ADVICE from Starbene

GOOD HEALTH STARTS WITH YOUR INTESTINE

PUT AN END TO...

- LOW IRON LEVELS
- DIGESTION PROBLEMS
- MENOPAUSE SYMPTOMS

THE 16 RULES FOR A HEALTHY LIFE

KEEP YOUR HEART, LIVER AND MIND IN SHAPE WITH THE RIGHT SUPPLEMENTS

RESTORE YOUR WELLBEING WITH PHYSIOLOGICAL NUTRACEUTICS

in collaboration with GUNA

Colostrononi

Natural prevention of gastro-intestinal disorders

Colostrononi is an innovative orodispersible formulation with bovine colostrum, indicated for adults and children. Thanks to the synergy of its natural active principles, it helps protect the gastro-intestinal tract by preserving its optimal function.
The action of **Colostro**noni is supported by the **Noni juice** (Morinda citrifolia), with natural protective and stimulating properties.
Colostrononi represents the ideal adjuvant in the prevention of gastro-intestinal disorders, also due to flu and flu-like illness.

Protects your intestinal balance naturally

Colostrononi contains 24 sachets of orodispersible granules

To learn more about Guna food supplements: **www.gunainternational.com/physiological-nutraceuticals**
To learn more about our Company: **www.gunainternational.com**
To learn more about Guna ethical and social activities: **socialhub.guna.it**
To receive more information: **export@guna.it**

GUNA S.p.a. participates in the Zero Impact® Project: the CO_2 emissions generated by its laboratory activities are offset through carbon credits generated by the creation and protection of growing forests.

GUNA S.p.a. - Milan - Italy
www.gunainternational.com

COMPANY WITH QUALITY MANAGEMENT SYSTEM
UNI EN ISO 9001:2008
CERTIFIED BY CERTIQUALITY

CONTENTS

4 ALL ABOUT PHYSIOLOGICAL NUTRACEUTICS
6 THE IMPORTANCE OF THE INTESTINE
10 DISCOVERING MICROBIOTA
12 THE 3R RULE
14 THE 16 RULES FOR A HEALTHY LIFE
18 YOUR SUPPLEMENT FRIENDS
20 HELP YOUR DIGESTION
22 TACKLE DYSBIOSIS
24 PREVENT WINTER AILMENTS
26 FIGHT LOW IRON LEVELS
27 PROTECT YOUR LIVER
28 KEEP YOUR CHOLESTEROL UNDER CONTROL
30 DEAL WITH MENOPAUSE PROBLEMS
32 OVERCOME MENTAL FATIGUE

OUR EXPERTS

* ***Barbara Aghina,*** BIOLOGIST
* ***Alberto Fiorito,*** DOCTOR, HOMEOPATHIST, HOMOTOXICOLOGIST, EXPERT IN NUTRITION
* ***Mario Mariani,*** SURGEON, SPECIALISED IN ANGIOLOGY
* ***Tatiana Rivkina,*** SURGEON, HOMOTOXICOLOGIST
* ***Tiziana Semplici,*** SURGEON, SPECIALISED IN GASTROENTEROLOGY AND NUTRITION, HOMOTOXICOLOGIST.

EDITOR **Annalisa Monfreda**
DEPUTY EDITOR **Sabrina Barbieri**
GRAPHIC PROJECT **Barbara De Toffoli**
TEXTS **Simona Acquistapace**
PHOTO **Shutterstock, iStock, Fotolia**

TO LEARN MORE ABOUT PHYSIOLOGICAL NUTRACEUTICS PLEASE VISIT
WWW.GUNAINTERNATIONAL.COM/PHYSIOLOGICAL-NUTRACEUTICALS

ALL ABOUT PHYSIOLOGICAL NUTRACEUTICS

***Eating properly is the key element for balance in our body's health.** Unfortunately, however, the production processes used in the modern agricultural and food system often cannot guarantee a sufficiently well-balanced intake of the various nutritional elements that are vital for regulating and keeping our bodies healthy. Many minor problems that our bodies suffer from are actually the signs of an unbalanced diet. Over the last ten years, the increasingly detailed knowledge gained in the physiological and nutritional fields has brought about an innovative idea, **PHYSIOLOGICAL NUTRACEUTICS**, i.e. nutrition combined with pharmaceuticals and physiology.

OVER TO THE EXPERT

To understand more about this subject, we interviewed Dr Barbara Aghina, a molecular biologist, head of the Nutraceuticals and Medical Devices line at Guna. «In recent years, scientific research has focused a lot on the nutritional substances found in foods, discovering that some, as well as building and rebuilding our body, also play an essential regulatory function in keeping it healthy», explains the expert. In the event of increased need, or deficiency, nutritional supplements are recommended. «This is the substantial switch from diet to nutraceutics, which therefore leads to restoring good health, via the evaluation of specific

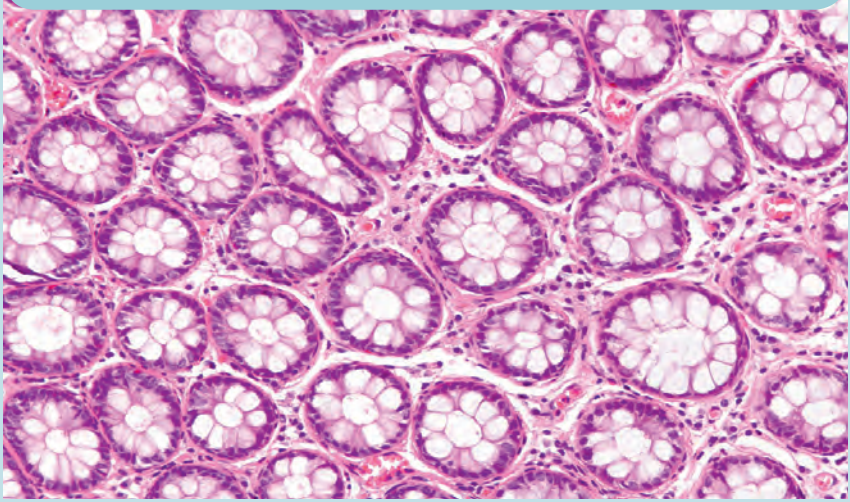
A method achieved by Italian creative research, based on exclusive food supplement formulas, studied to guarantee the perfect, balanced intake of various nutrients and precious phytotherapy elements, according to each person's needs.
*These ultra-modern supplements, halfway between pharmaceuticals and food, act on our **gastrointestinal system**, which is considered crucial by physiological nutraceutics because several functions essential for the whole body occur in this site (such as the absorption of nutrients and water and the regulation of the internal defence "barrier").
*By helping the intestine to efficiently restore its natural state of health and keep it stable, the whole body is preserved, which in turn has unexpected beneficial effects on other organs too, and even on the mind.

