Diabetes Freedom

Advanced System

Destroy High Blood Pressure In 21 Days Or Less

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How To Lower Your Blood Pressure In 21 Days Or Less

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Introduction

You have surely noticed the first thing your family doctor does when you go for a check-up.

You may be there because you have backache, or bronchitis or severe depression, but your doctor always starts off by taking your blood pressure.

And if he or she doesn't do that systematically, then maybe you should consider changing your doctor!

Why? Because blood pressure is one of the main causes of death in developed countries.

High blood pressure, which is often referred to as "the silent killer", can kill you outright without prior warning.

This is why all properly trained doctors make sure they carry out this simple little gesture at the beginning of a consultation - because they know that simply taking your blood pressure in their surgery can enable them to detect this silent illness which is capable of causing so much harm.

The sooner high blood pressure – or high blood pressure – is taken care of, the better your chances are of never having to undergo the consequences.

If after taking your blood pressure the doctor considers that all is well, continue in the same way as before until your next check-up.

If, however, the doctor detects high blood pressure, whatever you do, don't treat it lightly. Your doctor certainly won't and will no doubt prescribe some drugs to lower your blood pressure.

This is well-intentioned and sometimes unavoidable, but these drugs are not without risks.

As soon as abnormal blood pressure has been detected, and even before that, there are natural methods of lowering your blood pressure without the use of drugs.

If these natural remedies don't work, then you should of course try allopathic treatment, but before that, give Nature a chance!

This book is designed to explain what high blood pressure is and how to get rid of it without the use of chemicals. You will discover the traditional means of fighting it, but also the natural alternatives to these drugs which sometimes have very disagreeable side effects.

What exactly is blood pressure?

Blood pressure is the force with which your blood travels through your arteries once it has been ejected from your heart.

To properly understand the notion of pressure, you need to imagine that your arteries are pipes and your heart a big pump. When the pipe is too narrow for the strength of the flow, the pressure applied to the walls of the pipe ends up by damaging them.

Pressure increases when the pressure of the blood in the arteries increases, which in turn creates pressure on the artery walls.

To measure blood pressure, the ratio between the blood flow and the resistance of the artery walls is analyzed.

The arterioles, which are small veins equipped with muscular walls, are the main regulators of blood pressure. They start off at the arteries and end up in the capillaries, which are the smallest of all the blood vessels. It is the arterioles which adapt themselves to the blood flow by dilating and contracting and it is they which determine vascular resistance.

When we refer to blood pressure, in fact we measure two things:

→ Systolic pressure

→ Diastolic pressure

Systolic pressure corresponds to the maximum pressure to which your arteries are subjected when your heart contracts to eject blood.

Diastolic pressure corresponds to the moment when your heart is relaxed before filling up with blood again and when pressure is at its lowest.

The second measurement is the most important because if pressure is too high when the heart is at rest, it means there is a problem.

On average, a satisfactory measurement of blood pressure is 120 (systolic)/80mmHg (diastolic).

If there is more than 120 systolic and 80 diastolic, it is imperative to keep a close watch on your blood pressure, because if the latter is too high it can cause your arteries to weaken and deteriorate, sometimes irreversibly, and multiply the factors of cardiovascular risk.

And what if your blood pressure is too low? This depends.

Don't think that low blood pressure is necessarily a bad sign, because the best athletes generally have quite a low diastolic pressure compared to the population on average and this is a sign that their arteries are more supple.

So what about high blood pressure? It is characterized by figures above 140/90 when the doctor takes your blood pressure. If you carry out the test at home and it exceeds 135/85, you should also consult a doctor. It is assumed that blood pressure is slightly increased by the stress caused by being in a surgery (the "white coat syndrome").

In most western countries, 30 % or more of adults and half of the population of over 65 years of age suffer from high blood pressure. And the greatest problem is that most people are unaware of it. This is why doctors systematically take their patients' blood pressure. And it is also why it is essential to keep an eye on your blood pressure after the age of 40.

Even if, according to your doctor, you do not suffer from high blood pressure, keep an eye on the figures.

It is quite possible that you suffer from pre-high blood pressure if you are regularly over 130/80.

Why should you take it seriously? Because there are numerous risks connected with chronic high blood pressure:

- → Heart attack
- → Stroke
- → Arteritis in the lower limbs
- → Kidney failure
- → Aortic dissection
- → Heart failure
- → Kidney disease

→ Visual disorders

→ Alzheimer's disease (according to the French Federation of cardiology)

We will come back to this later.

How do you recognize high blood pressure?

What are the visible symptoms of high blood pressure? Unfortunately there are only a few, which is why it is called the silent killer.

In the case of certain patients, there are absolutely no warning signs before the accident occurs.

For others, there are warning signs which are symptoms of high blood pressure and which should not be neglected:

- → Frequent nosebleeds (the small blood vessels in the nose have become fragile)
- → Loss of balance
- → Migraine
- → Feeling sick
- → Troubled vision

These are the signs that, taken individually, may seem so harmless that they do not incite you to consult a doctor. However, they could make it possible to detect an already well-established problem of high blood pressure.

Unfortunately, nobody thinks about high blood pressure after feeling nauseous or having a headache.

This is why taking your blood pressure is so important and why it should be systematic at each visit to the doctor after the age of forty.

If you never go to the doctor because “all is fine”, at least go now and then to check your blood pressure. The consequences of high blood pressure that is not under control can be dramatic, and sometimes even fatal.

Don’t wait until your body warns you and it’s too late to do anything before you face to up the facts.

The consequences of high blood pressure

Don't forget that your blood vessels, arteries and capillaries are subjected to blood pressure at each moment of your life, day and night, without any break.

Since each part of your body contains these vessels, each part runs the risk of being seriously damaged if the pressure bursts a vessel. Any organ can be affected, from the smallest to the largest.

