Food supplement

DuoLife My Gastrin is a food supplement in liquid form, containing natural ingredients of plant origin, including the Asafin®* proprietary formula based on oleo-gum-resin sourced from asafoetida giantfennel (*Ferula assa-foetida*). The Asafin®* formula is obtained in the patented FenuMAT™* technology guaranteeing its optimal quality and bioavailability. The formulation includes the highest-quality natural raw ingredients that support digestive processes, normal intestinal peristalsis, healthy bowel habits, normal pancreas and liver function, as well as that of gallbladder and bile duct. It is a valuable source of numerous bioactive compounds found in standardised plant extracts. Health-oriented effect of ingredients in this food supplement was proven by clinical trials and documented in scientific reports.



100% natural ingredients



Ingredients subjected to clinical trials



Broad spectrum of action



Vegan



Synergy of action



Gluten-free



Digestive disorders are one of the most common causes of gastrointestinal complaints. They may affect as many as 60% of the adult population¹. Most often, they appear due to dietary mistakes, e.g. after consuming food that is difficult to digest (such as mushrooms, beans, onion, cabbage), fast foods, large portions of food, as well as due to unbalanced diet and insufficient amount of dietary fibre in food. Indigestion can also be a result of improper eating habits which comprise lack of adequate chewing and fast eating. Digestive disorders are usually accompanied by such symptoms as: heaviness in stomach, constipation, diarrhoea, bloating, nausea, eructation, stomach and intestinal cramping. These symptoms occur periodically in 20% of people with indigestion, while for as many as 60% they are permanent¹.

A properly balanced diet, appropriate eating habits, and proper supplementation support the optimal functioning of the digestive tract.

DuoLife My Gastrin food supplement is intended for use as support for optimal body functions in the case of:

- people who want to support the proper functioning of their digestive tract, including stomach and intestines, on everyday basis;
- people who care for normal function of liver, pancreas, gallbladder and bile ducts;
- people with constipation problems with slow intestinal transit;
- people who suffer from indigestion;
- people suffering from bloating, nausea, eructation, and heaviness in stomach after meals;
- people with gentle stomach and intestinal cramping;
- people complaining of digestive disorders after fatty meals;
- people with inflammatory digestive problems;
- people who want to maintain a normal body weight;
- people wanting to keep normal blood cholesterol level.

DuoLife My Gastrin is a 100% natural food supplement based on high-quality ingredients of plant origin, including the proprietary microencapsulated Asafin®* formula obtained in the patented FenuMAT $^{\text{m*}}$ * technology.

DuoLife My Gastrin supports:

- proper functioning of the stomach and intestines;
- proper digestive processes and secretion of gastric juice;
- optimal functioning of the liver and protection of liver parenchyma;
- optimal functioning of the pancreas;
- proper functioning of the gallbladder and bile ducts; bile secretion;
- healthy bowel movements and intestinal transit, contributing to relieve constipation;
- minimalisation of bloating, nausea, and excessive eructation;
- reduction of intestinal inflammatory processes;
- weight control and weight loss process;
- normal blood cholesterol level;
- antioxidative processes and removing toxins from the body.

f) How to use:

People aged over 12: 25 to 50 ml once daily, before or after one of the main meals. It can also be used twice daily at a dose of 25 ml, before or after meals. Shake before each use. Do not exceed the recommended maximum daily dose.

The product should not be used as a substitute for a varied diet. A balanced diet and a healthy lifestyle are essential for the proper functioning of the body. Should you have any doubts concerning the use of the formulation, consult a doctor or a pharmacist.

25 ml = 2 tablespoons

Ingredients: prune juice from concentrated juice, Asafin®* – proprietary formula of Asafoetida oleogum-resin (Ferula assa-foetida) microencapsulated in the fenugreek dietary fibre (Trigonella foenum-graecum), rose hip extract (Rosa canina) 20:1 (225 mg/50 ml) standardised for the content of 70% of vitamin C, fennel seed extract (Foeniculum vulgare) 4:1 (200 mg/50 ml), ironwort/mountain tea leaf extract (Sideritis scardica) 4:1 (150 mg/50 ml), peppermint leaf extract (Mentha piperita) 10:1 (100 mg/50 ml), milkthistle seed extract (Silybum marianum) 5:1 (100 mg/50 ml), blackradish root extract (Raphanus sativus var. niger) 10:1 (100 mg/50 ml), rosemary leaf extract (Rosmarinus officinalis) 10:1 (60 mg/50 ml), curcuma/turmeric rhizome extract (Curcuma longa) 10:1 (50 mg/50 ml) standardised for the content of 7% of curcuminoids (3.5 mg/50 ml).

