

ANALYZED PARAMETERS

- **ARACHIDONIC ACID (AA):** the most significant fatty acids of the Omega-6 family. All "bad" eicosanoids derive from it.
 - **ICOSAPENTAENOIC ACID (EPA):** the most significant the fatty acids of the Omega-3 family. All "good" eicosanoids derive from it.
- These two fatty acids compete for the same enzymatic system, and this is the reason why it is so important and useful to monitor their ratio.
- **INSULINEMIA:** measure of the concentration of blood insulin: anabolic hormone which regulates the larger part of the metabolic processes.
 - **GLYCEMIA:** measure of the concentration of blood glucose: it varies during the day depending on the quantity of ingested carbohydrates.
 - **HOMA INDEX** (Homeostasis Model Assessment): measure of the risk of incurring in diabetes mellitus type 2, a metabolic pathology, which strikes more and more the Western society nowadays.

In your city, you can contact:

OTHER DIAGNOSTIC TESTS CARRIED OUT BY NATRIXLAB:

- **FOOD INTOLERANCE TEST:** assessment of food intolerance with the ELISA (Enzyme Linked Immuno Sorbent Assay) method.
- **GLUTEN SENSITIVITY TEST:** non-celiac gluten sensitivity evaluation.
- **HORMONAL PROFILES:** Weight Loss, Stress, Sport, Goodnight, Woman (Fertility\Menopause), Man.
- **CELLULAR AGING FACTORS:** global assessment of cellular aging by analyzing the 4 main processes implied (oxidation, inflammation, methylation, and glycation).
- **LIPIDOMIC PROFILE:** Evaluation of plasmatic or membrane fatty acids profile.
- **CHECK UP PROFILES:** prevention of the main diseases of organs and systems.
- **IN FLORA SCAN:** the most in-depth assessment panel for intestinal health.

Tele
nutrizione



*YOUR NUTRITIONIST
ALWAYS BESIDE YOU*

After the analysis, you can request on-line a specific nutrition program through the telemedicine service called "**Telenutrizione**". A team of doctors and nutrition specialists can assist patients during their nutrition program. For further information, visit the site.

www.telenutrizione.com

For more information you can contact us from Monday to Friday from 09:00 to 13:00 and 14:00 to 18:00 (+39 0522 232606).



NATRIX s.r.l.u.

Via Cavallotti, 16 - 42122 Reggio Emilia - Italy (IT)
Tel: +39 0522 232606 - Fax: +39 0522 506136
E-mail: info@natrixlab.it

www.natrixlab.com



ZONA PLUS TEST

*(AA/EPA) ratio assessment
Insulinemia, Glycemia, HOMA Index*

A PRECISE INDICATION
OF THE HORMONAL BALANCE

The "**Zone Plus Test**" quantifies the ratio between arachidonic and eicosapentaenoic acid (AA/EPA) from blood samples and in the analysis of the insulinemia and glycemia, to monitor how the glucidic metabolism is regulated. In accordance with the Zone lifestyle developed by U.S. chemist Barry Sears, these exams are the most effective tools to assess the balance between two hormone families derived from the two fatty acids (the "bad" eicosanoids and the "good"). Moreover, we assess insulin levels, which should always be monitored and kept at low concentration, choosing meals with a low overall glycemic load. The test provides crucial indications to take advantage from when elaborating a nutritional regimen with a low overall glycemic load, and it helps the specialists in optimizing and personalizing the integration of Omega-3 fatty acids, thus maintaining the values of the AA/EPA ratio within ideal parameters. In other words, this analysis evaluates if the body is capable of fully expressing all its potential.