The terrifying list below will give you an idea of the consequences of high blood pressure and will give you even more reason to go and get your blood pressure checked.

Cardiovascular problems

Cardiovascular diseases are the first cause of death in people over 65 and in women generally. Every year, 150,000 people die in France due to one of these diseases.

Heart attacks come first, causing 27 % of these deaths. The coronary artery gets blocked, which in turn blocks the blood flow and prevents oxygen from reaching the heart.

Strokes are responsible for 25 % of deaths. A vessel in the brain bursts under pressure, leading to neurological damage, handicap or death.

Heart failure is responsible for 23 % of these deaths. The cardiac muscle fails to pump correctly. The immediate consequences of this range from breathlessness to swollen ankles, via coughing.

Brain damage

In France, strokes affect 120,000 people a year. Generally speaking, when the brain is subjected to poor blood supply, the consequences can be very serious:

When the brain is not properly oxygenated, this can cause what is known as vascular dementia, which is a deterioration of the cognitive capacities caused by too much pressure in the brain's blood vessels.

This resembles Alzheimer' disease, with consequences such as amnesia, behavioral problems and aphasia. It is a sickness which develops and worsens with time.

To forestall strokes, one must be attentive to all the symptoms which could be linked to a vascular problem:

- → Dizziness
- → Difficulties in seeing
- → Sudden tiredness
- → Heavy limbs
- → Aphasia

These symptoms can warn you of an imminent stroke due to high blood pressure.

Damage to the kidneys

The role of your kidneys is to filter the blood for eliminating your body's toxins. Loss of the ability to filter can lead to very serious consequences for your body.

Unfortunately, high blood pressure can cause serious damage to the kidneys and is even the cause of half of the cases of kidney failure.

On the other hand, when the kidneys do not function properly, this can cause high blood pressure, due to the retention of water. This excess water in the body increases blood volume and consequently the pressure in the vessels.

When this happens, the effects can be severe and may even lead to a heart attack or stroke.

In the same way, when the kidneys are less and less efficient in filtering, the toxins and impurities build up in the blood and end up by accumulating in the arteries.

In short, high blood pressure and kidney failure create a terrible vicious circle.

If you have a kidney disease, you should be doubly careful and monitor your blood pressure regularly in order to protect your cardiovascular system.

Damage to the eyes and extremities

High blood pressure does not only affect your kidneys, heart or brain. As previously mentioned, high blood pressure can affect all the organs in the human body that are irrigated by blood.

Wherever there is a blood vessel, there is a risk of damage due to high blood pressure. This is especially true for vessels that touch the extremities of the ocular sphere.

Moreover, in cases of high blood pressure, the eyes are frequently checked in order to avoid hypertensive retinopathy. This is damage done to the vessels located in the retina and which appears after several years of high blood pressure. The usual symptoms are blurred or distorted vision.

This pathology is worsened by smoking and when associated with diabetes can cause blindness. The ophthalmologist or family doctor, if they have the right equipment, will systematically carry out a test known as the fundus examination to check that the vessels in the retina have not shrunk abnormally, which is a sign of hypertensive retinopathy.

Has your vision suddenly altered? Then think about getting your blood pressure checked.

Often the effects of high blood pressure can be detected at the other extremity of the body, on the ankles.

High blood pressure causes weakness in the heart muscle and the resulting difficulty to pump the blood correctly can be a cause of swelling in the lower members, since the blood accumulates towards the bottom of the body.

Swollen ankles is a recurring problem in the case of high blood pressure. A first impression could be that it is just an aesthetic problem, less harmful than the other consequences of high blood pressure.

However, this accumulation of blood in the extremities can be the cause of serious problems such as arterial, venous or mixed ulcers.

Cellulite and varicose veins are also two problems that are frequently associated with high blood pressure, not forgetting the pain in the legs when there is muscular contraction.

The origin of most of these pains can be attributed to an obstruction in the peripheral arteries, known as peripheral artery disease or PAD, and which causes a lack of blood flow into the part located before the obstructed artery.

Diabetes and high blood pressure

High blood pressure does not cause diabetes, but diabetics run a greater risk of suffering the negative consequences of high blood pressure.

Indeed, diabetes itself makes the blood vessels more fragile, which in turn puts them even more at risk if there is high blood pressure.

The risk of strokes, heart attacks and kidney damage is therefore greater for diabetics with high blood pressure and hence treatment is even more indispensable.

Consequences for men and for women

One of the primary consequences of high blood pressure for men, and which is also a problem that can be a warning signal, is erectile dysfunction.

Poor vascular condition can lead to an inadequate irrigation of the corpora cavernosa of the penis and absence of erection.

As a result, no automatic erection on waking up in the morning may be a warning signal and be a good reason for checking out one's blood pressure.

For women, high blood pressure is particularly frequent at two times in their life – during pregnancy and the menopause.

It often appears during the last three months of pregnancy, when it is known as pre-eclampsia or gravid arterial high blood pressure. This may continue for a while after giving birth, but as a general rule stops on delivery of the baby.

If your blood pressure remains high after the baby is born, you should consult a doctor.

Women who already have blood pressure problems should be especially vigilant during pregnancy.

During the menopause, there are two reasons for the rise of blood pressure – putting on weight and the decrease of feminine hormones, which up to then have protected the cardiovascular sphere.

One out of two postmenopausal women suffer from high blood pressure, and the risk of a cardiovascular accident and especially a stroke then becomes higher than for men.

Hormone Replacement Therapy, which is prescribed to reduce the inconveniences of the menopause, does not significantly increase the risk of high blood pressure, but nevertheless extra monitoring is recommended.

In any case, putting on weight, hormone deficiency and aging arteries are all good reasons for women over the age of 60 to check their blood pressure.

Another time of life when high blood pressure is liable to raise its head without warning is when the contraceptive pill is used.