THE SUPERORGANISM

*40,000 billion: the number of cells that are contained in an adult human body.
*110,000 billion: the number of bacteria that we host, or rather that host us, as there are 2.7 times more bacteria in our body than human cells.
Therefore, we are not an organism, but a superorganism, a mixture of human being and bacterial population living in symbiosis (see page 10). A perfect machine, where each of the two components is essential to the other. This peaceful cohabitation of bacteria and cells (symbiosis) is what physiological nutraceutics are most interested in.

nutritional integration, thus guaranteeing a "surplus" of well-being for the body.»
Why the adjective "physiological"? «Research has taken another step forwards, selecting the most active, bioavailable form for these precious substances, and associating them with minerals and vitamins (which aid absorption) and with phytotherapeutic elements to actively support them». With regard to the intestine, «Physiological Nutraceutics places it at the centre of its research because it is not considered to be merely an absorption organ - it is a precious defence system against external agents and the regulating "switchboard" for the entire body», says Dr Aghina.

THE IMPORTANCE OF THE INTESTINE



*__With its large surface area, the intestine is our body's most important interface between the "outside world" and the "inside world".__
It does not end here - it is also considered to be the "second brain", ready to metabolise your inner world and your "no" moments.
The relationship between intestine and brain is a two-directional relationship where emotions can alter __intestinal functions__ through the stress pathway and, in turn, this can

INTESTINAL HOMEOSTASIS

**The balance of the gut and its relations with the entire body is known as __homeostasis.__*
To keep it or re-establish it, and thus prevent or cure any gastrointestinal or extra-intestinal alterations, it is necessary to have all four levels of the intestinal barrier in full working order:
the mucous layer (the mucosa that lines the intestinal wall internally),

DID YOU KNOW? The intestine is a true microcosm that controls the balance of the whole body. The mucosa that lines it has various functions, i.e. nervous (it can secrete neuropeptides and neurohormones), endocrine (hormone secretion), immune (cytokine secretion). It is also deeply connected with all the other organs.

affect nervous function and even behaviour.

*In a condition of well-being, the delicate intestinal mucosa acts as an efficient filter, which can select what is useful and what is harmful for your body. Basically, in addition to transforming food into energy, the intestine "trains" a large part of the immune system, thus keeping allergies, intolerances and infections at bay.

Two thirds of our immune system depend on our intestine. The bacteria that "live" in it are mostly friendly, as they protect us from germs, produce antibodies and obstruct the absorption of harmful substances. Therefore, if our gut is healthy, we do not become ill. And yet we are often unkind to our intestine, eating badly and without restraint.

There are some very common conditions such as stress, unhealthy lifestyles, food intolerances, viral, bacterial or parasite infections, prolonged treatment with antibiotics, which can disturb the intestinal balance, frequently causing symptoms such as: diarrhoea * constipation * abdominal bloating * flatulence * digestion problems.

the intercellular junctions (which prevent the penetration of harmful substances), the GALT (the immune system associated with the mucosa) and intestinal microbiota (the large family of bacteria that populates the intestine).

Thanks to* **Physiological nutraceutics *it is possible to intervene on the integrity of these elements, in order to fight inflammatory processes, not only in the intestine, but in the entire body as well.*

* Do you want to “pamper” your intestine and enjoy the consequent benefits deriving from its well-being on your entire body? To start with, have a healthy lifestyle, a well-balanced diet and exercise regularly (e.g. walk half an hour every day). Remember that a good balance between body and mind is essential for well-being. You should always find a little time for yourself, to be with your friends and to rest, and try to reduce tension with a little humour.
Eat fruit and vegetables, but do not overdo it and avoid fruit-only meals because they are not nutritionally complete. Taking **specific probiotics** every day can help you maintain a balanced intestinal flora and improve intestinal function.
Do you drink alcohol? A glass of wine or one small beer a day could even help protect your health, but larger quantities should be avoided.
If you often suffer from intestinal problems, go to your doctor to exclude functional disorders or specific illnesses.

> ALL ILLNESSES ORIGINATE IN THE INTESTINE
> HIPPOCRATES (460-377 B.C.)

ProFlora™

Enhanced probiotic action

NEW

ALLERGEN FREE PATENTED PROBIOTICAL

6 exclusive alive and viable probiotic strains in "gastro-protected, micro-encapsulated" form, with prebiotic fibre.

Each of the six different probiotic strains contained in Proflora is completely protected from the action of gastric juices and has a fivefold **increased capability** to colonize the different intestinal segments. Proflora effectively rebalances the intestinal micoflora in cases of diarrhea, antibiotic therapies, physical and mental stress.

Proflora™ is allergen free certified (Probiotical S.p.A. patent), which means it is free from ANY allergen in accordance with the current regulations (annex II UE Reg. 1169/2011). The absence of the following allergens is guaranteed: cereals containing gluten, shellfish, eggs, fish, peanuts, soy, milk, nuts, celery, mustard, sesame seeds, lupins, molluscs, sulfur dioxide and sulphites.

To learn more about Guna food supplements: **www.gunainternational.com/physiological-nutraceuticals**
To learn more about our Company: **www.gunainternational.com**
To learn more about Guna ethical and social activities: **socialhub.guna.it**
To receive more information: **export@guna.it**

ZERO IMPACT LIFEGATE CO_2

GUNA S.p.a. participates in the Zero Impact® Project: the CO_2 emissions generated by its laboratory activities are offset through carbon credits generated by the creation and protection of growing forests.