THE IMPORTANCE OF INDIVIDUAL WELL-BEING

Over the last decades, medical science has increasingly attributed importance to nutrition as a form of prevention of many pathologies. The concept of health is no longer defined as the absence of illness, but as a condition of mental and physical wellbeing. As pointed out by Dr. Sears, if a person does not suffer from a known disease does not necessarily imply he is well. Perfect health and wellbeing should represent one of the main goal of modern medicine, which gives the priority to medical treatments of full-blown illnesses. The necessary conditions for an organism to maintain a perfect health are:

- reduction of the inflammatory processes
- improvement of cardio-vascular health

Both these conditions may favor the regression of a large number of chronic pathologies affecting the body. To achieve these goals, it is necessary to reach a condition of hormonal balance, which depends on the follow-up of the insulin production and of those formidably powerful substances of hormonal nature, the eicosanoids, which derive from Omega-3 and Omega-6 fatty acids.

The **"Zone Plus Test"** assesses how health and wellbeing improve over time, integrating a proper diet with personalized doses of Omega-3 and by lowering the glycemic load of each meal.

The Omega-3 are essential to achieve the hormonal balance which coincides with wellbeing concept, and to objectively monitor this balance and to fit the doses to the peculiar needs of each subject, the only way is to undergo the "Zone Plus Test" every month.

POLY-UNSATURATED FATTY ACIDS

The poly-unsaturated fatty acids have one or more single bonds in their molecule which give them special physical and chemical properties. Some of these are defined as "essential", because the organism is not capable to synthesize them and, therefore, they must

be taken with the daily diet. In particular, the essential poly-unsaturated fatty acids are linoleic and alpha-linolenic acid, respectively precursors of the Omega-6 and Omega-3 families.

THE EICOSANOIDS

The eicosanoids are a variety of local hormones (prostaglandins, thromboxanes, leukotrienes, lipoxins) derived from poly-unsaturated fatty acids. They have crucial physiological roles in organism's survival: their secretion affects the synthesis of nearly all the other hormones. Depending on which are produced in greater quantity, the "good" or the "bad", they trigger either great benefits or heavy damages.

REGULATION OF THE METABOLISM

To structure an ideal diet it is useful to know the glycemic indexes (GI) of foods, the capacity of increasing blood glucose concentration after the ingestion, to favor the intake of foods with low GI, such as vegetables, fruit, several cereals, fish, and white (poultry) meat, and avoiding refined carbohydrates, e.g. pasta, bread, rice, simple sugars and sweets.

Moreover, it is essential to regulate insulin which regulates:

- glucose storage in cells;
- production of endogenous cholesterol;
- fat storage in adipose cells;
- hunger/satiety: blood glucose drops drastically and hunger appears.

THE IMPORTANCE OF THE OMEGA-3 FATTY ACIDS

Omega 3 have different physiological and metabolic effects:

- they modify the metabolism of the plasma lipoproteins, leading to a reduction of the triglycerides, during fast but also in the postprandial phase;
- they enable the regression of the atherosclerotic process, thanks to the reduction of the atherogenic lipoproteins, the LDL (Low Density Lipoproteins);
- they reduce the risk of thrombosis, one of the worst complication of atherosclerosis which may lead to myocardium failure;
- they decrease all the inflammatory processes, thanks to the inhibition of the production of pro-inflammatory molecules.

These effects can be traced back to the action of the "good" eicosanoids, derivatives of Omega-3 fatty acids.

THE IMPORTANCE OF THE DIET AND THE INTEGRATION IN MODULATING THE AA/EPA RATIO AND INSULINEMIA

Our health depends directly on the nutritional choices we make every day. Food is the most powerful hormonal stimulator known to man, more powerful than any drug. Over the last century, changes have occurred in what we eat, which led to negative consequences for the population's wellbeing:

- increase in consumption of carbohydrates;
- increase in the intake of Omega-6 fatty acids (animal proteins and fats).

This changes in the lifestyle has dramatically worsened the AA/EPA ratio and considerably increased metabolic pathologies, diabetes mellitus, overweight, obesity, hypertriglyceridemia, hypercholesterolemia. Several studies show how these parameters can be regulated with a balanced diet, in synergy with a conscientious integration of Omega-3 fatty acids. Nutrition plays a key role in preventing the most widespread pathologies, and Omega-3 plays an important part in this context.