



Presentation of the Cardiovascular Risk Prevention Programme:



Cardiovascular diseases are a series of disorders of the heart and blood vessels. According to the WHO, they are the number one cause of death in the world, in front of cancer and respiratory diseases.

The cardiovascular risk factors are those associated with a higher probability of suffering a cardiovascular disease: **cholesterol, diabetes, high blood pressure, smoking, genetic predisposition, stress, obesity and heart rate.**

Below you can see a presentation endorsed by health experts which explains how cardiovascular diseases occur and what role the so-called cardiovascular risk factors play in the development of said diseases.

This is the first in a series of infographs included in the Cardiovascular Risk Prevention Programme, part of COMSA Corporación's Plan for the Promotion of a Healthy Lifestyle.

Plan for the Promotion of a HEALTHY LIFESTYLE PREVENTION OF CARDIOVASCULAR RISK



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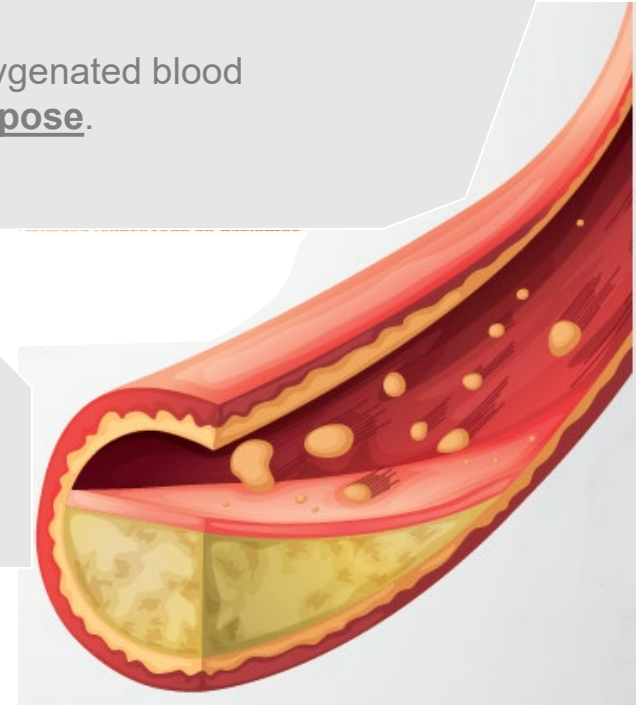
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01 | WHAT CAUSES CARDIOVASCULAR DISEASE?

Cardiovascular disease occurs when the arteries that carry oxygenated blood to our organs deteriorate and cannot adequately fulfil their purpose.

The most common cardiovascular disease is coronary heart disease or ischemic heart disease, which occurs when the heart deteriorates because it is not receiving enough blood.



The most common cause is a process known as atherosclerosis. In this process the blood vessels harden and narrow as a result of the accumulation of fat and other substances that are deposited on the walls of the arteries.



The so-called “**Cardiovascular Risk Factors**” play a part in the development of cardiovascular disease.

The more risk factors a person has, the more chance they have of suffering from a cardiovascular disease (accumulative effect).

UNCHANGEABLE FACTORS:

- Age
- Family history (Genetic predisposition)

CHANGEABLE FACTORS:

- High cholesterol
- High blood pressure
- Diabetes
- Smoking
- Obesity
- Sedentary lifestyle
- Stress

Of all the risk factors, 3 stand out for their particular relevance and influence on the prevalence of cardiovascular disease and are therefore considered factors of greater risk or main risk factors:

- **High cholesterol**
(multiplies cardiovascular risk by 4)
- **High blood pressure**
(multiplies cardiovascular risk by 3)
- **Smoking**
(almost doubles cardiovascular risk)



02 | FACTORES DE RIESGO CARDIOVASCULAR HIGH CHOLESTEROL

High cholesterol: This is associated with an unhealthy lifestyle and poor nutrition although some people are genetically predisposed.

Total cholesterol (TC) and LDL cholesterol are associated with the risk of ischemic heart disease.

A person is considered to have high cholesterol when their total cholesterol levels are > 190 mg/dl.

Colesterol LDL (malo):

Es el que se deposita en la pared de las arterias y forma las placas de ateroma.

HDL (good) cholesterol:

This is the cholesterol that transports excess cholesterol back to the liver to be destroyed.

Click on the link below to find out when is cholesterol bad?:



<https://youtu.be/grqt2hAjiHE>

(Video in Spanish)



02 | FACTORES DE RIESGO CARDIOVASCULAR HIGH CHOLESTEROL

Why is high cholesterol a risk factor?

When the cells are incapable of absorbing all the cholesterol circulated by the blood, the excess is deposited on the artery walls and contributes to their progressive narrowing leading to atherosclerosis.