GUNA terapie d'avanguardia

GUNA S.p.a. - Milan - Italy
www.gunainternational.com

COMPANY WITH QUALITY MANAGEMENT SYSTEM
UNI EN ISO 9001:2008
CERTIFIED BY CERTIQUALITY

DISCOVERING MICROBIOTA

*__The most complex ecosystem in nature is inside each and every one of us. It is called microbiota__ of the gastrointestinal system and it is the set of microorganisms found in the human digestive system, which plays an essential role for human life. According to scientists, who now call it a “super-organism”, it comprises a number of bacteria that is almost three times the total number of cells in the human body, and at least four million different types of bacteria, which live in close “mutualistic” contact with the intestinal mucosa. The main bacteria are **Bifidobacterium, Lactobacillus and Eubacterium**, but there are several other types and they all play roles that are essential for us:

“

ARE YOU UNSOCIABLE? IT IS DOWN TO YOUR STOMACH

**Some recent studies have shown how bacteria can even affect the mind (and mood) and human behaviour, stimulating the production of substances in the intestine, which reach and affect the central nervous system.*
**For example, according to the most recent scientific studies, some types of bacteria,*

*they improve the bioavailability of some nutrients and help metabolise calories
*they synthesise several types of vitamins
*they regulate the expression of the immune system in the intestinal mucosa
*they support intestinal peristalsis
*they protect the intestinal mucosa - and therefore the entire organism - from attacks by pathogenic micro-organisms, thus preventing the onset of many infections.

The composition of the microbiota is heavily influenced **by diet**, starting with the type of milk given to infants (breast milk or formula), by weaning and then by daily eating habits. Internal and external factors can cause dysbiosis, i.e. alterations (including major ones) of the microbiota. Among them are an unbalanced diet, psychophysical stress, unbalanced lifestyle, incorrect use of medicinal drugs.

DID YOU KNOW?

For years, it was believed that killing bacteria was the right thing to do against illness and antibiotics were overused, with the intention of sterilising the gastrointestinal tract. Then the opposite was done, with generalised probiotic treatments, to help the proliferation of bacteria. Physiological nutraceutics focuses on a new type of intervention: selecting the microbiota.

to protect the delicate balance of their own ecosystem, cause a person to stop exploring new environments, thus reducing the risk of coming into contact with new types of bacteria that could colonise the intestine. The result may be a person who shuts him/herself off from a healthy social life. Research that helps us chose the right mixture of bacteria is therefore most welcome.

THE 3R RULE

*__Rebalance, Repair, Replace:__ This is the motto of **Physiological Nutraceutics**, i.e. the best system for taking care of the intestinal mucosa.
*__Rebalance:__ the ph is one of the most important vital parameters for the maintenance of intestinal health. The delicate intestinal mucosa is one of the tissues that most suffers ph alterations. You can combat metabolic acidosis thanks to specific food supplements that help restore the correct acid-base balance and drain the organism.
*__Repair:__ it is necessary to preserve mucosal integrity, thanks to

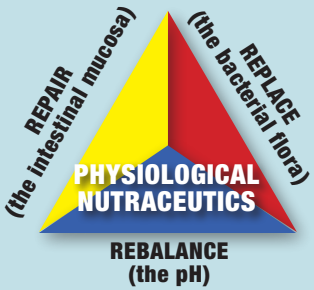
INFLAMMATION, THE SILENT KILLER

*The **3 R Rule** is essential for addressing a widespread, yet little known problem: low-intensity chronic inflammation. Let us take a look at what this means.*
**Several studies have shown that qualitative and quantitative alterations in the microbiota (dysbiosis) could be one of the main causes of inflammatory diseases of the intestine, irritable colon, hypersensitivity to gluten, leaky gut syndrome, and also extra-intestinal problems such as anxiety-depression problems, Alzheimer's disease, type II diabetes, obesity, psoriasis, rheumatoid arthritis, recurring respiratory diseases.*

substances such as colostrum together with noni, which regulates inflammation, selects beneficial microbiota and supports the immune system.

*__Replace:__ the intestinal habitat is now ready to welcome a load of beneficial bacteria thanks to specific probiotic and prebiotic products.

The 3R rule



The 3 R Rule is the most simple, physiological method for guaranteeing perfect intestinal health

DID YOU KNOW?

A recent study highlighted the efficacy of low doses of cytokines (molecules produced by the immune system) in the treatment of intestinal inflammatory diseases. Thanks to the action of these "low-dose" pharmaceutical products, inflammatory cytokines were significantly reduced, anti-inflammatory cytokines increased and the mucosa was better protected with no side effects.

All these illnesses have one thing in common: inflammation (specifically low grade chronic inflammation), a silent killer that gradually leads to the loss of integrity in the intestinal mucosa, until it becomes impossible for the mucosa to act correctly as a barrier.

**The delicate intestinal mucosa is actually continuously attacked by various types of inflammatory agents, such as stress, medicines, food.*

Industrial food is particularly dangerous - the so-called "western diet", which is not well balanced and is rich in fat, salt, sugar and genetically modified foods - is closely connected to the diffusion of diabetes, obesity and colon-rectum tumours, characterised by latent, persistent inflammation, which has an inevitable effect on the integrity of the intestinal mucosa and on the composition of the bacterial flora.

THE 16 RULES FOR A HEALTHY LIFE

***Taking care of your own intestine, protecting the mucosa, keeping low-intensity chronic inflammatory processes under control,** selecting the microbiota, strengthening the immune response, reducing toxin load, and draining the organism: these are the choices to stay in good health, respecting your individuality, your combined mind and body and your harmony with the environment surrounding you.
To achieve these important well-being goals, here are 16 rules to apply daily, to make your life easier, healthier and better.

1 **Eat healthily:** choose organic foods and avoid processed products.

2 **Protect your intestine's health** (and therefore that of your whole body) by using prebiotics and probiotics.

3 **As a mother, if possible, continue with breastfeeding at least until** your child is six months old.

4 **Exercise for at least** 30 minutes per day. By moving your body, you move toxins into the bloodstream and in this way you remove them. There's more - you fight excess cortisol caused by stress, which lowers immune defences. Try a few sports, until you find the one that really works for you: walking, running, dancing, aerobics, swimming, gym... If you do not have a favourite, try yoga: it relaxes the mind and strengthens the body at the same time.

5 **Reduce your consumption of salt** (no more than 5 g per day, in addition to what is already contained in food), sugar and refined fats. Remember that some types of fat are beneficial, such as raw extra virgin olive oil and the omega 3 fats found in fish and dried fruit. Just avoid processed fats.

6 **Go to bed early,** avoiding TV and computers before you go to sleep, because light from the screen interferes with the production of melatonin. So after turning off all screens, create a routine just for you, have a bath, read a few pages of a book, or listen to music - it might only be a few minutes, but it is very important for you to fully relax.

