

EDITORIAL

Nutrition, Hydration and Sport Possible Antiaging Solutions

We live in a “smart” world, everything that surrounds us is smart, from the TV, phone to clothing and maybe everything that belongs to a current generation of products, all of this was created by human. Science of life, medicine and genetic engineering couldn't find a smart solution that keeps us away from the incurable diseases and preserve our youth. Researching various domains interference, nutrition studies, couldn't stop the aging process, only managed to slow the process. Most of the time, the solutions are closer than we expect and we should look for them in simple accessible things around us.

We also live in a world where our image not only that matters, but can even influence our destiny. Well care look, sizes closer to the ones from standards, positive attitude, always attract and can advantage a person in a certain situation. Of course, a life style that can concretize in movement, nutrition and education is the one that imposes the attitude, the positive thinking and the self-confidence. But in this entire carousel, time plays the main part, and most of the time is the biggest enemy. Aging is a progressive process, irreversible and most of the time sad. The fight against aging must be approached with courage, dignity and power but especially with knowledge because aging is not an incurable disease, but a life

stage that determines a decrease of all capacities and causes irreversible appearance changes.

Even though is universal, the aging phenomenon manifests differently on women in comparison with men, and this is influenced by the lifestyle they had before age 40, age that is medical considered starting of the decline.

Unfortunately, as the years pass by, also the excesses from youth are cumulating; the amount being settled at the age when fighting against aging is harder, always opening new situations on which the person does not expect.

The comparative studies of aging phenomenon at women and men are the ones that determine measures in order to slow the process limit the effects and increase the life time and quality it.

Human antiaging nutrition is, at the moment, a highly debated subject starting from a group problem to a book subject and also conference theme. This is a sign and a message towards a research area that can demonstrate through results that aging, even though cannot be defeated, can be slowed... more or less. The approaches regarding antiaging nutrition are various, suggesting nutrition plans and diets which take into account the glycemic index of foods, the color of these, diets based on food combinations, dissociated diet, Mediterranean diet, hypocaloric diet, diets against diseases, antiaging diets and so on, all of these having the same goal in maintaining the great privilege of youth.

The causes of aging are multiple and complex, the factors which accelerate the process are stress of all kind which is also equal with genetics, pollution factors from atmosphere that can concretize with pollution from life style and work, active or worse, passive smoking, prolonged exposure at UV radiation (is one of the favoring facts of skin aging that manifest with “unbearable” stains apparition, moles and “impossible” wrinkles), nutrition based on excessive processed food, rich in “empty calories” and poor in vitamins, minerals, enzymes that are specific in “raw” healthy food, sedentariness with all the bad consequences, the third millennium diseases (hypertension, dyslipidemia, diabetes type I or II – WHO statistics), free radicals.

The aggressiveness of free radicals manifests by starting of the chain reactions that degrades the cellular membrane, protein, lipids or even the DNA molecules. Basically, free radicals attack every cell which comes in contact with, take from its electrons and the attacked molecule becomes unstable and in search of electrons, the final result is the apparition of new free radicals. The negative effects of these factors are unfortunately, most of the time late.

It is known that the immune system is the one which can “neutralize” some of the excess of free radicals, but also the deterioration of the immune system manifest only with years passing.

In this situation, the fight against years can be taken at the interference of at least four domains: medicine, psychology, genetic engineering and sports.

In the present, cellular antiaging researches are orientated towards the study of the telomeres' length, DNA repetitive regions which are found at the termination of every chromosome and the influence of telomeres' length on aging process and longevity (Texas University, Health Sciences Center).

Other researchers are orientated towards prolongation of the synthesis capacity of some antiaging enzymes like superoxide dismutase (SOD) and glutathione peroxidase (GP), which synthesis is reduced after age 30 (dr. Mihaela Bilic – Health Tastes).

Health is a balanced but fragile condition and involves efforts to keep it. Health is “expensive”, healthy food is expensive, sports practice at gym costs money and involves time, but the hardest thing is to respect a balanced diet. ***Why is so hard to follow a diet? The answer is maybe because we “eat with the brain” and “we live with three elements: water, electrolyte and hormones”***, and this is why we don't have the capacity to permanently control our nutrition.

Hunger and thirst sensation, satiety sensation, body temperature regulation take place between the endocrine system, central nervous system and autonomic nervous system, in the hypothalamus. Gherlin and leptin are two hormones that adjust the hunger, and also satiety. Gherlin is a hormone produced by geese lining epsilon cells from pancreas and by the gastrointestinal mucosa, that

causes hunger and accumulation of fat. Gherlin has hyperglycemic effect by inhibiting the secretion of insulin. Leptin is a hormone secreted by fat cells that can truly be considered an endocrine organ. In the hypothalamus, leptin joins the receptors that cause the satiety sensation. This is how the hunger-satiety mechanism is set, in conclusion “we are led by hormones” and we often cannot control how much, what and how we eat if there is the slightest disorder in the hormonal level.