The pill, especially when taken in association with smoking, is a significant risk factor for high blood pressure. In order to reduce as much as possible the risks of high blood pressure linked to taking the pill, it is recommended to choose pills which have more progesterone content than estrogen – and above all, to stop smoking.

The causes of high blood pressure

There are two distinct kinds of high blood pressure – essential and secondary.

Essential (or primary) high blood pressure is the most common form (90 %) and results from the association of several risk factors.

Secondary high blood pressure is caused by a pre-existing sickness or affection, in most cases of the heart or kidneys. People who suffer from secondary high blood pressure are usually well looked after and monitored, both for their sickness and for their high blood pressure.

On the other hand, people who suffer from essential high blood pressure are most of the time unaware of it because, as we have said, it is a silent killer which gives almost no warning before striking.

Fortunately, it is on these risk factors that you can take action, and for this you need to know what they are.

These are the main risk factors for high blood pressure:

- → Excess weight: The risk is obviously not the same for a person suffering from obesity as for someone who has a few kilos too many, but it nevertheless always exists when there is any excess weight.

  The reason can be explained mathematically – the more you weigh, the more the volume of your blood increases and the more your heart is solicited to distribute this blood volume throughout your body. Since the blood vessels are subjected to greater pressure, they become more fragile more quickly.

  The distribution of fat in the body also plays a role in the risk of high blood pressure. Your waistline is more important than your total weight – the larger it is, the greater the risk.

- → Too much salt: Although salt is indispensable, there is too much of it in industrial food and it is often also added at home. For some people it presents a considerable risk factor for high blood pressure. It creates an increase in blood volume by retaining water in the cells. Rather than having to drastically reduce salt intake after a diagnosis of high blood pressure has been made, it is preferable to reduce it gradually beforehand and thereby prevent the disease.

A lack of potassium also often leads to an excess of sodium in the blood because these two elements balance each other out. So make sure that you always eat food that is rich in potassium.

→ Smoking and pollution: When you know what smoking does to your arteries, you are obliged to link it to high blood pressure.

First of all, nicotine accelerates the heart rate. Secondly, the presence of harmful molecules sent into the blood circulation when inhaling tobacco smoke is directly responsible for the weakening and hardening of the blood vessels.

Also, and for the same reasons, it has now been proven that air pollution increases the risks of high blood pressure.

→ Alcohol: Drinking too much alcohol on a regular basis is directly responsible for raising blood pressure.

Moreover, people who suffer from high blood pressure have only to reduce or stop drinking alcohol in order to see their blood pressure dropping.

→ Sedentary lifestyle: It is evident that the lack of physical exercise is hugely responsible for excess weight, but it is also directly responsible for high blood pressure, especially for women over the age of 50, who lead a particularly sedentary lifestyle in France.

→ Obstructive sleep apnea-hypopnea syndrome (OSAHS): This syndrome is difficult to detect when you are alone because it occurs during sleep.

It is often associated with the tendency to snore and is frequent when there are excess weight issues (but not only) and is revealed when breathing momentarily stops or slows down. This leads to a lack of oxygen in the blood and, as a result, in the brain.

Extreme tiredness on waking may be a warning sign and encourage you to consult a doctor. Indeed, OSAHS is very often associated with high blood pressure and the two together are particularly detrimental.

→ Heredity: If a near relative (father, mother, brother, sister) suffers from high blood pressure without obvious reasons such as excess weight, you should be especially careful.

High blood pressure is sometimes a genetic condition which is passed on within a family without any connection to known risk factors.

Medication for high blood pressure

In this section we will deal with the subject of traditional medical treatment for high blood pressure, or rather the remedies that modern medicine proposes, which are numerous but never free from side effects.

First of all, you should be aware that the drugs you are given for your high blood pressure problems are solely intended to control your blood pressure so that it does not get too high. But unfortunately they are not designed to resolve the cause of your high blood pressure.

Below you will find the most common drugs for high blood pressure, together with the problems they can cause. They are generally used in combination, with lower doses than if they were prescribed on their own. This guarantees a better effect with fewer drugs.

Before your doctor prescribes any drugs for high blood pressure, make sure that he or she is well acquainted with your medical file, including any allergies, problems related to the kidneys, heart and liver, and your glycemia (blood sugar).

This will ensure that your doctor doesn't choose drugs that are incompatible with your medical antecedents, which could do you more harm than good.

If it is your first visit to this particular doctor, and the latter doesn't give you a full questionnaire before prescribing drugs to treat your high blood pressure, don't hesitate to tell him or her about any other health issues you may have or may have had and don't be embarrassed about it!

Diuretics

These belong to the oldest class of drugs used to treat high blood pressure. They act on the blood volume and favor the elimination of excess water and salt via the kidneys.

Traditionally, treatment for high blood pressure begins with diuretics, since their mechanical action may suffice if there is no other associated illness.

They may also be prescribed in association with other antihypertensive drugs.

Generally speaking, they are well tolerated, but can have certain side effects, such as dizziness, tiredness and feeling sick for the first few days.

Sometimes there is also a drop in potassium levels and with hydrochlorothiazide there is *hypersensitivity* to sunshine.

Beta-blockers

Often associated with diuretics, these reduce the force and frequency of cardiac contractions, which enables a lowering of the blood pressure. In other words, they oblige the body to rest.

Atenolol, Acebutolol, Betaxolol, Celiprolol and also *Nebivolol* are among the most commonly prescribed molecules.

At the start of the treatment, the side effects of beta-blockers are more acute than those caused by diuretics. They include weakness, vertigo and sensitivity to the cold. The slowing down of the blood circulation can lead to greater sensitivity to the cold in the extremities.

Other less frequent side effects can also be encountered, such as erectile dysfunction, insomnia and depression.