*The Asafin® formula is obtained with the use of the patented FenuMAT™ technology. Asafin® and FenuMAT™ are trademarks of Akay Natural Ingredients Private Limited.

Content per serving of the product	25 ml	50 ml
Asafin®* – proprietary microencapsulated formula of oleo-gum-resin from asafoetida giantfennel (<i>Ferula assa-foetida</i>)	125 mg	250 mg
Vitamin C from rose hip extract (Rosa canina)	79 mg (99% NRV**)	158 mg (198% NRV**)

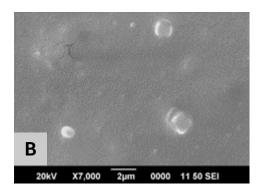
^{**}NRV — Nutrient Reference Value for an average adult (8400 kJ/2000 kcal).

The herbal extracts in the preparation have 20:1, 4:1, 5:1 and 10:1 ratios written next to their names - this is the so-called DER - what does it mean?

DER (*drug extract ratio*) specifies a number of milligrams of the plant material used to obtain one milligram of the extract. If a 50 ml dose of the supplement contains, e.g. 100 mg of peppermint extract DER 10:1 (or any other herbal extract with the same DER), it means that as much as $10 \times 100 \text{ mg} = 1000 \text{ mg}$ (1 gram) of raw material was used to obtain one portion.

Asafin®* the beneficial influence of the microencapsulated, proprietary formula from asafoetida giantfennel found in DuoLife MyGastrin on the gastrointestinal tract has been confirmed in clinical trials

Asafin®* is a completely natural plant-based formula **available in the patented FenuMAT™* technology.** The technology comprises the process of microencapsulating healthy oleo-gum-resin sourced from asafoetida giantfennel in the fenugreek dietary fibre. It makes it possible to mask the unpleasant natural flavour and smell of the oleo-gum-resin, with the obtained microcapsules supporting the extended, slow release of healthy active compounds and their better absorption² (*Figure 1*).



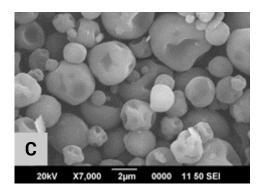


Figure 1: On the left (B) – oleo-gum-resin from asafoetida giantfennel in the basic form. On the right (C) – microencapsulated, proprietary formula of asafoetida giantfennel based on the FenuMAT $^{\text{m*}}$. technology. Image from an electron microscope. Based on².

Asafoetida giantfennel (*Ferula assa-foetida*), is an Indian medicinal plant and spice that's been known in Ayurvedic medicine for thousands of years; for a long time, it's been also known and valued in Europe and the United States (GRAS status, compliant with EFSA requirements). Root and rhizome of Asafoetida giantfennel contain gum resin with scientifically documented health-oriented properties. **The plant's beneficial influence on digestive tract function,** including stomach and intestines, clearly stands out among plenty of its other applications. Asafoetida **contributes to improved digestive processes,** increases saliva secretion and fosters the activation of amylase – a digestive enzyme found in saliva. It also contributes to more effective digestion of fats by improving bile secretion and stimulating the production of bile acids. Moreover, Asafoetida supports the activity of digestive enzymes of pancreas and small intestine, thus **fostering the digestion of all nutrients.** It supports the secretion of hydrochloric acid in the stomach, **promotes healthy bowel movements, helps reduce bloating.** It also shows antioxidative, antimicrobial, and relaxing properties³⁻⁴.

Asafin®* is a plant formula based on gum-resin from Asafoetida giantfennel with pre-clinically and clinically proven effectiveness^{2, 5}. In research, among others, a portion of 250 mg of the formula per day was used. A portion of 250 mg is found in 50 ml of DuoLife My Gastrin food supplement.