The nutritional intake should always be correlated with age and the type of activity and must be balanced with food proteins, carbohydrate, lipids, vitamins, minerals, and all these must be consumed from the best quality and safe sources. The balance between the demand and the nutritional intake results the nutritional status, which if it is optimum, the person is perfectly healthy.

Alkaline or acidic nutrition?

Alkaline or acidic nutrition is a long discussed and analyzed topic, the most disputed aspect being the loss of calcium. In conclusion, the alkaline nutrition reduces or limits the urinary losses and the acid nutrition favors urinary calcium elimination. Usually, in the human body doesn't exist overdoses of calcium and is recommended alkaline food with all its benefits, acid food is rarely recommended, only in some pathologies.

Hydration is the magic word at any age, but especially with older age. One of the rules says that is necessary 1 ml of water at every kcal swallowed, but of course a higher consumption can only have beneficial effects. Water cleans the body of toxins and is recommended to drink water even if the thirsty sensation is not present. Another big property of water is that doesn't have calories, water consumption fantastic results is that it doesn't fatten. Dehydration causes hydroelectrolitic disorder with all its negative and very serious consequences.

A balanced nutrition diet has the role of ensuring the function of all body organs and systems and to control and minimize food consumption, the distribution of the meals should be made to ensure the glucose maintenance at constant levels and the food proteins should be as small as possible. To control everything we must have a brain that works perfectly and for this is required the synthe-

sis of some neurotransmitters which require phosphorus, vitamins, minerals, essential aminoacids.

The skin is the largest organ of the body and is the one that provides information about the health of the whole body. The skin is the barrier between the interior and exterior environment, and belongs to the sense organs group with numerous sensory nerve endings, is well vascularized. Skin appearance is influenced both from interior by nutrition and hydration and also from exterior by the involvement of the environmental factors.

The movement is as important as nutrition and hydration for a healthy lifestyle in the intense battle with age. *Basically, movement and hydration always compete each other.*

Sports or any kind of movement, preferably outdoors, must be included in a lifestyle in order to fight against the passing years and with the weight gained. At least two hours after a meal, practicing a medium intensity outdoor “march” with a correct breathing, for at least 30 minutes, leads to burning fat deposits. The effort is called “aerobic” because the muscle energy is given from “the lipids burned in the carbohydrates fire” in presence of oxygen. The body position control is very important and must become a habit.

Possible antiaging solutions are: stress elimination, respecting the rest period, respecting a daily schedule of meals, small portions of food, balanced nutritional intake with food principles (proteins, lipids, carbohydrates, minerals and vitamins) food without genetic changes, from unpolluted areas, adequate hydration, alkaline diets rich in raw foods, deeply colored, that contain enzymes, flavonoids, phytonutrients, water-soluble vitamins (B, C), lycopene, minerals (selenium, potassium, calcium, magnesium, phosphorus), essential fatty acids (EPA and DHA), diets that contain complete proteins: eggs, white turkey and chicken meat, fish, liver, giving up smoking, drinking alcohol occasionally and when consumed, natural red wine, rich in tannins with powerful antioxidant, giving up or at least reduce confectionery and pastry sweets and sugar, giving up eating chocolate, and if it is consumed, to be dark chocolate containing 70% cocoa, nutrition through the skin, hydrating with mineral water, nutrition and hydration with natural oils and creams

without parabens and without too many synthetic chemicals, using herbal or clay cosmetic masks, homemade and immediately used to prevent the oxidation of components, respecting a weekly exercise program (light exercise, sports or at least 10,000 steps/day with proper breathing).

Natural food supplements can help, but will be recommended with caution, knowing their side effects, possible associations or interaction with other medicines.

Genetic research conclusions demonstrate a lower activity of genes regarding the aging process in case of a *reduced calorie intake*. The antiaging diets need to take into account the fact that *human must eat less to live long*.

In our world, the amount of information overwhelms us, stress is omnipresent, rest time is always pressed, it is impossible respect meals program and relaxation is a rarely used term. Now is the time for each of us to be the “zero” priority and have the will and power to rearrange our goals. Everyone who takes care of himself through “smart” nutrition, hydration and sports will face challenges and will always be a winner. But of course it is difficult, and the decisions on healthy lifestyle send you on a battlefield with food temptations, but always remember ... *“Look for helping hand on end of own arm.” Confucius*

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