7 **Drink at least 30 ml of water per kg of body weight each day.** So, if you weigh 50 kg, drink one and a half litres of water.

8 **Unless strictly necessary, avoid medicinal products such as antacids and antibiotics** that can alter intestinal bacterial flora. Choose homoeopathic or low-dose medicinal products, that do not have side effects and do not cause intestinal dysbiosis.

9 **To alkalise your body and balance your pH, eat a lot of fruit and fresh vegetables.** If you can't manage to eat large quantities, take a supplement that balances pH levels.

10 **Limit the consumption of foods that can favour inflammation**, such as:
- gluten
- monosodium glutamate (an additive contained in many stock cubes and granular preparations for stock)
- refined sugar, corn syrup with high fructose content and other artificial sweeteners
- fried food
- processed and packaged foods in general.

11 **Do not eat a big meal before going to bed.** Wait at least 2-3 hours between eating your last meal and going to bed. Your main meal should be lunch, not dinner.

12 **Eat anti-inflammatory foods at mealtimes, such as:**
- green leaf vegetables (spinach, chicory, puntarelle...)
- whole fresh fruit
- red fruits
- cold-pressed extra virgin olive oil

- still water and green tea
- foods rich in Omega 3 such as walnuts, hazelnuts, oily fish and linseed.

13 **Breathe deeply and rhythmically, to lower your heart rate and blood pressure.** Remember that it is impossible breathe deeply and be stressed at the same time - so when you feel anxious and you realise that you are breathing in a rapid, shallow manner, make yourself control your breathing. You will stimulate the parasympathetic nervous system and will automatically relax.

14 **Totally banned: smoking.** In addition to all other contraindications, nicotine is also extremely inflammatory.

15 **Do not exaggerate with caffeine** (and with sugar and sweeteners often combined with coffee).

16 **Keep an open mind:** your mind is like a parachute, it only works when it is open. Concentrate on positive thoughts, exercise the brain to detach yourself from the internal gabble of negative thoughts. Negative thoughts are pro-inflammatory.

YOUR SUPPLEMENT FRIENDS

*__Taking care of your own__ intestine, protecting the intestinal mucosa, combating low-intensity, chronic inflammatory processes, selecting the microbiota, supporting your immune response, reducing your toxin load and draining the body. These are the solutions for staying healthy.

CHANGING YOUR HABITS

There is nothing more difficult than getting people to change their eating habits: an Italian mother will not give up serving a nice dish of pasta to her child, an American mother will educate her children to the culture of hot dogs, and others will carry on cooking their traditional Arab dishes...
Cultural certainties do not coincide with our bodies' needs: the only

*__Physiological nutraceutics__ research has led to the creation of innovative food supplements, so it is now possible to have a modern approach to health, based on three different types of intervention:
*by acting primarily on the gastrointestinal system, nutraceutical supplements act on the entire organism;
*by helping prevent intestinal inflammatory processes, they allow to fight “low grade chronic inflammation”;
*by acting on mucosal integrity, they keep the balance in the digestive system and the whole body.
This type of specific food supplements is enough in many cases, in others they are the perfect complement to conventional, homeopathic, homotoxicological and phytotherapeutic treatments.
Research, supported by molecular biology studies applied to phytotherapy and by biological chemistry applied to nutrients, is the basis underlying the development of these preparations. There are pre-clinical and clinical studies on their efficacy, carried out according to strict experimental standards, to support the results obtained in surgeries.

DID YOU KNOW?

Even with a healthy lifestyle and balanced diet there can be moments of weakness due simply to physiological reasons – after the age of 40, for example, the efficiency of digestive enzymes is 50% lower and there is a reduction in oestrogens and calcium during menopause. It is here that Physiological nutraceutical supplements intervene to prolong well-being, so that you can live at your best possible at any age.

truly universal rules are the laws of nature and physiology.
Physiological nutraceutical *supplements are based on these laws. These nutritional principles are studied to guarantee a balanced intake of various nutrients for each person, depending on his or her individual deficiencies or needs,to drastically lower the incidence of pathologies such as metabolic syndrome, excess weight, inflammatory intestinal diseases, etc.*

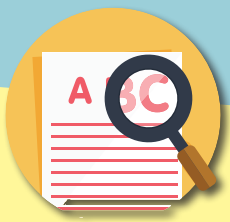
DIGESTION PROBLEMS

IF YOU HELP ENZYMES, YOU SOLVE YOUR PROBLEMS

VERY OFTEN, ESPECIALLY AFTER THE AGE OF 40, THE NATURAL PRODUCTION OF ENZYMES BY THE PANCREASE SLOWS DOWN CONSIDERABLY. WHAT IS THE RESULT? A HEAVY STOMACH, DROWSINESS AND HEADACHES AFTER LUNCH AND DINNER.
HOWEVER, IF YOU SUPPLEMENT WITH VEGETABLE OR ANIMAL NUTRACEUTICALS, MILK, CHEESE AND MEAT WILL NO LONGER BE SUCH A CHALLENGE FOR YOUR DIGESTIVE SYSTEM

***Heavy stomach, bloating, drowsiness and post-prandial headaches,** especially after eating milk, yoghurt, cheese (lactose), meat (complex proteins), vegetables rich in fibres or fatty foods: if this is what your digestion feels like and you are over the age of 40, you probably have a reduced enzymatic secretion. After this age digestive enzyme function is reduced by 50%.
Digestive enzymes are normally secreted in the first part of the digestive tract (mouth, stomach and first part of the small intestine), where they are responsible for the digestion and assimilation of nutrients.
In situations linked to food excess or stress, ageing, irregular lifestyles, there may be a reduction in enzymatic secretion, which leads to bad digestive processes and reduced liver, pancreas

and kidney function.
The solution is a supplement of digestive enzymes that, in addition to helping you digest, also contribute to restoring balance to body purification processes. Enzymes are distinguished according to the type of food that they can break down:
*bromelain (pineapple extract) papain (from papaya), pepsin, pancreatin, trypsin, chymotrypsin are proteolytic enzymes, i.e. they can break down proteins into amino acids (much smaller, more digestible molecules);
*lipase is a lipolytic enzyme that breaks down fat, transforming it into glycerol and fatty acids and facilitating transit through the stomach and intestine;
*lactase is the enzyme that digests lactose, the sugar in milk;
*amylase promotes the breakdown of starches;
*cellulase, an enzyme that our organism cannot produce, breaks down fruit and vegetable fibres.