Total cholesterol:

- Normal: less than 200 mg/dL.
- Normal-high: 200 to 240 mg/dL.
- High: over 240 mg/dL.

It has been shown that people with blood cholesterol levels of 240 have twice as much risk of suffering a heart attack as those with levels of 200.

Click on the link below to find out
[what are the risks of high cholesterol?:](https://youtu.be/Ng5LDCjpbQ4)



<https://youtu.be/Ng5LDCjpbQ4>

(Video in Spanish)



02 | FACTORES DE RIESGO CARDIOVASCULAR HIGH BLOOD PRESSURE

High blood pressure: High blood pressure damages the arteries which become harder and narrower, hindering blood flow and multiplying the effort the heart has to make.



Normal blood pressure. The maximum levels of systolic blood pressure (maximum) are between 120-129 mmHg and those of diastolic blood pressure (minimum) are between 80 and 84 mmHg.

A person is considered to have high blood pressure when their blood pressure figures are equal to or exceed 130-80 mmHg

High blood pressure is considered a silent disease, as it has no symptoms. That's why it's important to know and periodically check blood pressure levels.

You can click on the link below: [how do I know if I have high blood pressure?](https://youtu.be/JS-nXXHYrlo)



<https://youtu.be/JS-nXXHYrlo>

(Video in Spanish)



02 | FACTORES DE RIESGO CARDIOVASCULAR DIABETES

Diabetes: Diabetes is a chronic illness that is characterised by an increase in blood sugar, causing small lesions in the blood vessels (particularly in the heart, brain, kidneys and retina).

The figures that are considered normal, in healthy people who haven't eaten for the last 12 hours, are those falling between 60 and 110 mg/dL.

Diabetes is related to other coronary risk factors (high blood pressure, obesity, a sedentary lifestyle, etc.) and leads to a series of cardiovascular and renal complications.



There are two types of diabetes:

Type 1: The person's body does not produce insulin, meaning this must be administered on a regular basis.

Type 2: The body does not produce or does not use insulin correctly. Frequently appearing in adults (does not always require the administration of insulin).

You can click on the link below: [how does diabetes affect the heart?](https://youtu.be/82rcJ2zkubg)



<https://youtu.be/82rcJ2zkubg>

(Video in Spanish)



Smoking: Smoking significantly increases the risk of suffering a heart attack or stroke.

Smoking fosters the development of **atherosclerosis** and increases the likelihood of **thrombotic phenomena in the arteries.**

Smoking is related to other serious diseases such as **cancer, chronic obstructive pulmonary disease,** etc.

You can click on the link below: **[how does smoking affect the heart?](https://youtu.be/2Tu8qqyfaC8)**



<https://youtu.be/2Tu8qqyfaC8>

(Video in Spanish)



02 | FACTORES DE RIESGO CARDIOVASCULAR SEDENTARY LIFESTYLE

Sedentary lifestyle: Physical inactivity or a **lack of exercise** is considered to be one of the major factors in the development of cardiovascular disease. People with sedentary lifestyles are at **greater risk of suffering atherosclerosis, high blood pressure and respiratory diseases.**

The only way to combat a **sedentary lifestyle** is with **physical activity.** The key is to **change sedentary lifestyle and leisure habits** and transform these to increase your level of physical activity and sport.



A sedentary lifestyle contributes to accentuating the effects of other risk factors like **obesity, high blood pressure and cholesterol.** People with sedentary lifestyles tend to be overweight and often lack a balanced diet.



02 | FACTORES DE RIESGO CARDIOVASCULAR OBESITY

Obesity: The risk of obesity depends largely on the location of the fat. Fat that accumulates in the area of the abdomen has the greatest effect on the heart. That's why keeping your weight within reasonable limits is very important for the normal functioning of the heart, blood vessels, metabolism, bones and other organs of the body.



What is a normal waist measurement?

88 centimetres for women and 102 centimetres for men.

If an overweight person's waist measurement is lower than the values mentioned then we talk about peripheral obesity, whilst if the waist measurement is higher we talk about central obesity.

It is closely related to diabetes, high blood pressure and heart failure. High blood pressure is twice as common in obese people as in people of normal weight.



02 | FACTORES DE RIESGO CARDIOVASCULAR STRESS

Stress: Stress is tension caused by overwhelming situations that cause psychosomatic reactions or psychological disorders that can be serious.



Stress occurs according to the intensity of an external stimulus and a person's individual response capacity to deal with it.

All this makes it difficult to monitor as a cardiovascular risk factor, as it depends on how the individual adapts to the situation that is affecting them and how they deal with it.

The link between emotional stress and major coronary events was established a long time ago and is accepted by the scientific community.

**THANK YOU FOR
YOUR ATTENTION**

**Take care of your health,
take care of your future**



WE COMSTRUCT THE FUTURE
+ HEALTHY