Talk to the health professional who is taking care of you if you find that the side effects are having a heavy impact on your everyday life.

Angiotensin-converting-enzyme inhibitors (ACE inhibitors)

These are enzyme inhibitors that prevent the conversion of angiotensin I into angiotensin II. Their role is to stop the production of angiotensin II, which is a hormone produced by the kidneys. This hormone is a vasoconstrictor, which increases blood pressure by favoring the contraction of the smooth muscles around the blood vessels.

So by taking inhibitors that limit the production of angiotensin and angiotensin II, you reduce the risks of constricting your blood vessels, which is what would happen if the production of these enzymes were not stopped.

These drugs are often recommended for heart or kidney failure and also for diabetics. They are however strictly forbidden during pregnancy!

Angiotensin II receptor blockers (ARBs)

These are the antagonists of angiotensin II. Their action is situated locally on the blood vessels where they connect with the angiotensin II receptors, which prevents the contraction of the smooth muscles around the vessels and consequently reduces arterial pressure.

They are also forbidden during pregnancy and are to be avoided in cases of kidney failure.

ACE inhibitors and ARBs are generally given along with diuretics. Their most frequent side effects are hypotension, diarrhoea and a dry cough. These should be notified to the doctor. Allergy is also possible in the form of angioedema (Quincke's edema).

In rarer cases, urticaria (hives) may appear or your food may taste different.

Human renin inhibitors

In line with the ACE inhibitors and the ARBs, these drugs work by blocking the renin-angiotensin system. High levels of renin, the kidney enzyme, can cause high blood pressure.

Reducing these levels with human renin inhibitors makes it possible to stop the creation of angiotensin II, thereby reducing the constriction of the blood vessels.

The only available renin inhibitor treatment is Aliskiren and its side effects are less well known than those of the more traditional antihypertensive drugs. A priori, diarrhoea or facial skin allergies are possible.

These drugs are especially recommended for patients suffering from high blood pressure caused by excess weight and should be taken with a low-fat meal.

Calcium channel blockers

This treatment consists in slowing down the entry of calcium ions through the walls of the smooth muscles around the arteries and the heart, which has a vasodilator effect and slows down the heart rate.

Apart from high blood pressure, they are frequently used to treat angina, arrhythmia, Raynaud's phenomenon, or the consequences of a stroke on the brain.

For high blood pressure, they are often combined with other treatments such as beta-blockers, or ARBs.

Some calcium channel blockers have a more noticeable effect on the heart, while others are more specifically vasodilators. Their prescription is therefore to be adapted according to the specific profile of the patient.

Side effects vary according to the class of calcium channel blockers:

Dihydropyridines, for example, can cause red blotches on the face, headaches, vertigo, arrhythmia, or swelling in the lower members. This is particularly the case for the following molecules: *Amlodipine, Felodipine, Isradipine, Lacidipine,* etc.

Phenylalkylamines (*Isoptine, Verapamil*) often cause constipation.

Women should start treatment by calcium channel blockers later in life, since using them tends to increase the risk of breast cancer.

What to do when the drugs don't work

If you suffer from high blood pressure, the first thing to do during the initial consultation is to determine the level of blood pressure that is acceptable for you and the figures that you need to attain.

With this objective, you will certainly receive a prescription with one, or probably more than one, drug. It is likely that these will have the desired therapeutic result.

But what if they don't? There are other medicinal solutions that can be envisaged as a last resort.

- → Alpha-blockers: These are generally used to treat benign prostatic hyperplasia, but two of them – *prazosin* and *urapidil* – can also help in serious cases of high blood pressure.

  These drugs must however be taken with particular caution, especially if there is a possible interaction with other drugs, such as corticoids, anesthetics, anti-depressants, and certain other drugs used for high blood pressure.

- → Any treatment which results in vasodilation: the blood vessels dilate and the pressure applied on their walls automatically decreases.

The drugs work

Have you reached the desired diastolic and systolic pressure? It is possible that your treatment also involves a daily intake of acetylsalicylic acid. This is the case for the majority of patients who have had a stroke or a heart attack.

Patients whose high blood pressure is under control are often encouraged to take aspirin in order to increase the fluidity of the blood, which can help to reduce blood pressure even further.

Aspirin is especially prescribed almost systematically in the case of gravid high blood pressure, for pregnant women.

If you have started this treatment, then you should be aware that you may have been recommended to take it daily, long term.

The only problem is that aspirin can have side effects, in particular strokes and gastrointestinal hemorrhages. This is why it is not recommended to take it if you have an ulcer, allergy or risk of hemorrhage. As for allergies to aspirin, these can take the form of skin rashes or edemas.

It is true that not many people are intolerant to aspirin, but you should always be careful with this product which is not as harmless as you may think.

What to remember

As you will have seen, these antihypertensive treatments are effective, often used in combination, and never free from side effects.

Most of the time the latter are only minor and you won't even notice them.

But it is possible that they become incapacitating and this depends on the physiological response of each individual, which cannot be anticipated in advance (except in special cases when the doctor knows that a certain treatment must not be prescribed owing to a physical particularity or sickness).

Treatment for high blood pressure is above all based on chemical molecules, which are expected to have a powerful effect. But knowing that they have an intentional impact on the blood circulation, potential side effects can affect the cardiovascular system and this is not without danger.

It is also possible that your doctor will change your treatment several times in order to stabilize your blood pressure without causing too significant side effects.

Whatever the case, remember that all these treatments will tackle the symptoms, but not the root of the problem which has brought about the rise in your blood pressure.

The best thing to do, with or without medicinal treatment, is to consider the alternative solutions that are proposed by Nature in order to get back a healthy blood pressure.

Refractory high blood pressure

As a general rule, high blood pressure can be resolved with one, two or even three combined drugs. But not for everyone. It would appear that 20 % of the patients who are monitored for high blood pressure are victims of refractory high blood pressure, meaning that they need four different combined drugs to regulate their blood pressure.

