

# MIGRASIN®

Capsules with gastro-resistant pellets

## Patient information

FOOD FOR  
SPECIAL MEDICAL USES

MIGRASIN® is food for special medical purpose, which is used in dietary management of migraine.

### What is histamine?

Histamine is an essential molecule, a transmitter that belongs to the so-called group of biogenic amines and that is naturally present in many foods as well as inside our cells. Normally, the intake of histamine contained in food does not cause any problem, since it is quickly processed and metabolized by the Diamine Oxidase enzyme (DAO).

### What is DAO?

DAO is the main enzyme in the metabolism of ingested histamine. It is mostly located in the intestinal epithelium, where it degrades the histamine ingested in diet, preventing it from entering the bloodstream.

### What is DAO deficit?

A DAO deficit is a deficiency in the activity of the metabolizing enzyme Diamine Oxidase (DAO) or when there is an unbalanced proportion between the histamine ingested with food and the ability to metabolize it by the enzyme Diamine Oxidase (DAO). Therefore, histamine is neither metabolized nor sufficiently degraded and passes into the bloodstream triggering different symptoms. The usual reactions when there is a deficit of DAO are migraine and other cephalic or headaches, although there may be other symptoms such as:

- Digestive disorders, such as bloating, flatulence, constipation, or diarrhoea
- Muscle aches, contractions and pains
- Skin disorders, such as dry or atopic skin

### What foods contain histamine?

Histamine is present to one degree or another in all foods, whether they are of animal or plant origin. Foods that ripen or are stored for a long time have a particularly high content of histamine and other biogenic amines that are also degraded by the DAO enzyme.

These include, for example:

- Raw milk, pasteurized milk and dairy products
- Citrus, strawberries and bananas
- Seafood, oily fish and fish sauces
- Raw cured sausage such as spiced sausage, chorizo or bacon
- Some vegetables, such as tomatoes, spinach or aubergines
- Alcoholic drinks\*, especially red wine

\* Alcoholic drinks contain, to some extent, histamine or other biogenic amines, and furthermore, alcohol inhibits DAO activity, impeding histamine degradation and metabolization.

## How does MIGRASIN® work ?

MIGRASIN® Diamine Oxidase (DAO) complements the body's own enzyme, which is used to metabolize histamine. Taking one MIGRASIN® capsule before each meal increases the amount of DAO in the small intestine and thereby the ability to degrade histamine. This accelerates the processing of histamine in food in the digestive tract, which is the trigger of the symptoms.

## How should MIGRASIN® be used?

The capsule should be swallowed whole with some water, 20 minutes before the main meals (3 times a day). If you are unable to swallow it whole, please open it and ingest the pellets from its interior separately, swallowing them whole without chewing, splitting or breaking them.

## What does MIGRASIN® contain ?

Bulking agents: microcrystalline cellulose and hydroxypropyl cellulose; anhydrous al; coating agent: ethyl cellulose; medium-chain triglycerides, potato starch, pig kidney protein extract with 7% Diamine Oxidase (DAO); stabilizers: sodium alginate, oleic acid and magnesium stearate; humectant: Glycerine; stabilizer: hydroxypropyl methylcellulose; pyridoxine hydrochloride (Vitamin B6), cyanocobalamin (Vitamin B12), folic acid (Vitamin B9), anti-caking agent: stearic acid, rice starch; colourings: beet red and riboflavin. Vegetable capsule: hydroxypropyl methylcellulose. MIGRASIN® Eficaps® capsules contain gastro-resistant pellets with controlled release of DAO in the intestine that prevent stomach acid pH and these guarantee the immediate release of adjuvant active ingredients. Each capsule contains four pellets:

- 2 DAO white/beige gastro-resistant pellets with release into the intestine.
- 1 orange pellet for immediate release with group B vitamins.
- 1 red-coloured pellet for immediate release with caffeine\*

(\* ) If you cannot take caffeine, please open the capsule and remove the red pellet.

# MIGRASIN®

## Important notes

MIGRASIN® does not replace a balanced diet and a healthy lifestyle, nor does it serve as a single source of nutrition. Alcohol and drugs can greatly inhibit the action of the enzyme Diamine Oxidase (DAO). Use only under the supervision of a physician or nutritionist, who will recommend dosage based on symptoms. Keep out of reach of children. Not recommended for children or pregnant women. Store in a cool and dry place.

## ¿Which pack sizes is MIGRASIN® available in?

MIGRASIN® is available in packs of 30 and 60 capsules.

Nutritional information	Per capsule	Per 100g
Energy value	3,43Kj / 0,832 Kcal	858,3 Kj / 208 Kcal
Fats of which:	0 g	0,25 g
Saturated	0 g	0,25 g
Carbohydrates	0,024 g	6 g
of which: Sugars	0 g	0 g
Dietary Fiber	0,035 g	89,9 g
Proteins	0,004 g	1,05 g
Salt	0 g	0 g
Protein extract	4,2 mg	0,77 g
· Diamino Oxidase	0,3 mg	0,055 g
Caffeine	30 mg	5,53 g
Vitamin B-6	1,4 mg	258,1 mg
Vitamin B-12	1 µg	184,35 µg
Folic Acid	400 µg	73.743,04 µg
Sodium	0 mg	0 mg

## DR Healthcare España, S.L.

Escoles Pies, 49 · Principal  
08017 Barcelona · Spain  
Tel. +34 935 533 692

E-mail: [info@dr-healthcare.com](mailto:info@dr-healthcare.com)

Sanitary Registry:  
RGSEAA nº 26.011864

Web: [dr-healthcare.com](http://dr-healthcare.com)