

# Exercise & Stress Reduction



**FIT TO THRIVE / F2T**  
FACT SHEET

## The Relationship Between Exercise and Stress

Physical activity and exercise have been widely studied for their positive effects on mental health, particularly in reducing stress. Being active helps lower stress through a combination of psychological, physiological, and neurological processes that improve mental health by lowering symptoms of anxiety and depression, both of which can be worsened by stress. Studies show that even light to moderate activity, like walking, can boost mental well-being, suggesting physical activity has the potential to help prevent and treat mental health issues [1]. Staying active also improves confidence and overall quality of life, making it easier to handle stress [2].

Furthermore, physical activity can provide a healthy distraction from stressful thoughts [3]. Being active can also promote social interactions, which can further reduce stress. Exercising with others can make being active more enjoyable, increasing the likelihood of maintaining a routine and maximizing the mental health benefits [4]. Participating in group workouts or team sports can also help build supportive relationships that improve emotional well-being [5].

## How Exercise Can Help Alleviate Stress

On a physical level, being active helps regulate the body's stress response and prevents stress-related weakening of the immune system. Even simple activities like brisk walking can help balance the sympathetic nervous system, which controls the body's "fight-or-flight" reaction to stress [6]. This balance results in lower levels of stress hormones, like cortisol, reducing the physical effects of stress [7]. Additionally, physical activity triggers the release of endorphins and other brain chemicals that improve mood and overall well-being [8].

## Fire Fighters Exercising to Reduce Stress

Fire fighters who exercise regularly tend to report better mental health and quality of life [9]. Exercise has a therapeutic effect on reducing job-related stress among fire fighters, partly because the demanding and rewarding feelings that often accompany exercise can divert their focus from stress [10]. One study included 430 career fire fighters and reported those who exercised for at least one hour per week had an approximate 50% lower risk of occupational stress than those who did not exercise. Furthermore, every hour per week of increased physical activity was associated with 16% lower risk for occupational stress after adjusting for age, education, smoking, and BMI [10].

However, fire fighters can face significant barriers to exercise participation. For instance, shift work and poor sleep quality can hinder exercise consistency, contributing to obesity and reduced overall health [11]. A resource for overcoming barriers to physical activity and creating opportunities to be active can be accessed [HERE](#).

