# **Are you fit?**

It is important for you to know a bit about fitness and who to go to. But we must also know what we look out for.

In this article I am going to talk about your heart, lungs, kidneys. Medicine is complicated and that is why doctors train for many years. Most conditions can be treated and it is important even during the Covid-19 period to contact your GP if you have health concerns.  Practices are still accessible. If you are not familiar with the system, then listen to the options on the telephone. Going through a list is frustrating, but then at least you can focus on your need. Here is a[**link to the NHS**](https://www.nhs.uk/using-the-nhs/nhs-services/gps/gp-appointments-and-bookings/)**.**

**Let's get down to the nitty gritty**

**Breathing**

Puff equals lungs plus heart. Blowing harder can be painful. Try the stairs or a hill. If you are finding it hard going then there are three things you need to consider.

* you don't exercise much
* you are carrying too much weight
* Your physical fitness is affects by a medical problem

Ideally I would hope it is for the first reason but no-one can avoid the recent press about [**Covid-19**](http://consultingfootpain.co.uk/a-virus-to-get-the-worlds-attention/) and obesity. We don't want to become obese but even carrying a extra stone (14 pounds) or 6.4Kg can make a difference. Going to a gym to exercise needs a bit of responsibility. Look at your family history to see if anyone had a medical problem. Worse still has anyone has died because of a medical problem? We have heart valve problems in my family. I had my GP check my heart. You never know and once you get past 40 years of age you are into cardiac territory. Even slim and fit people drop down dead!

**Smoking**

If you are reading this you already know this is not a good idea. Smokers in their teens can still perform well. Of course they think that they are invincible. They look at us oldies with contempt!  Long term smokers will do damage to their lungs and we know when Covid-19 hit any lung disease brings a high risk. Look at this link which is an [NHS site](https://www.nhs.uk/live-well/quit-smoking/) and you will be amazed at the effects and benefits when stopping.

**What needs checking?**

We can't see the heart but we can feel it. Those four valves make a sound and we like to hear that *lup- dup noise*. This is a rhythm. Pulse rate is important, that's how many times the heart beats. If it is racing away much faster than normal then the big question is why? Modern gismos like Fitbits and the like monitor our pulse rates. A heart should not be fast at rest. Seasoned runners and some people have low pulses down as low as 40-50. A pulse may vary but over 70 **at rest** then seek advice before going to the gym for the work out for the first time.

**Blood pressure**

Blood pressure (BP) is a great way to check our health. The heart is a pump and so it forces blood around the body. It needs to be pretty high to do this. This is called ***systolic pressure***. This value is the higher value of 2 measurements. The heart relaxes for a bit and the pressure drops and so there is a second pressure. This is called ***diastolic pressure***. If we know both pressure values we can say something about your status. 120/60 is value we learn in training, but it is not as simple as that. We prefer to use ranges. At 64 my pressure was 141/88 at 8.30 this morning when I had walked upstairs and down. The pulse was 60. I went to the gym for a 45-minute work at 9.15am and remeasured my BP at 124/85 with a pulse of 68. So exercises modifies the blood pressure and of course pushes the heart rate (pulse) up.

The heart has three conditions that would not be good for exercise if these went undiagnosed.

* Blood flow to the heart (coronary artery supply blocked)
* The valves are sticking and not allowing flow
* The electrical timing is not right

Chest pains on exercise suggest [**angina**](https://www.nhs.uk/conditions/angina/). Valves not working will soon make you short of breath and electrical timing will affect your pulse rate. Trying to simplify these conditions is not easy but I want to give you some overview. Hearts need more the blood and electrical conduction to make them work. We have dedicated hormones and sensors all around our body. The kidneys play a vital role in maintaining fluid balance and blood pressure. This paints a complex series of interrelated working parts to the body. In my job flow to the limb and feet are vital and it all starts with the heart.