The problem is that these patients are even more liable to undergo cardiovascular complications than the other people who are being treated for high blood pressure.

The cause of refractory high blood pressure is not exactly known, but it would appear that could be in part hereditary.

However, if you have refractory high blood pressure this does not mean that all is lost – it can be completely controlled, but it requires more effort, both from a medical point of view and with regard to changes of lifestyle.

What is positive is that you cannot depend entirely on drugs and that you will have to carry out some research in order to understand the origin of your refractory high blood pressure. It is this questioning that will induce you to change your lifestyle for the better. In a way, refractory high blood pressure is a godsend because it will oblige you to do a bit of introspection.

It is important to be aware that sometimes the cause of refractory high blood pressure is linked to a pre-existing disease, in which case it is really secondary high blood pressure. In this case the patient's diagnosis will often reveal a kidney disease or sleep apnea.

Just because you haven't been diagnosed with these diseases doesn't mean that you don't have them and it may be a good idea to broach the subject with your doctor when searching for the causes of your refractory high blood pressure.

However, it is probable that the origin of the problem is less serious and above all easier to manage with natural methods. Below are the main causes of refractory high blood pressure which can be avoided.

Lifestyle and nutrition

An unhealthy lifestyle and inappropriate nutrition are the primary causes of high blood pressure. Even if you are genetically disposed to having high blood pressure, a change in lifestyle and diet must be the first solution to be envisaged in order to reverse the trend.

The advantage of looking after your blood pressure by being careful about what you eat and how you live is that you will at the same time reduce the risk factors of many other diseases, particularly diabetes and cancer.

You should also benefit from a general wellbeing, slim down and get back a healthy weight and shape, because it is true that people with high blood pressure often have a weight problem.

Excess weight

Excess weight is one of the main avoidable risk factors of high blood pressure. This is one of the reasons why the figures for obesity and for high blood pressure in the world follow parallel curves – the more excess kilos, the more the risk of high blood pressure increases.

The good news is that it is easier to get rid of superfluous kilos than a genetic predisposition.

How can you lose weight? You most certainly have the answer, although you don't want to hear it – you have to consume fewer calories than you use. To do this, you need to work out your average daily energy expenditure, i.e. your metabolism. Because not everyone burns the same amount of calories.

A sedentary lifestyle and age tend to lower the metabolism (the quantity of calories burned per day).

It could be useful to calculate your basic metabolism, i.e. the amount of calories you burn when resting. To do this, use a calculator on the internet. Then, depending on your activity, you can multiply this by:

x 1.2 if you have a sedentary lifestyle

x 1.375 if you exercise 1 to 3 times a week

x 1.55 if you exercise 3 to 5 times a week

x 1.725 if you exercise every day

x 1.9 if you have intense daily activity

With the final figure you will obtain the number of calories that you should consume each day. If you want to slim down, you should either consume fewer calories or increase your physical activity. Or both.

It is up to you to choose which way to do it according to what seems to be the easier to manage, since it is your ability to make long-term changes that will determine the effectiveness of your weight loss.

Below is a table which will give you an idea of the calories burned according to the activity carried out. For the same activity, you must be aware that each person will burn a different number of calories, depending, amongst other things, on their weight and height. So here is the number of calories burned during an hour's activity by a person weighing 70 kilos:

Exercise	Caloric expenditure	Sport	Caloric expenditure
Indoor aerobics	450	Running	563
Water aerobics	281	Home trainer (moderate speed)	493
Badminton	317	Trampoline	246
Skipping	563	Housework	246
Walking (5km/hr)	246	Swimming	770

It's good but it's not enough just to exercise; you also need to take a look at what is in your plate, and not only because of the calories.

Apart from the calorific aspect, it is true that some foods are particularly harmful for people with high blood pressure, whereas others can help to lower the blood pressure.

It is no good embarking on a sophisticated program for losing weight where you have to eat just one sort of food, for example, or to count your calories with scales.

On the other hand, you could see improvements by following the diet against high blood pressure which has been developed by the American research workers who founded the Dietary Approach to Stop High blood pressure.

These researchers have found that by eating a maximum amount of fruit and vegetables every day and by reducing salt intake to 3g a day, it is possible to lower one's blood pressure as efficiently as with drugs.

The interesting double effect of the DASH diet is that it enables you to reduce your blood pressure and at the same time to slim down. In this way you enter the virtuous circle.

Below is a table which will enable you to adapt your meals to the requirements of the DASH diet. It corresponds to the needs of a person who consumes 1,600 calories a day.

Food	Daily portion
Wholegrain cereals (no added sugar)	6
Vegetables	3 to 4
Fruit	4
White meat, poultry, fish	3 to 6
Low-fat dairy food	2 to 3
Grains and nuts	1 per week
Lipids (butter, oil)	2
Sugar products	0
Salt	No more than 4g per day

To help the balance between potassium and sodium and to further reduce water retention, which is responsible for high blood pressure and feeling bloated, you should eat as many foods containing potassium as possible.

You have no doubt heard that bananas are rich in potassium? Indeed they are, but they are far from being the only food to contain it.

Here are some of the foodstuffs that are rich in potassium:

- Lentils (800mg)
- Dates (790mg)
- Prunes (732mg)
- Almonds (705mg)
- Spinach (662mg)
- Avocado pears (650mg)
- Chestnuts (600mg)
- Mushrooms (600mg)
- Nuts (450mg)
- Apricots (440mg)
- Artichokes (430mg)
- Potatoes (420mg)
- Bananas (420mg)
- Beef, chicken and oily fish also contain a lot of potassium (about 300mg for 100g)

How To Exercise

Be reassured, you are not obliged to become a marathon runner or enroll in a sports club tomorrow.

