



Fit as a fiddle and ready to play

What is Fitness?

Fitness can be defined as the ability to carry out daily tasks and performance goals without undue fatigue. Fitness can be thought of as either **general** or **specific**. While general fitness implies a state of health and wellbeing, specific fitness means the ability to meet the specific demands of a particular task. By improving their specific and general fitness, performers make their bodies more resilient and more efficient at handling the physical stresses of practice, rehearsal and performance.

We can divide physical fitness into components. For instance, **Cardiorespiratory** (aerobic) fitness relates to the fitness of the heart and lungs while **muscular** fitness relates to the power, flexibility and endurance of the muscles. Our balance, agility and coordination are part of **motor** fitness.

What does exercise do?

At a microscopic level every tissue in the body responds to regular exercise. Training for as little as 6 weeks can produce measurable changes in the following:

Muscles and tendons – increases in strength, endurance, flexibility and efficiency

Bones – increases in strength and density

Joints and ligaments – increases in strength and flexibility

Heart and lungs – increases in efficiency, oxygen delivery and endurance

Nerve and brain tissue – increases in activation and efficiency

For the performer these changes add up! Improved energy levels, faster recovery after exertion, increased strength, correction of muscle imbalances, greater endurance and more flexibility, are just a few things that are likely to help you meet your performance goals and decrease your risk of injury. Balance, body awareness and posture, all vitally important for healthy performance, are also enhanced by regular training.

We also know that regular exercise has a preventative effect and helps to reduce the risk of myriad of lifestyle associated diseases such as heart disease, type 2 diabetes, stroke and colon cancer.

Many other conditions are also effectively treated with exercise, and it is often prescribed as a key component with the management of depression/anxiety, osteoporosis, high blood pressure, weight problems, chronic pain, arthritis and musculoskeletal injury.

How much is enough?

To achieve the effects mentioned above, the World Health Organization (WHO) guidelines on physical activity recommend that adults aged 18 to 64 years should do at least 150 minutes/week of moderate intensity* aerobic physical activity or 75 minutes/week of vigorous intensity** physical exercise or an equivalent combination of the two. This activity should be in bouts of at least 10 minutes in duration. For * and **, see below in 'How hard should I exercise?'

WHO further recommends that additional health benefits can be achieved by increasing this training to 300 minutes/week of moderate intensity exercise or 150 minutes/week of vigorous exercise. To strengthen muscles, specific exercises for major muscle groups should be performed three days/week with 48 hours rest between sessions.



For optimum health, performers should perform around 30 minutes/day of moderate to vigorous physical activity and also include some strengthening exercises around three times/week. See the ASPAH Cross Training guide for further information.

What's the right exercise for me?

Any activity that requires moderate or vigorous physical work will increase your general fitness. To help you keep motivated, choose an activity that you enjoy and that makes you feel good. Ideally, choose something convenient and affordable which is challenging enough to keep you interested. Walking, jogging, cycling, surfing, swimming, circuit class, yoga and Pilates are all good forms of exercise. You can also increase your exercise levels by parking further away from your destination, or by using the stairs rather than the lift. Of course, common sense must prevail. Carrying a double bass up 15 flights of stairs is not advisable.

For specific fitness, you may need professional advice on strengthening or releasing areas affected by your instrument's demands. If your playing position is asymmetrical, you may benefit from activities that balance out your work position. For example, swimming could help strengthen the postural and control muscles associated with long hours playing an orchestral instrument, thereby improving your body's ability to tolerate the demand. Of course, some forms of exercise are more hazardous than others. Listen to your body, and seek professional advice if you suspect an exercise might put your performance apparatus (i.e. your body) at risk.

How hard should I exercise?

If you are usually inactive, it is advisable to start with a small amount and gradually increase intensity, frequency and duration of exercise over time. This will condition your body steadily and prevent unnecessary injury. Remember your goal is 30 minutes/day, including at least 10 minutes continuously!

***Moderate intensity** physical activity raises your heart rate and makes you breathe more rapidly. You should be able to talk but not sing. Your pulse rate should be around 65% of your maximum (calculate by 220 minus your age, multiplied by 65%). For instance, if you are 35 your 65% max is $(220-35) \times 0.65 = 120\text{bpm}$.

** **Vigorous intensity** physical activity makes you breathe deeply and huff and puff, making it difficult to talk in full sentences between breaths. Your pulse rate should be around 80% of your maximum (calculate by 220 minus your age, multiplied by 80%)

For strengthening exercises, choose a very light weight to begin with and work towards the goal of 3 sets of 8 repetitions for each muscle group you are targeting (try 3-5 muscle groups per session). Remember safety first and don't overdo it!

Are there any risks?

Exercise is generally safe if you follow the guidelines discussed but it can exacerbate some conditions. It is a good idea to complete the Adult Pre-Exercise Screening Tool (see below) or talk to your GP before you start. Other risks related to exercise include but are not limited to Delayed Onset Muscle Soreness (DOMS); musculoskeletal injury; overtraining syndrome; and exercise dependence.

Who should I ask for advice?

If you are unsure, ask your GP to refer you to an exercise specialist such as an accredited exercise physiologist, physiotherapist or fitness instructor for guidance. Alternatively, go straight to a physiotherapist for sets of exercises designed specifically for your fitness level, body and needs. It is essential to rule out any underlying injuries or conditions that might cause you problems during your fitness training.



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If you are exercising at a gym ask a qualified personal trainer for help. These people are trained to advise you on the best exercises to achieve your aims. Talk to them about your needs and stress that you want to improve your performance on stage. Mention that you need core strength, endurance and muscle tone but not necessarily muscle bulk.

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NB: This ASPAH Guide is intended as an educational resource only and does not replace professional advice. ASPAH recommends that diagnosis and initial advice is always obtained from an accredited healthcare professional.

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