**Using your own blood pressure measuring equipment**

You can buy pressure measuring equipment from the internet or your pharmacy. It is accessible and now digital so you don't need a stethoscope. Here are a few tips. Home equipment is not tested regularly and may be inaccurate. If you keep using the pressure cuff, trying to improve your blood pressure, you will become over anxious. Try to test it at the same time each day. You are looking for trends only. Only a trained medical professional should interpret blood pressure. He or she will also be looking to see what is normal for you. Values vary between ethnic groups, men and women and those who are active or in high stress occupations.

***What about our lungs***

These two big chest bags need blood to pass through them so they can exchange vital oxygen and expel carbon dioxide. The heart is connected intimately with the lungs. If you have bad lungs then your heart can be strained. The heart muscle is overworked. Diseases of the lungs whilst once rare have re-emerged such as tuberculosis. Covid-19 likes to kill people with bad lungs and hearts. You might think this statement scaremongering, but the Office for National Statistics says otherwise. Asthma, smoking damage as well as those with other forms of lung disease will need counselling before exercising. Asthma however can benefit immensely from exercise.

***Kidneys***

Kidneys act as a filter preventing you losing essential chemicals within the blood. They work to keep your blood pressure normalised by ensuring the correct balance of salts. Excessive water if not shifted could end up on the lungs. You can test your urine which is mainly made up of water. When we use the toilet we can gauge how concentrated our urine is. Ideally it should be clear and not murky or smell when fresh. Drinking water regularly will ensure this stays clear. As we warm up our body retains water normally and the urine darkens. If we exercise we need to avoid too much loss of water and so it is good to keep a flask of water with us when active. Filtered tap water is fine so please don't add to the plastic wastage please! If your kidneys fail to do the right job, the filter starts to fail and blood pressure can rise. Equally high blood pressure can damage your kidneys. You can read more here about [**kidneys**](https://www.heart.org/en/health-topics/high-blood-pressure/health-threats-from-high-blood-pressure/how-high-blood-pressure-can-lead-to-kidney-damage-or-failure).

***Weight Gain or loss***

Big swings in weight are not good and can in fact damage your kidneys. This is why dieting is not ideal and one should exercise and have a balanced diet. Balanced diets mean exactly that. Taking in useful calories which includes fish, low fat meats (if you like meat), vegetables and fruit are important. Reducing sugar is a must as well as [**avoiding those bad fats**](https://www.healthline.com/health/heart-disease/good-fats-vs-bad-fats). We rarely need vitamins if we have a diet that is balanced. Alcohol should be kept to small amounts and binge drinking avoided so the liver is not damaged. Smoking keeps weight down as it suppresses our appetite. But as we know, smoking damages lungs, blood vessels and affects our immunity.

***Bowels & water intake***

My fascination with the ascending and descending colon and ileum (small bowel) came from school biology as did my passion for kidney function. As you reach the age of 60 (sometimes 55) you will receive a [***poo kit***](https://www.nhs.uk/conditions/bowel-cancer-screening/) to check for bowel cancer. It is not a guarantee but it gives us a chance to help those with this common disease. But what of exercise? Should this stop us. Well the two swing variations are constipation and diarrhoea. The latter really needs to be looked into as you cannot afford to lose weight or fluids. Some food will loosen you up but generally we want to stay on the *soft side of hard*!  The large bowel, the colon reabsorbs water and for those exercising we pump water out through the skin as sweat and through our lungs as vapour. Moreover, if you sweat out the water you will increase the chances of constipation, dehydrate and this could affect body functions. Avoid laxatives unless they are natural. Add roughage to your diet. Drink plenty of water throughout the day and more if you have to strain those bowel movements. Blood from haemorrhoids is one unsavoury problem as these little varicose veins are torn with firm stools. The good news is that exercise helps you poo better and moves the bowel assisting it with moving waster out.

**Exercise is good for you**

If you feel you have pain in the chest after pushing yourself don't worry chances are you are fine. The heart and lungs adjust and tightness in us oldies is due to infrequent walking up hills and increasing the pace. A good blast out twice a week is valuable and does not just keep your body trim but helps the mind. The so called runners high is a real feature of [**nerve chemicals called endorphins**](https://www.healthline.com/health/depression/exercise#1). It does not take long before your passion for the gym becomes a way of life and need.