Clinical trials have shown that over 80% of participants taking the Asafin®* formula for 30 subsequent days experienced a statistically significant (compared to the placebo group) improvement of life quality and reduction of indigestion symptoms such as: upper digestive tract discomfort (-57%), fullness after meals (-63%), bloating (-50%), early satiety (-66%) (*Figure 2*). Upon the completion of the trial, even 66% of people taking the formula did not report any symptoms of indigestion. On the other hand, during the recruitment all participants in both the study and placebo groups suffered from moderate and significantly exacerbated

functional dyspepsia. The trials were conducted according to the gold standard of randomised, double-blind, placebo-controlled trials. **During the trial, the formula was also proven safe for use**⁵.

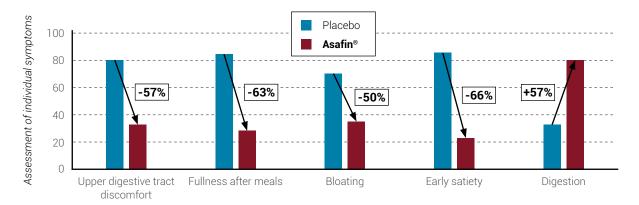


Figure 2. Influence of the Asafin®* formula on symptoms of indigestion. According to a clinical trial 5 where the formulation was used in the dose of 2 x 250 mg for 30 days; p<0.01.

Moreover, in pre-clinical testing for the Asafin®* formula, it was proven to minimise inflammatory processes within the gastrointestinal tract².

During own research the formula's manufacturer also proven its **protective action on the intestinal microbiota** (*Figure 3*).

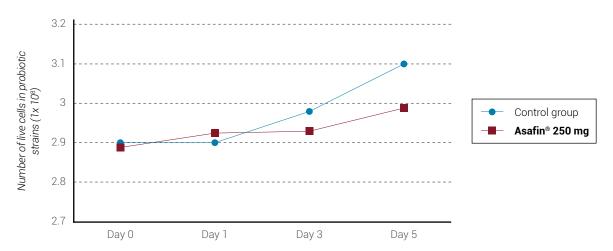


Figure 3. During the use of the Asafin®* formula, the viability of Lactobacillus acidophilus and Lactobacillus brevis probiotic strains remains on a high level fostering the maintenance of beneficial functions of the intestinal microbiota. According to own, unpublished research of the formula's manufacturer (dose used: 250 mg).

Silymarin obtained from milk thistle (Silybum marianum) seed extract supports optimal liver function.

The liver is a particularly important organ for our body. It has many essential functions. It is involved in most of metabolic processes and production of bile which supports digestion and absorption of fats in the gastrointestinal tract. The liver is also a part of toxin neutralisation processes. It also stores vitamin A, D, B12 and iron reserve.

Poor nutrition, stimulants, some medications and toxins from the environment all impair liver function. As an organ, the liver shows high regenerative properties. Frequent exposition to harmful factors, however, may hamper healing processes.

Active substances found in milk thistle extract foster the regeneration of damaged liver cells and liver protection. They also support digestion and body cleansing processes⁶.

Silymarin found in milk thistle seeds has protective effect on liver cells (hepatocytes), fosters their regeneration and shows antioxidative properties. The mechanism of its antioxidative action is based on reduction of free radicals produced by toxins damaging cell membranes⁶⁻⁹. Health-oriented effect of milk thistle and the safety of its use is documented in numerous scientific reports and proven by multiple clinical trials^{10,11}.

Other plant extracts in DuoLife My Gastrin

Plant extracts found in DuoLife My Gastrin food supplement synergistically support digestive processes, as well as stomach, intestine, pancreas, liver, gallbladder and bile ducts function. Health-oriented properties of all ingredients are widely documented in scientific reports and proven by multiple pre-clinical and clinical trials^{6,12–25}.

