensity that involve all major muscle groups																																																									
<b>Sedentary Behavior</b>	<b>“How much time do you usually spend sitting on a typical day?”</b> <i>This question is about sitting at work, home, getting to and getting from places, including time spent sitting at a desk, traveling in a car or bus, reading, playing cards, watching television, or using a computer. DO NOT include time spent sleeping.</i>	[minutes or hours/day]	<ul style="list-style-type: none"> <li>✓ Limit sedentary time</li> <li>✓ Replace sedentary time with physical activity of any intensity</li> <li>✓ Aim to do more than the recommended levels of moderate- to vigorous-intensity physical activity</li> </ul>																																																									
<b>Cardio-respiratory Fitness*</b>	<b>Males:</b> $100.27 - (0.296 \times \text{age}) - (0.369 \times \text{waist circumference}) - (0.155 \times \text{resting heart rate}) + (0.226 \times \text{Physical Activity Index})$		<table border="1"> <thead> <tr> <th rowspan="2">RATING</th> <th rowspan="2">AGE</th> <th>18-25</th> <th>26-35</th> <th>36-45</th> <th>46-55</th> <th>56-65</th> <th>65+</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td>&gt;60</td> <td>&gt;56</td> <td>&gt;51</td> <td>&gt;45</td> <td>&gt;41</td> <td>&gt;37</td> </tr> <tr> <td>Good</td> <td>52-60</td> <td>49-56</td> <td>43-51</td> <td>39-45</td> <td>36-41</td> <td>33-37</td> </tr> <tr> <td>Above Average</td> <td>47-51</td> <td>42-48</td> <td>39-42</td> <td>36-38</td> <td>32-35</td> <td>29-32</td> </tr> <tr> <td>Average</td> <td>42-46</td> <td>40-42</td> <td>35-38</td> <td>32-35</td> <td>30-31</td> <td>26-28</td> </tr> <tr> <td>Below Average</td> <td>37-41</td> <td>35-39</td> <td>31-34</td> <td>29-31</td> <td>26-29</td> <td>22-25</td> </tr> <tr> <td>Poor</td> <td>30-36</td> <td>30-34</td> <td>26-30</td> <td>25-28</td> <td>22-25</td> <td>20-21</td> </tr> <tr> <td>Very Poor</td> <td>&lt;30</td> <td>&lt;30</td> <td>&lt;26</td> <td>&lt;25</td> <td>&lt;22</td> <td>&lt;20</td> </tr> </tbody> </table>	RATING	AGE	18-25	26-35	36-45	46-55	56-65	65+	Excellent	>60	>56	>51	>45	>41	>37	Good	52-60	49-56	43-51	39-45	36-41	33-37	Above Average	47-51	42-48	39-42	36-38	32-35	29-32	Average	42-46	40-42	35-38	32-35	30-31	26-28	Below Average	37-41	35-39	31-34	29-31	26-29	22-25	Poor	30-36	30-34	26-30	25-28	22-25	20-21	Very Poor	<30	<30	<26	<25	<22	<20
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<b>Females:</b> $74.74 - (0.247 \times \text{age}) - (0.259 \times \text{waist circumference}) - (0.114 \times \text{resting heart rate}) + (0.198 \times \text{Physical Activity Index})$																																																												
Physical Activity Index score = sum of responses [(A+B+C)]	[never or < 1/week = 0 1/week = 1 2-3 times a week = 2 almost every day = 3]																																																											
<b>A. How frequently do you exercise?</b>	[take it easy = 0 heavy breath and sweat = 5 push near exhaustion = 10]																																																											
<b>B. How hard do you push yourself?</b>	[≤ 15 minutes = 1 16-30 minutes = 1.5 > 1 hour = 1.5]																																																											
<b>C. How long does each session last?</b>																																																												

\*A validated predictive equation may be most easily used in worksite settings, unless employers have established relationships with universities/clinics that can conduct the cardiometabolic testing.