# THE ANTI-AGING PROFILE

The ANTI-AGING PROFILE allows to detect the antioxidant stress global balance and it is an instrument able to give the doctor useful information for the evaluation of the patient's general health condition.

The global balance of oxidative stress involves:

- Free Radicals Test (F.R.T.): measurement of oxygen free radicals (hyperoxides) in serum.
   A colorimetric method is used for measuring the concentration of total hyperoxides on blood samples at an early stage. This assures the good quality of the final result.
- Antioxidant Capacity Test (A.C.T.):
   evaluation of the whole set of substances
   (enzymes, vitamins, polyphenols, etc.) in
   the serum which can oppose the activity of
   free radicals. A.C.T. is able to measure the
   patient's serum ability to oppose oxidation.

# THE IMPORTANCE OF THE TEST

**ANTI-AGING PROFILE** recommended for everybody even for people in good health because everybody is exposed to risk factors such as UV rays, pollutants, food pollutants, etc.

- Suitable to strike the balance between your aging and your health status.
- Useful for people exposed to pro-oxidant factors (bad diet habits, polluting substance in workplace, inadequate physical activity).
- Recommended for all patients suffering from pathologies related to oxidative stress (rheumatoid arthritis, atherosclerosis, diabetes, Alzheimer's disease, etc.).
- Suitable for the control of peculiar pharmacological treatment (radio and chemotherapy, contraceptive pill, cortisone).
- It is able to prevent or optimize the after-effects of oxidative stress through specific therapeutic approaches (diet and integrators).

In your city, you can contact:

#### OTHER DIAGNOSTIC TESTS CARRIED OUT BY NATRIXLAB:

- FOOD INTOLERANCE TEST: assessment of food intolerance with the ELISA method.
- GLUTEN SENSITIVITY TEST: non-celiac gluten sensitivity evaluation.
- **CELIAC TEST**: Immunological evaluation of the possible positivity to celiac discase.
- 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).
- IN FLORA SCAN: the most in-depth assessment panel for intestinal health.
- MINERAL EVO: nutritional minerals and heavy metals assessment.

# 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 website.

### www.telenutrizione.com

For more information you can contact us from Monday to Friday from 09:00 a.m. to 1:00 p.m. and 2:00 p.m. to 6:00 p.m. (+39 0522 232606).



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# ANTI-AGING PROFILE (A.A.P.)

# Global evaluation of oxidative stress



"Anti-Aging Profile" is able to determine the alobal balance of oxidative stress. This score is calculated through evaluation of the balance in free radicals production and antioxidant power. ANTI-AGING PROFILE includes Free Radicals Test (F.R.T.) aimed at dosing free radicals and **Antioxidant Capacity Test** (A.C.T.) which measures the antioxidant power.

We can't stop the aging process, but we can do a lot to slow it down.

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Oxidative stress constitutes the basis for many pathologic conditions, and premature aging as well. The delicate genetic mechanism that controls speed of cell aging is negatively influenced by oxidative stress.

According to Harman's theory (1956) aging is a by-product of oxidative stress caused by an excess of oxygen free radicals in the body.

Oxygen Free Radicals are high reactive molecules having strong oxidant power, which is harmful for the whole body. Oxygen is usually essential for life, but in this case it becomes a dangerous source of free radicals. Oxidative stress involves cell aging and therefore tissues aging. For instance, skin aging (wrinkles and blemishes) is one of the most visible signals. A certain amount of free radicals is to be considered physiological; in fact, in healthy organisms free radical production is balanced by their neutralization. During millennia of evolution process living bodies have developed a complex defence system, the so called antioxidant system, in order to prevent or minimize free radicals Physiological damage. disbalance between free radicals production and their elimination has to be considered dangerous for organisms.

It has been proved that oxidative stress is a risk factor; therefore, it is crucial to keep free radical production within "normal" levels, so you have to know this value and antioxidant capacity as well.

### **FACTORS CAUSING OXIDATIVE STRESS**

It is important to know factors which influence free radicals production in order to control it.

## Among external causes:

- Chemical factors: drugs, smoking, alcohol, medicaments (e.g. contraceptive pill, antibiotics, antitumorals), polluting substances (e.g. nitric oxide, carbon monoxide, unburnt hydrocarbons, nitrates, aldehyds, nitrogen dioxide).
- Physical factors: ultraviolet and ionizing radiations, electromagnetic fields, radio frequencies, microwaves.
- Biological factors: infective illnesses, parasitic diseases, inflammations, vaccines.
- Mental factors: depression, anxiety, stress.
- *Nutritional* factors: unbalanced diet, diets rich in proteins and animal fats.

# Among body's internal causes:

- Acceleration of cell metabolism (it can occur after intense and extended physical effort, done without practice).
- Some pathological conditions that cause increase in free radical production and reduction of antioxidant defences (diabetes, Alzheimer's disease, rheumatoid arthritis, dislypidemic diseases, etc.).

### ANTIOXIDANT DEFENCE SYSTEM

The antioxidant system is made up of many antioxidant substances able to oxidize free radicals.

- Enzymes: superoxide dismutase, glutathione peroxidase, catalase.
- Vitamins: vit.A, vit.B, tocopherols.
- Macro and microelements: flavonoids, polyphenols.

The efficiency decrease of the antioxidant defence system can be determined by scarce intake, reduced absorption and/or reduced bioavailability of antioxidants.

### DAMAGES CAUSED BY OXIDATIVE STRESS

An optimum level of oxidative stress is needed for aging well. It has been noted that oxidative stress can cause a decrease in longevity. Some factors, such as obesity, an excessive consumption of calories and an inadequate physical activity, are related to the production of free radicals.

- Acceleration of aging process (premature appearance of white hair, wrinkles, skin blemishes, decrease of muscular mass in favour of fat mass, which can lead to obesity).
- An increase of risk factor to develop strong cardiovascular pathologies (atherosclerosis, ictus, heart attack and ischemia).
- Fertility and sleep disturbs.
- Reduction of immunitary defences and predisposition to infective illnesses.