UNDER THE LENS

Enzymes cannot function alone: they need to be activated by other substances, coenzymes, which are just as important for kick-starting metabolism. These vitamins belong to the group of B vitamins (especially PP), vitamins A, C and K and some minerals such as zinc, magnesium, copper and calcium.

THE EXTRA FACCTOR

TURMERIC, MELON AND FUMARIA

To protect the liver and pancreas, the extracts of these three plants were found to be especially useful combined with enzymes:
*__Turmeric:__ *with powerful antioxidant and protective properties, it contrasts the slowing down of the liver and biliary function*
*__Melon:__ *known for its anti-ageing properties, it is rich in vitamin PP, an important enzyme co-factor that keeps gastric and intestinal mucosae in an efficient condition.*
*__Fumaria officinalis:__ *a plant extract used for its balance-restoring properties in the liver and biliary system.*

DYSBIOSIS

SAY GOODBYE TO STOMACH PROBLEMS THANKS TO SYMBIOTICS

BLOATING, METEORISM, NAUSEA, VOMITING, CONSTIPATION ALTERNATING WITH DIARRHOEA: IF YOU SUFFER FROM THESE SYMPTOMS, HELP YOURSELF WITH A MIXTURE OF SPECIFIC LACTIC

* **It is calculated that 98% of people suffer from dysbiosis. Unbalanced diet** (especially excess consumption of sweets, pasta and leavened food), pharmaceutical treatments and stress can cause the deterioration of some beneficial micro-organisms (microbiota) that are naturally found in the intestine. This can alter the general state of health with:
*diarrhoea * constipation * flatulence * abdominal pain
*meteorism * greater exposure to infections.
To restore balance to the intestinal ecosystem, special supplements known as symbiotics should be taken. They are made up of a combination of:
1) **probiotics, i.e. specific, "gastroprotected" lactic bacteria** - thanks to innovative microencapsulation technologies, at least 2 billion manage to reach the intestine alive and fully functioning;
2) **prebiotics, i.e. indigestible fibres that selectively stimulate the development of bacteria beneficial to microflora**, helping in the full recovery of intestinal functions.
Some particularly useful probiotics are **Bifidobacterium** and **Lactobacillus**, which act synergically and ensure the rapid colonisation of various intestinal segments. Lactobacillus rhamnosus and Lactobacillus plantarum, in particular, are able to produce bacteriocins that fight coliform bacteria, which are responsible for diarrhoea and urinary tract infections. Among prebiotics, **fructo-oligosaccharides** (FOS) pass through the stomach and small intestine undamaged and reach the colon where they are fermented by Lactobacillus and Bifidobacterium, aiding in the absorption of magnesium and calcium

THE EXTRA FACCTOR

LACTOBACILLUS SALIVARIUS

To aid the rapid, long-lasting colonization of the intestine by beneficial micro-organisms, latest-generation symbiotics are enriched with **Lactobacillus salivarius**, *which increases the capacity of the strains to adhere to the intestine's epithelial mucosa.*

New triple action

GLUTEN FREE

3 LAYERS • DIFFERENTIATED RELEASE •

Enzyformula

Enzyformula is a food supplement in controlled-release, "gastro-protected" tablets. Its unique combination of active ingredients is contained in **differentiated-release** layers:

- ***outer layer:*** contains an **enzyme blend** (Papain, Bromelain, Lactase, Cellulase, Amylase, Lipase), which is released in the gatroduodenal region within 60 minutes. Moreover, the extract of ***Phyllantus niruri*** supports the hepatic function, while ***Fumaria officinalis*** extract contributes to the hepatobiliary and digestive function and to the cleansing functions of the body.

- ***"gastro-protected" inner layer:*** contains Superoxide dismutase (extracted from Melon) and ***Curcuma longa***, useful to the digestive function and antioxidant.

Enzyformula is contained in a blister of 20 swallowable tablets

Enzyformula contains:

DIGESTIVE ENZYMES

lactase

lypase, papain and bromelain

cellulase

- ***Curcuma longa*** supports the **digestive function**.
- ***Fumaria officinalis*** supports the **cleansing functions of the body**.
- ***Phyllantus niruri*** supports the **hepatic function**.

Chiara Biondani et Al.
*"Evaluation of the effects of the dietary supplement Enzyformula in functional disorders of the digestive system". Advanced Therapies - Anno III - N. 4 - Febbraio **2014**: 24-33*

To learn more about Guna food supplements: **www.gunainternational.com/physiological-nutraceuticals**
To learn more about our Company: **www.gunainternational.com**
To learn more about Guna ethical and social activities: **socialhub.guna.it**
To receive more information: **export@guna.it**

ZERO IMPACT LIFEGATE CO_2

GUNA S.p.a. participates in the Zero Impact® Project: the CO_2 emissions generated by its laboratory activities are offset through carbon credits generated by the creation and protection of growing forests.

GUNA terapie d'avanguardia

GUNA S.p.a. - Milan - Italy
www.gunainternational.com

COMPANY WITH QUALITY MANAGEMENT SYSTEM
UNI EN ISO 9001:2008
CERTIFIED BY CERTIQUALITY

WINTER AILMENTS

THE MOST NATURAL PREVENTION IS BY USING COLOSTRUM, RICH IN ANTIBODIES

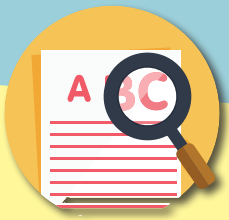
PRODUCED BY THE MATERNAL MAMMARY GLAND IMMEDIATELY AFTER GIVING BIRTH, IT IS A CONCENTRATE OF AMINO ACIDS, VITAMINS, MINERALS AND TRACE ELEMENTS. A FREEZE-DRIED BOVINE VERSION THAT HELPS THE IMMUNE SYSTEM IS AVAILABLE FOR SALE

***"A baby's first vaccination"**: This is how colostrum, the first milk produced by a mother's breast after giving birth, is defined because it is six times richer in antibodies than the milk that comes after it. Its protective action encouraged researchers to study its bovine "relative" that, once skimmed, freeze-dried and pasteurised, was found to be an effective help to the immune system when associated with the intestinal mucosa.

*The gastrointestinal system plays an important role in the delicate self-defence mechanisms of our bodies. Its large surface area (about 400 m2) is the most important interface between the "outside world" and the "inside world".