But it is undeniable that you cannot expect to lose some weight and lower your blood pressure if you do not increase your daily quota of physical activity.

The worst enemy of the cardiovascular system is a sedentary lifestyle. When you work on a computer, do you think about getting up and moving around every hour?

When you go on an errand, do you take the car or are you prepared to walk for ten minutes?

The strategy of taking small steps will enable you to succeed in your change of lifestyle in the long term.

You don't need to start playing squash or football if you have no usual sports routine in your life. Start off by getting off the bus or subway one stop sooner than usual and walking a little further, or by going shopping on foot rather than by car.

In the subway, use the stairs instead of the escalators and at work forget about the elevators and take the stairs (unless of course you work on the tenth floor of a tower!)

Get up 20 minutes earlier in the morning and indulge in a calm yoga session to wake your body up gently.

At weekends go for a walk in the countryside instead of watching a film on your couch.

After Sunday lunch, go for a walk with your family instead of lounging about in the family room.

In short, fit physical exercise into the heart of your daily routine. Then, once you have got into the habit and are physically prepared, you can start a real sports activity, either by joining a club, investing in a cross-trainer, going to the swimming pool or running in the park.

However, if you usually have no real physical activity, the worst thing is to start one of these pursuits overnight, since you would be taking the risk of injuring yourself or getting discouraged, both of which would have the same result – giving up.

The most important thing for managing to lower your blood pressure is to carry out physical activity on a regular basis.

At the beginning, you could simply try and walk as often as possible. Buy a pedometer, which could be helpful and motivating.

If walking is difficult because of your excess weight or problems with your joints, a solution would be to alternate it with swimming sessions.

Swimming is a good way to use up your calories and to develop your muscles harmoniously without hurting your joints. If possible, swim continuously for 30 minutes 3 times a week.

Moving every day, either by swimming or walking, will boost your metabolism and thus help your body to burn more calories.

Beware of keeping your eyes riveted on the scales – when you practice a sport you will build up your muscles, the lean body mass. Since muscle is heavier than fat, you may notice that you aren't losing any weight in spite of all your efforts.

To avoid this kind of disappointment, buy an impedance scale, which accurately measures the muscle mass, the level of fat and the percentage of water in the body.

This way, even if your weight doesn't change, you will be able to see that exercise is helping to replace your pounds or kilos of fat with muscle, which in turn will help you to burn more calories and body fat.

If, thanks to physical exercise, you succeed in controlling your high blood pressure, above all don't stop there! If it works, this proves that your body needed it and that you should henceforward fit this physical activity into your routine, if possible every day or at least two or three times a week.

Necessary changes to your lifestyle

As we have explained, too much salt intake is one of the greatest risk factors for high blood pressure – the resulting water retention automatically generates an excess of blood and consequently pressure.

Introducing a low salt diet is therefore one of the first actions to be envisaged for lowering your blood pressure, whatever the other changes you have anticipated.

You may well lose weight and have a very healthy diet, but if you eat too much salt your arteries will be subjected to too much pressure.

Government health organizations in many countries recommend that 5 grams of table salt a day is the maximum amount that should not be exceeded. If you already have high blood pressure, then you can easily halve this amount.

The problem lies in the fact that it is extremely difficult to estimate the quantity of salt existing in food that you buy every day, but you should surmise that there is always too much.

The best way to ensure that you reduce your salt intake is to cook as many things as you can yourself.

For essential foodstuffs that you don't have the time or courage to make yourself, bear in mind that there are about 8 grams of salt in 500 grams of bread.

To reduce your salt intake, you can test other seasonings, such as gomasio, which is a mixture of sea salt and grilled sesame seeds. You can also use fresh herbs and lemon rind to flavor your dishes, not forgetting spices such as chili peppers or sumac, which add flavor without adding any sodium.

To limit your salt intake, you should be aware that the following products contain a high proportion of salt:

- Soya sauces
- Miso sauces
- Industrially-made tomato sauce
- Ready-made meals
- Cold cooked meats
- Bread
- Smoked fish
- Canned vegetables

Remember that by adding potassium-rich fruit and vegetables to your daily diet, you will compensate for excess sodium and will re-establish the necessary balance for regulating your blood pressure.

Other risk factors are also to be limited or stopped if you really want to see a positive effect on your blood pressure - alcohol and cigarettes.

You should not have more than one glass of alcohol a day if you are a woman or a senior and two glasses a day if you are a man, and there should always be two days in the week when you don't drink any alcohol at all.

For cigarettes, the advice is much clearer – you should stop smoking as soon as possible.

Smoking is a major risk factor for high blood pressure, as well as for atherosclerosis, and you cannot expect to control your blood pressure if you don't do something about it.

You may be worried about putting on weight if you stop smoking? You should consult an addiction expert or a nutritionist as soon as you have stopped smoking. He or she will help you to examine all the ways of stopping this addiction without overdoing the way you compensate for it.

If you stop smoking in order to reduce your blood pressure, it is certainly no good if you then put on weight - this would be counter-productive.

One of the best ways of fighting against the risk of excess weight linked to giving up smoking is to begin an additional physical activity as soon as you stop.

Stay calm when faced with high blood pressure

One of the main risk factors of high blood pressure, apart from genetics and food, is stress, this modern scourge which particularly affects people living in cities - mostly working adults, but also more and more seniors.

Adrenalin and cortisol, the stress hormones, have a real impact on our organism and in particular on the state of our blood vessels. When there is a rise in stress levels, you can feel your pulse going faster.

But the worst thing is this permanent, chronic stress, which is with you all day long and which may be caused by professional, financial or personal reasons … and which in the end can kill you.

It is therefore indispensable to buckle down and reduce your stress in order to lessen the cardiovascular risks linked with high blood pressure. And if it is not always possible to act on the causes of your stress, you can nevertheless act on the way your body responds to it.

