

# Effects of Exercise on Health-Related Outcomes in Those with Cancer

## What can exercise do?

- **Prevention of 7 common cancers\***

Dose: 2018 Physical Activity Guidelines for Americans: 150-300 min/week moderate or 75-150 min/week vigorous aerobic exercise









- **Survival of 3 common cancers\*\***

Dose: Exact dose of physical activity needed to reduce cancer-specific or all-cause mortality is not yet known; Overall more activity appears to lead to better risk reduction

\*bladder, breast, colon, endometrial, esophageal, kidney and stomach cancers

\*\*breast, colon and prostate cancers

Overall, avoid inactivity, and to improve general health, aim to achieve the current physical activity guidelines for health (150 min/week aerobic exercise and 2x/week strength training).

Outcome	Aerobic Only	Resistance Only	Combination (Aerobic + Resistance)
<b>Strong Evidence</b>	Dose	Dose	Dose
 <b>Cancer-related fatigue</b>	<b>3x/week</b> for <b>30</b> min per session of moderate intensity	<b>2x/week</b> of <b>2</b> sets of <b>12-15</b> reps for major muscle groups at moderate intensity	<b>3x/week</b> for <b>30</b> min per session of moderate aerobic exercise, plus <b>2x/week</b> of resistance training <b>2</b> sets of <b>12-15</b> reps for major muscle groups at moderate intensity
 <b>Health-related quality of life</b>	<b>2-3x/week</b> for <b>30-60</b> min per session of moderate to vigorous	<b>2x/week</b> of <b>2</b> sets of <b>8-15</b> reps for major muscle groups at a moderate to vigorous intensity	<b>2-3x/week</b> for <b>20-30</b> min per session of moderate aerobic exercise plus <b>2x/week</b> of resistance training <b>2</b> sets of <b>8-15</b> reps for major muscle groups at moderate to vigorous intensity
 <b>Physical Function</b>	<b>3x/week</b> for <b>30-60</b> min per session of moderate to vigorous	<b>2-3x/week</b> of <b>2</b> sets of <b>8-12</b> reps for major muscle groups at moderate to vigorous intensity	<b>3x/week</b> for <b>20-40</b> min per session of moderate to vigorous aerobic exercise, plus <b>2-3x/week</b> of resistance training <b>2</b> sets of <b>8-12</b> reps for major muscle group at moderate to vigorous intensity
 <b>Anxiety</b>	<b>3x/week</b> for <b>30-60</b> min per session of moderate to vigorous	Insufficient evidence	<b>2-3x/week</b> for <b>20-40</b> min of moderate to vigorous aerobic exercise plus <b>2x/week</b> of resistance training of <b>2</b> sets, <b>8-12</b> reps for major muscle groups at moderate to vigorous intensity
 <b>Depression</b>	<b>3x/week</b> for <b>30-60</b> min per session of moderate to vigorous	Insufficient evidence	<b>2-3x/week</b> for <b>20-40</b> min of moderate to vigorous aerobic exercise plus <b>2x/week</b> of resistance training of <b>2</b> sets, <b>8-12</b> reps for major muscle groups at moderate to vigorous intensity
 <b>Lymphedema</b>	Insufficient evidence	<b>2-3x/week</b> of progressive, supervised, program for major muscle groups does not exacerbate lymphedema	Insufficient evidence
<b>Moderate Evidence</b>			
 <b>Bone health</b>	Insufficient evidence	<b>2-3x/week</b> of moderate to vigorous resistance training plus high impact training (sufficient to generate ground reaction force of <b>3-4</b> time body weight) for at least <b>12</b> months	Insufficient evidence
 <b>Sleep</b>	<b>3-4x/week</b> for <b>30-40</b> min per session of moderate intensity	Insufficient evidence	Insufficient evidence