*When everything works well, the gut mucosa is an efficient filter that can select what is useful and what is harmful for the body. It is an extraordinary **defence barrier** against pathogens and substances that can

harm its integrity, such as free radicals. *In the case of illness or weakness caused by stress, dietary imbalance, irregular lifestyles, the gastrointestinal mucosa can become the main entry route for viruses, bacteria, parasites, fungi and any alteration in the mucosa can give rise to several problems: *influenza * cystitis * candida * gastroenteritis * food intolerances and allergies * diarrhoea * constipation. *Colostrum, thanks to the presence of **immunoglobulins**, helps to protect against viral, bacterial and mycotic infections. With its **amino acid and growth factor** content, it helps the growth and repair of the intestinal mucosa, improving its barrier effect. Bovine colostrum is especially rich in **vitamins A, C, D, E, B vitamins, Coenzyme Q10, trace elements and minerals,** which support cellular metabolism and protect against free radicals.



UNDER THE LENS

A recent study showed how immunoglobulins found in bovine colostrum, also thanks to the simultaneous presence of protective molecules (glycoproteins) and enzyme inhibitors (tryptic inhibitors), can resist attacks by the enzymes in our digestive system and reach the intestine intact.

THE EXTRA FACCTOR

NONI

Also known as Indian mulberry, **Noni (Morinda citrifolia L.)** *is a fruit that is now being noticed for its marked beneficial properties on the immune system, which makes it the ideal complement to colostrum as protection. In particular, the juice contains a high concentration of proxeronine, a precursor of xeronine, a substance that has been implicated in several biochemical processes in the body. It is a useful restorative, anti-inflammatory, anti-bacterial and anti-stress aid.*

LOW IRON LEVELS

SOLVE WITH SUPPLEMENTS THAT DO NOT DAMAGE THE INTESTINE

AN ADEQUATE INTAKE OF THIS MINERAL IN A BIOAVAILABLE FORM HELPS PREVENT THE PROBLEM AND ITS SYMPTOMS, I.E. A GENERAL SENSE OF TIREDNESS, DIFFICULTY IN CONCENTRATING

***Iron deficiency is the most common deficiency in humans** and unbalanced diets or intense sports activity can make it worse. Iron is an essential mineral for the body because it transports oxygen from the blood to tissues via red blood cells, aiding muscular oxygenation and the elimination of toxins.

A specific iron supplement is required in the following cases:

*increased need (in pregnancy, breastfeeding, sports activities);

*intestinal diseases that affect iron absorption (dietary deficiencies, intestinal diseases that affect iron absorption); vegetarian or vegan diets.

*increase loss of blood (physiological, due to heavy periods, or pathological, due to gastritis, gastroduodenal ulcer, gastrointestinal alterations).

In all these situations, taking a suitable amount of iron contributes to the normal formation of red blood cells and haemoglobin and helps reduce tiredness and other symptoms. However, iron-based supplements often cause side effects to the gastrointestinal tract, such as bloating, nausea, vomiting, heartburn and often an upset intestine (with constipation or diarrhoea). To provide the correct amount of iron, in a more bioavailable, well-tolerated form and maintaining intestinal health, it is useful to combine this mineral with other substances, that aid iron absorption. In particular, **vitamin C** and **copper** increase bioavailability, allowing low dosages and maximum tolerance.

THE EXTRA FACCTOR

BAOBAB FRUIT

There is a natural ingredient that aids tolerability of iron in the gastrointestinal tract. ***Dehydrated Baobab fruit flesh****, thanks to its high vitamin, mineral and trace element content, aids the production of haemoglobin (the protein that transports iron) and ferritin (the protein that stores it).*

OVERWORKED LIVER

PORK EXTRACT IS THE PERFECT REMEDY TO HELP IT

DIFFICULTY IN DIGESTION, INTESTINAL PROBLEMS, ABDOMINAL BLOATING, HEADACHES, FLUCTUATING WEIGHT, INTOLERANCE TO CERTAIN FOODS, ESPECIALLY GREASY AND SPICY FOODS: THIS TYPE OF SITUATION CAN BE THE CONSEQUENCE OF A TYPE OF BODY INTOXICATION, CAUSED BY FLOODING THE ORGAN THAT IS THE BODY'S PURIFICATION ENGINE

*__The liver is one of the most complex, sophisticated organs in the body__. It is a true biological "laboratory", it produces bile (which is essential for digesting fats), it is a fundamental storage site for iron, vitamin B12 and copper and it is an excellent filter, which can eliminate food waste and other toxic substances. However, a poor diet with excessive amounts of fats and sugar, being overweight, obesity, too much alcohol, an incorrect use of medicinal products can alter the liver's health, causing digestion problems, weakness, alterations in hepatic functions (transaminase), until the liver's physiological functions slow down and it is no longer able to regenerate itself fully.

*A nutraceutical remedy? **Pork liver:** our grandparents considered it a remedy for all illnesses, but the habit of eating animal offal has now been lost.

Today, fortunately, using an innovative freeze-drying process, its natural nutrients (such as B vitamins, minerals such as iron and essential amino acids for supporting and regulating metabolic and repair processes in the liver) are more bioavailable. The result is a supplement that, taken daily, helps the liver carry out its task of breaking down fats.

THE EXTRA FACCTOR

CHOLINE AND GREEN TEA

These are the ideal allies for pork liver to ensure good liver function. **Choline** *is an essential nutrient that aids hepatic detoxification.* **Green tea**, *rich in polyphenol compounds (also known as catechins) guarantees, according to several studies, an antioxidant action that stimulates hepatic function and reduces fat deposits in the liver.*

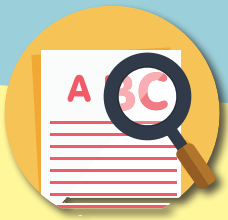
CHOLESTER

KEEP IT UNDER CONTROL WITH FERMENTED RED RICE

IT IS IMPORTANT TO PROTECT THE CARDIOVASCULAR SYSTEM FROM THIS RISK FACTOR. THERE ARE PRECIOUS NATURAL SUBSTANCES THAT HELP TO MAINTAIN THE RIGHT BALANCE BETWEEN LDL (BAD) AND HDL (GOOD) CHOLESTEROL. HOWEVER, THE HEART AND ARTERIES ARE AT RISK IF THERE ARE HIGH LEVELS OF HOMOCYSTEINE, AN AMINO ACID THAT CAN BE REBALANCED WITH FOLIC ACID