In this domain, traditional medicine and phytotherapy (herbal remedies) are particularly helpful.

Depending on your physical condition, martial arts, and in particular yoga and tai-chi, can be a great help for managing stress on a daily basis.

The effects of yoga and tai-chi are such that Australian scientists have even ended one of their studies on the subject by strongly advising people who have suffered a stroke to take up one of these disciplines.

Why are they so effective? Because they teach you to breathe, to focus and to work on the balance between strength and gracefulness – in short, they teach you a certain form of meditation in movement.

For those of you who feel capable of doing it, meditation can moreover work miracles in terms of stress management.

With the aid of an audio device or a teacher in person, it is easy to learn the basics of meditation, as well some SOS techniques that can help you to quickly reduce stress in cases of emergency.

Mindfulness meditation, which is very much in fashion, does not involve any religious beliefs, but is simply a discipline of the mind. There has been a lot of research on the effects of meditation and it has been demonstrated on numerous occasions that mindfulness meditation is a veritable method of regulating blood pressure, particularly for people who have pre-high blood pressure.

Ideally, you should practice meditation every day, or at least on a regular basis. You don't need to spend hours on it, but 15 minutes in the morning and 15 minutes in the evening could really change your life. The advantages are double:

- The quality of life immediately improves – you feel more serene and less anxious.
- In the long term your blood pressure will be under control and the risk of cardiovascular accidents reduced, which is also one less source of stress!

If you have never done any yoga, be sure to start by finding a course, either online or in real life, which suits you. Be aware that some versions are much more physical than others. Moreover, a form of yoga like the bikram yoga, which is practiced in a hot room, is absolutely not recommended for people with high blood pressure.

However, there are other sorts of yoga, focussed on breathing and a slow sequence of postures which is altogether suitable. This is hatha yoga, which suits both beginners and seniors without any practice.

More sporty people can try vinyasa yoga, which is more athletic since it consists in a series of postures that correspond to breathing patterns and which are not held for very long.

To find the kind of yoga which is adapted to your needs, don't hesitate to surf the web, where you will find free lessons that will enable you to choose without having to physically go out and look for them.

Afterwards, you may need to go to a real lesson to be sure to stick to it. It is all a question of personality – some people manage self-discipline alone, while others need to know that their coach is waiting for them.

If you want, you can even test the benefits of yoga on your blood pressure right away by trying out one of the most well-known poses recognized for their anti-hypertensive effect:

- The sun salutation: This is a series of postures, ideal on waking, since it loosens the muscles and joints and opens the rib cage for easier breathing.
- The fish pose: Lying down, this posture strengthens the back, relaxes the neck and opens the rib cage.
- The corpse pose: This is the last pose made during a yoga session. The body is stretched out lying down and favorable to relaxation.

You aren't tempted by yoga? Or meditation either?

You can also turn towards other relaxing disciplines, such as sophrology or acupuncture.

There is also a technique that is extremely easy to carry out and to use in emergencies. You can learn it in just a few minutes.

This technique is based on breathing and enables you to relieve the pressure immediately, without having to blow a fuse, in cases of extreme stress.

You just need to practice this technique regularly for it to become a reflex action whenever your body risks overheating.

How to do it? Very simple:

- Breathe in for four seconds
- Breathe out for 6 seconds
- Continue until the pressure has dropped

It may be extremely simple, but it is really very effective. You might also like to try the technique of tapping the upper lobe of your right ear with your index finger – it is apparently an extremely effective way to calm down (and not dangerous).

There are numerous breathing techniques that can help you to relax, alleviate stress and even help you to sleep.

There are also many gadgets and applications which enable you to test your cardiac coherence, a complex breathing technique which makes it possible to regulate the central nervous system and restore to its rightful place the parasympathetic nervous system whose role is to calm you down. If you can do it, it is certainly the method that has the best effect.

This is the principle to be followed: 6 breaths a minute for 5 minutes, 3 times a day. To manage 6 breaths a minute, you have to breathe in for 5 seconds and breathe out for 5 seconds. As this is more difficult than it appears, it is a good idea to use a guide, chronometer or internet application to help you get used to it (the tendency is to breathe out for longer and breathe in more rapidly).

In the long term, cardiac coherence makes it possible to:

→ Reduce high blood pressure

→ Reduce blood sugar level

→ Reduce attention disorders

→ Improve concentration and memory

→ Reduce inflammation

It would be a shame not to try, wouldn't it?

Whichever method you choose, the main thing is that you do something about tackling stress so that it doesn't eat you alive.

The nutrients which help fight high blood pressure

Minerals

As we have seen, the sodium-potassium balance is at the heart of the principle of blood pressure and it is crucial to make sure that the sodium (salt) doesn't get the better of the potassium.

Potassium is the oligo-element par excellence that contributes to keeping your heart healthy. It regulates the fluid and electrolyte balance and has the important role of allowing the conduction of nerve impulses which generate the contraction of the muscles, and consequently of the heart.

When there is excess salt, potassium is threatened. This is why you must reduce your salt intake and increase your consumption of potassium-rich foods.

To regulate your blood pressure you must also take an interest in another oligo-element – magnesium.

Magnesium is also crucial for the nerve impulse conduction which regulates muscular contraction. It is involved in the production of energy on the cell level because it enables the production of adenosine triphosphate (ATP), a nucleotide which provides the indispensable energy for making the organism work at cellular level.

Without ATP, there would be no energy in the cell nuclei, no cellular division, and no muscular movement.

To produce ATP, you need magnesium. This is why people who lack magnesium often have a drop in their energy levels. To increase the level of magnesium in the blood, you can of course take food supplements, but like the rest, the best way is always to take it directly from your food. Also, an overdose of magnesium from real food is difficult to envisage, whereas it is altogether possible with pharmacy products.