- Fennel (Foeniculum vulgare) helps relieve symptoms of bloating, stomach cramps and intestinal colic.
- ▶ Ironwort/mountain tea leaf extract (Sideritis scardica) relieves gastrointestinal discomfort and protects gastric mucosa.
- Peppermint (*Mentha piperita*) shows choleretic and relaxing properties, increases gastric juice production. Supports digestive processes, helps minimise nausea, vomiting, bloating and indigestion.
- ▶ Black radish (Raphanus sativus var. niger) supports proper functioning of the digestive tract, liver, and bile ducts. It has a choleretic effect, promotes balanced peristalsis, facilitates bowel movements and helps prevent constipation. It also shows antimicrobial and antioxidative properties.
- ▶ **Rosemary (Rosmarinus officinalis)** helps protect liver cells against the effect of toxic compounds and free oxygen radicals. It also supports pancreas function, digestive processes and protects gastric mucosa.
- ▶ **Turmeric (***Curcuma longa***)** fosters the minimisation of inflammatory processes within stomach, intestines, and pancreas, helps relieve symptoms of indigestion, fosters proper liver function.

Do you know that vitamin C found in rosehip (Rosa canina) fruit extract and rosemary (Rosmarinus officinalis) leaf serve as natural stabilisers of the DuoLife My Gastrin food supplement's formula?

Rosemary is a plant that has been used for years in traditional medicine and cosmetics. It's also a valuable herb. Apart from health-oriented properties widely documented in scientific reports, as a herb it presents remarkably high antioxidative activity, as well as antimicrobial properties. It also serves as a preservative^{19, 20}. Maybe that's the reason why it naturally helps to maintain optimal physico-chemical and microbiological properties of the ready product – DuoLife My Gastrin.

Natural vitamin C found in the rosehip extract also naturally stabilises the formula of the DuoLife My Gastrin food supplement.

Do you know that the effect of herbal extracts supporting digestive processes depends on your meals? Find the best moment for you to take the DuoLife My Gastrin food supplement! Take the supplement regularly for optimal support of digestive tract function

Using herbal raw ingredients **before meals** fosters the increase in gastric juices secretion, improves appetite and promotes regular bowel movements thus preventing constipation. Taking these substances **after meals**, on the other hand, supports digestive processes and helps relieve symptoms of indigestion such as fullness after meal, bloating, gas, and eructation.

That's why **you should choose a convenient time** to take the DuoLife My Gastrin food supplement. If you struggle with **constipation and decreased appetite, take a dose of DuoLife My Gastrin before the meal.** If your problems with indigestion concern mainly **symptoms that appear after the meal** (fullness, nausea, bloating), **take the food supplement after the meal.** In other cases take it the way it's convenient for you - decide what's best for you!

Remember that **regular use of the supplement is important** to fully benefit from health-oriented properties of the raw ingredients found in it!

What makes DuoLife My Gastrin stand out?

- ▶ 100% natural composition only natural ingredients of plant origin.
- ▶ Proprietary microencapsulated Asafin®* formula obtained in the patented FenuMAT™* technology.
- ▶ The effect of ingredients **proved in clinical trials** and documented by scientific reports.
- Preserved biological background of the ingredients facilitating the release of active substances and their absorption into the bloodstream; employed FenuMAT™* technology improves the absorption of the Asafin®* formula.
- ▶ It works long-term, not only temporarily; regular use helps maintain optimal condition of the entire gastrointestinal tract.
- Synergistic action of components.
- ▶ The product is intended for a wide group of users: children over 12 years of age, adults, and the elderly.
- ▶ **Convenient form of use –** liquid ready for immediate consumption.
- ▶ The product CONTAINS NO preservatives, artificial fillers and is GMO free.
- Food supplement naturally stabilised with natural vitamin C found in rosehip extract and other plant extract rich in antioxidant compounds.
- ▶ The product is GLUTEN-FREE can be used by people with gluten intolerance.
- ▶ Product suitable for vegans and vegetarians.
- The product is preserved using IHHP™ by DuoLife (Innovation High Hydrostatic Process by DuoLife) a method based on the concept of "minimal processing". The advantage of the method is high health quality and durability and preservation of the natural nutritional and sensory qualities, compared to products preserved by classical methods. The technological process employed is conducted at a low temperature (to protect active ingredients), allowing to maintain the highest quality of the product without using preservatives.
- ▶ Special **bottle from pharmaceutical-grade glass** the dark glass protects against light and temperature fluctuations, and is resistant to release to the formulation of mineral substances from its inner surface of the bottle.
- 1 Reference list for DuoLife My Gastrin formulation can be found in the separate sheet of the binder.