*__Excess weight, obesity, high cholesterol levels, triglycerides, homocysteine__: when these factors are present, the health of the heart and arteries is in danger. In addition to a balanced diet and a healthy lifestyle, a natural substance, **fermented red rice**, has the full right to become a part of a balance restoring strategy. This product is obtained from the natural fermentation of rice (Oryza sativa) with a particular yeast called **Monascus purpureus**, which produces substances (monacolins), that have been proven to contribute to maintaining normal levels of cholesterol. These molecules, the most significant of which is **monacolin K**, have a similar structure to natural statins. For this reason monacolin K is used in phytotherapy to rebalance

cholesterol levels in the blood.
*Fermentation by **Monascus purpureus** has been known in China and in Chinese phytotherapy for centuries - fermented red rice is used in several food recipes, to improve blood circulation and to treat individuals suffering from indigestion and dysentery. Several clinical studies carried out on fermented red rice have highlighted a significant reduction in cholesterol, in particular LDL cholesterol, with an increase in HDL cholesterol. The efficacy of these extracts has been so well proven that, unlike other active principles, companies can state (on the labels of their products containing **monacolin K**) that it has positive effects on maintaining normal cholesterol levels in blood, if taken in doses of 10 mg per day.



UNDER THE LENS

In the last 10 years, hypercholesterolaemia (i.e.values over 240 mg/dl) has become increasingly frequent in both men and women: it affects 38% of Italians compared to 24% at the start of the millennium. When triglyceride values are also high (over 170 mg/dl), dyslipidemia is present and it must be treated with a healthy diet, no smoking and specific products.

THE EXTRA FACCTOR

FOLIC ACID

Known for its importance during pregnancy (it prevents some neonatal malformations), ***folic acid*** *has been found to be a precious ally in preventing cardiovascular problems. Supplementing this hydrosoluble vitamin (of the group of B vitamins) prevents deficiencies that can cause anaemia and increased blood levels of the amino acid homocysteine, which several studies have shown to be related to a higher risk of cardiovascular events such as thrombosis, atherosclerosis and vascular damage.*

MENOPAUSE

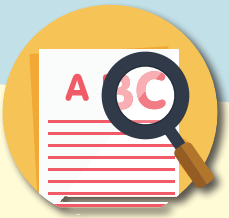
STOP YOU SLEEPING AND AFFECT YOUR MOOD? TRY ISOFLAVONES

WHEN A WOMAN'S BIOLOGICAL CLOCK SIGNALS THE END OF HER CHILD-BEARING AGE, A WOMAN FINDS HERSELF HAVING TO FACE A LOSS OF BALANCE IN HER SLEEP-WAKE RHYTHMS AND MOODS, IN ADDITION TO FEELING HOT FLUSHES AND SUDDEN PERSPIRATION. EFFICIENT NATURAL STABILITY FACTORS ARE PHYTOESTROGENS, PLANT HORMONES THAT DO NOT HAVE SIDE EFFECTS WHEN TAKEN

*__Night-time sweats, hot flushes, changing moods, vaginal dryness, changes in blood pressure, changes in body weight__: these are the most frequent problems during menopause (and also peri-menopause, the period that precedes it). Modern phytotherapeutic research has discovered the existence in some plants of i__soflavones__, also known as phytoestrogens, which can simulate the action of human oestrogen. They have a more bland, but totally natural action, because their molecular structures are very close to those of female oestrogens that disappear during menopause. They have no contraindications like synthetic chemical hormones do.

*There are several plants rich in useful isoflavones, but the best known are

soy, crimson clover and **kudzo** or Pueraria lobata. The extracts from these plants are widely used as phytotherapeutic supports during menopause.
Soy in particular is much appreciated for its considerable nutritional and dietetic properties, especially in oriental countries. Here, where it is eaten daily, a low incidence of menopausal problems, osteoporosis and hypercholesterolaemia is observed.
*When taking soy **isoflavones** it is important to make sure that the intestinal bacterial flora is efficient, because isoflavone molecules are very large and must be cleaved by glycosidases to be assimilated. These enzymes are produced by the intestinal **bacterial flora** so, in addition to taking isoflavones, **specific probiotic Lactobacillus and prebiotics** that increase intestinal bacterial flora should also be taken. In this way, the main ingredients will be better assimilated and will be more effective, in addition to avoiding intestinal bloating.



UNDER THE LENS

Isoflavones have proven useful to address the unpleasant symptoms of the menopause, especially in the initial phases. It is therefore important to start taking them as soon as the symptoms appear or – following the example of oriental women – start taking them when turning 40, in order to prevent the problems arising.

THE EXTRA FACCTOR

MELATONIN

*A winning duo? Isoflavones and **melatonin.** This hormone, naturally produced by our body, can regulate the sleep-wake cycle. A balanced daily intake is useful for restoring balance in neuroendocrine circuits and circadian rhythms and thus help you to fall asleep quickly.*
Additionally, together with isoflavones, it helps limit frequent reawakening caused by night-time sweats, which are typical during menopause.

MENTAL FATIGUE

A MORE EFFICIENT BRAIN WITH INDIAN GINSENG

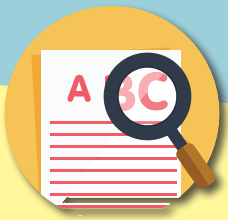
PREVENTING CEREBRAL AGEING, SUPPORTING INTELLECTUAL FUNCTIONS (FOR EXAMPLE IN THE EVENT OF INTENSE STUDY OR WORK PERIODS), SUPPORTING THE BODY IN SITUATIONS OF TEMPORARY BRAIN STRESS, FIGHTING DAMAGE CAUSED BY FREE RADICALS TO MEMORY AND COGNITIVE ABILITIES. DO YOU HAVE ONE OF THESE NEEDS? HELP YOURSELF WITH WITHANIA SOMNIFERA

* **The ability to concentrate and learn does not last forever and suffers highs and lows.** There may be situations of excessive fatigue, caused by overworking or studying, and the continuous wear by free radicals is one of the main causes of cerebral ageing and the deterioration of cognitive functions.
In the event of: * intense study or work * intense intellectual activity * mental fatigue * alteration of memor * ageing, a specific nutritional intake is important - a daily aid for mental tiredness.
Among the efficient natural remedies that support nervous structures, **Indian ginseng (Withania somnifera)** plays a primary role. It is known to have a particular action on

the hippocampus, which plays a decisive role in long-term memory. Among other things, the hippocampus is one of the first areas of the brain to be damaged by Alzheimer's disease. Indian ginseng can be a useful aid in people who are affected by this disease.