Below is a list of the best sources of magnesium:

- → Cocoa
- → Sardines in oil
- → Oleaginous fruits and seeds (Brazil nuts, sunflower seeds, almonds, cashew nuts, etc.)

- → Seafood
- → Buckwheat
- → Wheat germ
- → Yeast
- → Dried beans
- → Dried fruit (bananas, figs)
- → Mineral water (sourced locally)

Allium sativum

Is this an exotic plant for fighting against high blood pressure? No, it is just our old friend garlic, used traditionally in Mediterranean cooking. And it probably contributes to the fact that this diet has such a well-deserved reputation and is recommended for cardiovascular health.

Garlic is in fact a collection of powerful active ingredients and has been used to treat various afflictions since Antiquity.

It is effective against parasites and infections, stimulates the immune system and also helps to make the blood more fluid, which is extremely useful in the fight against high blood pressure.

It has been scientifically proved that garlic regulates blood pressure and reduces the risk of strokes.

If you add a crushed clove of garlic to your dishes at the end of cooking time, you will gain a maximum benefit from its properties. For a real effect against high blood pressure, we advise 2 to 4 cloves a day.

Fresh garlic can be indigestible, or so stimulating that it can cause insomnia. If you cannot tolerate it, then you can try food supplements, which are easier to digest. In this case, or if you eat a lot of garlic on a daily basis, be careful that you are not also taking drugs that make the blood more fluid and don’t hesitate to mention this to your pharmacist

Ubiquinone

Ubiquinone is the other name for the coenzyme Q10. Like ATP, the coenzyme Q10 is indispensable for producing energy in the cells. Without it, the energy supplied by food cannot be transformed into cellular energy.

The more an organ needs energy, the more it contains Q10. The heart in particular usually contains vast quantities. As you get older, the levels of Q10 become less, which is why supplementation is strongly recommended for seniors.

In Japan, it was already discovered in the 1950s that people suffering from heart failure had particularly low levels of Q10. The latter is moreover systematically prescribed along with other drugs to treat high blood pressure and numerous scientific studies confirm its real effect against high blood pressure.

Furthermore, since statins, which are prescribed for problems of cholesterol, reduce the production of Q10, it is doubly important to take it when following such treatment against cardiovascular risks.

Q10 is liposoluble, which means that it should be taken with a fatty food in order to be properly assimilated.

Hawthorn

This common plant has been used since time immemorial to treat cardiovascular disorders. Apart from being especially rich in flavonoids, with their antioxidant qualities, the complex mechanism which underlies its action remains unknown.

It is nevertheless a fact that hawthorn has the capacity of reducing cardiac palpitations and improving heart failure. Its effectiveness is apparently due to the fact that it improves the transmission of the electric signal to the heart, increases the latter's ability to contract, regulates blood pressure and reduces cholesterol in the blood. All these are highly beneficial effects for cardiovascular functioning.

The WHO has even validated the use of hawthorn extract as a class 2 treatment for congestive heart failure.

Omega 3

As a British study carried out in 2015 has proven, certain Omega 3 fatty acids are able to reduce blood pressure. These particular Omega 3 are DHA (DocosaHexaenoic Acids) and are found in oily fish and seaweed extract.

It is strongly recommended to eat oily fish once or twice a week, whether you have high blood pressure or not. The best oily fish are sardines, anchovies, mackerel or salmon (but only once a week for the latter).

Other natural ways of fighting against high blood pressure…

There are plenty of old home remedies for high blood pressure. Some people maintain that they see a real effect on their blood pressure and would not stop their natural treatment for anything in the world. You can always try them out, since they are altogether innocuous.

- → Olive leaves

  It is the oleuropein, a flavonoid contained in the olive leaf, which gives it its antihypertensive properties. It is said to improve the elasticity of the arteries and favor vasodilation.

  Olive leaves can be taken in a tisane, or as an extract in a capsule.

- → Cayenne pepper

  It is believed that drinking water with Cayenne pepper in it helps to lower blood pressure. What is certain is that it boosts the metabolism and hence helps weight loss.

- → Cinnamon

  This spice has many health benefits – it is anti-inflammatory, anti-oxidant and also acts against diabetes and regulates blood pressure.

- → Valerian

  Used since Antiquity for its calming properties, valerian can help fight against the stress which raises your blood pressure.

It calms you down without sending you to sleep and allows you to focus without running away with your emotions. A perfect remedy for stress in the workplace.

What to remember

The message is clear - you should never take high blood pressure lightly, especially if it is recurrent.

High blood pressure, this silent killer, affects 30 % of the population. It is the cause of strokes which leave their victims enfeebled and handicapped. But it is above all a cause of sudden death following a cardiovascular disease.

Fortunately there are many ways of fighting high blood pressure. Drugs, a healthy lifestyle, food, and even plants or oligo elements… they have all really proven their worth further to numerous scientific studies throughout the world.

Check your blood pressure regularly, either at the doctor's or at home if you have invested in a blood pressure monitoring device. This option will allow you to avoid the white coat syndrome (which makes your blood pressure go up) and will enable you to take your blood pressure at the same time of day, which is a good method for obtaining representative measures.

If it turns out that you have high blood pressure or are in a state of pre-high blood pressure, it is essential that you identify the causes of your condition together with your doctor.

You should most probably:

- → Stop smoking
- → Lead a less sedentary lifestyle
- → Lose weight
- → Eat food which regulates your blood pressure
- → Limit the sources of stress
- → Manage your stress

If your high blood pressure is still slight, it is probably better to try and lower it by using natural remedies before going on to allopathic medication. The latter is not free from side effects which are sometimes considerable, so if you can lower your blood pressure with natural remedies it would be a shame not to try.

Either way, don't make your decision lightly. Talk to your doctor before starting treatment, even if it is a natural one.