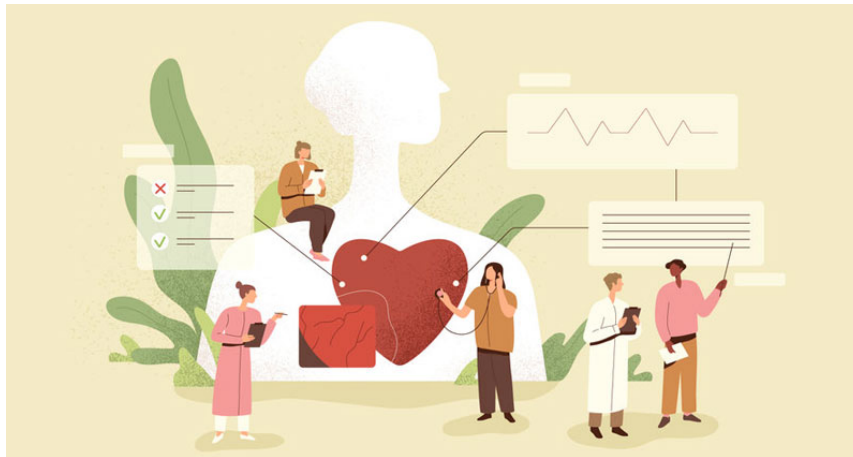# HEART HEALTH STARTS AT THE TABLE



## Cardiovascular well-being starting from nutrition

One of the most important scientific projects in the world, which has been underway for 30 years now, is trying to answer two existential questions: **how do we live**? and **how will we die**?

The **Global Burden of Disease Study** (GBD – the study of the burden that diseases represent on a global level – [1]) was started in 1990 with the aim of bringing together

information from all countries of the world on mortality rates and risk factors, at the same time measuring the decrease in quality and life expectancy due to the most common diseases.

The enormous amount of data obtained for three decades has allowed us to highlight:

- the progressive increase in chronic degenerative diseases and a decrease in infectious diseases;
- a general lengthening of life characterized, however, by greater disability due to the above-mentioned diseases;
- that by 2030 a sharp increase in the incidence of psychiatric diseases is expected, such as, for example, bipolar disorder and depression.

The latest editions of the GBD have defined that **ischemic cardiovascular diseases** (coronary heart disease, heart attack, angina) **are the main causes of mortality in the world**. In addition to being responsible for 16% of deaths in 2017 (therefore 1 death out of 6 worldwide for a total of 8.9 million deaths), the number of years of life lived in a condition of disability is increasing [2].

**So, we live longer but in worse health conditions.**

## The main risk factors

GBD has allow to establish plentiful cause-and-effect correlations between the incidence of chronic diseases (cardiovascular, autoimmune, respiratory …) and factors related to **lifestyle.**

With regard to ischemic cardiovascular diseases, the researchers, authors of the study published in the European Heart Journal – Quality of Care and Clinical Outcomes [3], defined **the three main risk factors**, going to "weigh" their contribution on mortality to world level.

In detail, **improper nutrition** accounts for 69.2% of deaths due to heart disease, followed by **high blood pressure** (54.4%) and, in third place, by high **LDL cholesterol** (41.9%).

It is worth underlining that **hyperglycemia** and the high **body mass index** are gaining ever greater "weight" on world mortality, so much so that they are defined as "emerging risk factors", in line with the emerging nature of the obesity epidemic and of new metabolic diseases in the world.

## The impact of improper habitual diet

This article details which eating habits can contribute to the definition of the **food risk factor**. For each habit, the daily consumption values are defined which, on the contrary, would allow to **minimize the risk**.

The following table shows the data relating to the dietary risk factor for heart diseases, defined thanks to the GBD data [3], with the guidelines for 2021 dictated by the European Society of Cardiology [4].

| Guidelines of the European Society of Cardiology | FOOD RISK FACTOR | DAILY CONSUMPTION VALUES TO MINIMIZE THE RISK |
|---|---|---|
| *"Adopt a diet based more on vegetarian sources and less on animal sources"* | low consumption of fruit | 200–300 g |
| | low consumption of vegetables | 290–430 g |
| | low consumption of whole grains | 100–150 g |
| | low consumption of dried fruit | 16–25 g (not salty) |
| | low consumption of fiber | 19–28 g |
| | low consumption of legumes | 50–70 g |
| *"Saturated fatty acids must represent a maximum of 10% of the total intake energy* | low consumption of omega-3 (EPA and DHA) from fish | 200–300 mg |
| | low | 9–13% |

| | | |
|---|---|---|
| *and must be replaced by PUFA and MUFA"* | consumption of polyunsaturated fats (PUFA) | of the daily energy intake |
| *"The consumption of red meat must be reduced, the consumption of processed meat must be minimized"* | high consumption of processed meat | 0–4 g |
| *"Sugary drinks should be avoided"* | high consumption of sugary drinks | 0–5 g |
| *"The consumption of trans fats must be minimized, especially from processed foods"* | high consumption of trans fats | 0–1% of the daily energy intake |
| *"Salt consumption must be reduced"* | high sodium consumption | 1–5 g |

# Healthy diet, lower cardio incidence

According to data collected by the 2017 Global Burden of Disease, **69.2% of deaths from heart disease could be avoided if a healthy diet would be adopted.**

The very strong influence that nutrition has on cardiovascular health should not surprise us: in fact, eating habits sequentially determine the weight that other risk factors (such as dyslipidemia, blood pressure, body mass index and hyperglycemia) have on the well-being of the individual.

Making substantial but, all things considered, achievable **changes to one's usual diet would improve the quality and life expectancy of the person**, creating a positive cascade effect on all other risk factors.

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To know more:

[1] https://www.thelancet.com/gbd

[2] https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death;

http://www.healthdata.org/results/gbd_summaries/2019

[3] Haijiang Dai et al. (2020) Global, regional, and national burden of ischaemic heart disease and its attributable risk factors, 1990–2017: results from the Global Burden of Disease Study 2017, European Heart Journal – Quality of Care and Clinical Outcomes, https://doi.org/10.1093/ehjqcco/qcaa076

[4] 2021 ESC Guidelines on cardiovascular disease prevention in clinical practice European Heart Journal, Volume 42, Issue 34, 7

Article by the editorial team of Lipinutragen

The information given should in no way replace the direct relationship between health professional and patient.The food recommendations in the article are not intended as a substitute for a personalized meal plan and are to be adapted to specific cases.