*In Ayurveda (ancient Indian medicine) Withania somnifera is used to prolong life, help the mind and improve sexual vigour. It is recommended after heavy stress or during convalescence because of its capacity to help the body and mind recover.

*Another useful supplement is **N-Acetyl-Cysteine** (NAC), known for its antioxidant activity. It is an important precursor of glutathione, our most powerful molecule against free radicals, which tend to damage delicate cerebral structures.



UNDER THE LENS

Research has great expectations from the study of the effects of Indian ginseng. The main active components of this plant appear to be able to balance the production of acetylcholinesterase, a molecule that blocks the correct function of cognitive processes (and more generally of the brain).

THE EXTRA FACCTOR

SELENIUM

Indian ginseng produces its best effects if associated with **selenium**, *a mineral that is one of the most effective natural substances for protecting cells from oxidative stress. Selenium, used synergically with green tea, coenzyme Q10 and manganese, also helps to support the body in the event of mental fatigue, improving learning and concentration capacities.*

GUNA
PHYSIOLOGICAL NUTRACEUTICALS

Colostrononi

Food supplement with bovine colostrum and Noni plant extract

Helps protect the gastro-intestinal tract by preserving its good function.

- 24 x 1.8 sachets

Gunabasic

Food supplement with plant extracts and mineral salts

Useful in cases of mineral deficiencies and to restore the acid-base balance.

- 15 x 7g sachets

Enzyformula

Food supplement with plant extracts, digestive enzymes, Vitamin PP

Specific support for the digestive and hepatic functions.

- 20 tablets – three layers, differentiated release

Gunabrain

Food supplement with Selenium, Manganese, N-acetylcysteine, Coenzyme Q_{10} and plant extracts

6 antioxidant ingredients to help improve concentration and cognitive functions.

- 30 x 840 mg tablets

Epatoguna

Food supplement with freeze-dried liver, Choline and Green tea

Contributes to support the hepatic function.

- 32 x 1.125 g tablets

Gunaelmint

Food supplement with Myrrh, Pumpkin seeds and Turmeric extracts

Useful to naturally support the immune system, reinforce the intestinal barrier and favour the body's detoxifying processes.

- 30x 4.2 g sachets

Ferroguna

Food supplement with Iron, Copper, Vitamin C and Baobab fruit pulp

The unique and ideal solution in cases of iron deficiencies, also during pregnancy.

- 28 x 1.7g sachets

Omeotoxnoni

Food supplement with Noni, plant extracts and Propolis

A selection of natural ingredients acting as an effective support to the respiratory tract.

- 150 ml bottle with dosing cap

Tonicoguna

Food supplement with plant extracts
The natural support in case of weakness, stress and exhaustion.
- 150 ml bottle with dosing cap

GUNAMINO FORMULA

Food supplement with 8 essential amino acids
Ideal adjuvant to *:
-help resolve nutrient deficiencies
-lose weight without wasting away
**Together with a balanced diet and a healthy lifestyle*
- 50 x 1.01 tablets
- 24 x 6.5 g sachets

GUNAMINO FORMULA SPORT

Food supplement for athletes containing essential amino acids, Magnesium and B group Vitamins. With PowerGrape®
The ideal and balanced combination for sportspeople.
- 24x 7.5g sachets

OMEGA FORMULA™

Food supplement with Baobab seeds, Vitamin B6, Folate and red yeast rice
Useful to maintain the normal blood cholesterol levels.
- 80 x 2g chewable tablets

proFEM™

Food supplement with micro-encapsulated probiotics, Pueraria lobata, Soy, Red Clover, Green Tea and Melatonin
For the well-being of menopausal women.
- 20 x 4.7 g sachets

proFLORA™

Food supplement with micro-encapsulated probiotics
Favours the rebalance of the intestinal flora and helps protect the urogenital tract from gut-related bacterial infections.
- 30 x 2.5 g sachets

proFOS™

Food supplement with fructo-oligosaccharides, Vitamin A, Magnesium, Silicon, Sodium Hyaluronate and plant extracts
Supports joint functionality and bone strength, favours skin moisture and elasticity.
- 30 x 5.1 g sachets

VIT FORMULA™ INTEGRATORE ALIMENTARE

Food supplement with Vitamins, Minerals, Trace Elements, Inositol, Choline and Methionine
Contributes to physical and mental wellbeing. Helps protect from the harmful effects of free radicals.
- 32 x 2.5g sachets

www.gunainternational.com

Ferroguna

NEW with steviol glycosides (STEVIA)

Balanced and optimal solution against iron deficiency

Ferroguna is an innovative **orodispersible** food supplement in handy sachets. One dose provides 100% of daily needs of iron, whose absorption is further enhanced by the presence of **Baobab fruit pulp**, **Copper** and **Vitamin C**.

Ferroguna is perfectly tolerated by children, elderly and women and is recommended in cases of increased iron needs due to: heavy menstrual bleeding, pregnancy, breastfeeding, sports activity.

GLUTEN FREE

QUICK DISSOLVING WITHOUT WATER

Box of 28 sachets

Orodispersible, immediately bioavailable iron.

A. Roncuzzi et Al.
"Efficacy and tolerability of Ferroguna versus iron sulfate in the treatment of iron deficiency anemia in pregnancy: non-inferiority controlled clinical trial". Giornale Italiano di Ostetricia e Ginecologia Vol. XXXIV - n.6 Novembre-Dicembre 2012

To learn more about Guna food supplements: **www.gunainternational.com/physiological-nutraceuticals**
To learn more about our Company: **www.gunainternational.com**
To learn more about Guna ethical and social activities: **socialhub.guna.it**
To receive more information: **export@guna.it**

ZERO IMPACT LIFEGATE CO_2

GUNA S.p.a. participates in the Zero Impact® Project: the CO_2 emissions generated by its laboratory activities are offset through carbon credits generated by the creation and protection of growing forests.

GUNA terapie d'avanguardia

GUNA S.p.a. - Milan - Italy
www.gunainternational.com

CERTIQUALITY

COMPANY WITH QUALITY MANAGEMENT SYSTEM
UNI EN ISO 9001:2008
CERTIFIED BY CERTIQUALITY