

# **DAO**head®



National code: 203421.1 / RGSEAA 26.011864
Food for Special Medical Purposes

## **DAO** enzyme

### Dietary management of migraine caused by DAO deficiency

- Contains DAO ENZYME (Diamine Oxidase). Also contains vitamins B6, B9 and B12 and caffeine that act as adjuvants on the dietary management of migraine.
- The active ingredient is a Novel Food according to the EU Regulation 2015/2283.
- Acts metabolizing ingested histamine in the diet, preventing its accumulation in the blood and avoiding the appearance of migraine and headaches.
- Restore the optimal activity DAO levels thanks to its structural and functional equivalence with the human DAO, avoiding histamine absorption.
- The DAO enzyme contained in DAOhead® presents an enzymatic activity of >0,41 mU per capsule (>20.000 HDU)

### What is DAO?

DAO is the main enzyme for the metabolism of ingested histamine. It is mainly located in the intestinal epithelium, where it absorbs and degrades the ingested histamine preventing it from passing into the bloodstream.

### 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 of 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 deficiency?

It refers to a deficiency in DAO metabolization activity or when there is an imbalance between the ingested histamine and the enzyme capacity to metabolize it. As histamine has not been properly metabolized and degraded, it passes into de bloodstream triggering different symptoms. The most common symptomatology of DAO deficiency is:

Migraine and headaches. The 87% of the patients with migraine diagnosis have a reduced or a very reduced DAO enzyme activity.

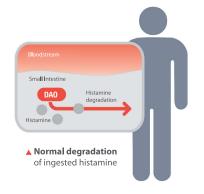
Although other symptoms may occur such as:

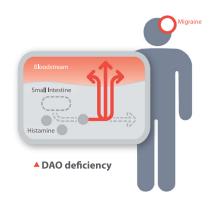
- Digestive disorders such as bloated feeling, flatulence, constipation or diarrhoea.
- Pain and muscle contractures and osteopathic pain.
- Skin disorders, such as dry or atopic skin.

### How does DAOhead® work?

The DAO contained in DAOhead® serves as a supplement to the enzyme found in the body, which oversees metabolizing histamine. Taking one capsule of DAOhead® before each meal increases the amount of DAO in the small bowel and therefore also boosts histamine degradation. This accelerates the processing of the histamine found in different foods in the digestive tract, which triggers the symptoms.

The DAO enzyme contained in DAOhead acts only in the intestine, is not absorbed and has no systemic activity, hence it is considered a harmless product with no adverse effects.







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### What does DAOhead® contain?

INGREDIENTS: Bulking agents: Microcrystalline cellulose and Hydroxypropyl cellulose; Anhydrous caffeine; potato starch; Glazing agents: Ethyl cellulose, Hydroxypropyl methylcellulose; Protein extract from pig kidneys with 7% Diamine Oxidase (DAO); Stabilisers: magnesium stearate and sodium alginate; mediumchain triglycerides; Pyridoxine hydrochloride (vitamin B6); Rice starch; Colour: Beetroot red; Stabiliser: Oleic acid; Folic acid (vitamin B9); Humectant: Glycerine; Stabiliser: Stearic acid; Colour: Riboflavin; Maltodextrin; Stabiliser: Trisodium citrate; Cyanocobalamin (vitamin B12); Acid: Citric acid. Vegetable capsule: Hydroxypropyl methylcellulose

DAOhead® Eficaps® capsules contain gastro-resistant tablets with controlled release DAO in the intestine that prevent stomach acid pH and tablets that guarantee the immediate release of adjuvant active ingredients.

Each capsule contains four tablets:

- 2 DAO white/beige gastro-resistant tablets with release into the intestine
- 1 red tablet for immediate release with caffeine
- 1 orange tablet for immediate release with vitamins B6, B9, and B12 (\*) If you cannot take caffeine, you can open the capsule and remove the red tablet.

### How should DAOhead® 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 tablets from its interior separately, swallowing them whole without chewing, splitting or breaking them.

DAOhead® Nutritional Information				
Nutritional				
Information	Per capsule	Per 100g		
Energy	8,21 kJ / 1,94 Kcal	1.348 kJ / 318 kcal		
Fat	0,007 g	1,1 g		
Carbohydrate	0,4 g	65 g		
of which: Sugars	0,003 g	<0,5 g		
Protein	0,0072 g	11,9 g		
Salt	0,003 g	0,464 g		
Protein extract from pig	kidneys 4,2 mg	0,689 g		
Diamine Oxidase (DAO)	0,3 mg	0,049 g		
Caffeine	30 mg	4.926 g		
Vitamin B6	1,4 mg	230,26 mg		
Vitamin B12	1 µg	164,47 µg		
Folic acid	400 µg	65789,47 µg		
Sodium	1 mg	186 mg		

DAOhead® does not contain the ingredients referred to in Annex II of the Regulation (EU) No. 1169/2011.

### Conservation

DAOhead® contains DAO, a thermolabile enzyme (sensitive to temperature), being advisable to keep it away from sources of heat. If consumed according to the dose recommended daily intake, does not require a special conservation, but if exceptionally consumes sporadically, being stored for long time, it is advisable to keep it in fridge.

### LOGISTICAL INFORMATION

Reference code : DAO60HEAD			
Net weigth	36,5 g	Cases per layer	9
Item dimensions (cm) L x W x H	11,4 x 6,2 x 7,7	Layers per pallet	5
EAN 13	8437009483121	Cases per pallet	45
Case dimensions (cm) L x W x H	45 x 17 x 24	Units per pallet	1260
Units per case	28	Pallet dimensions (cm) L x W x H	120 x 80 x 138

DR Healthcare is a leading biomedical company in research, development, innovation and manufacturing of nutraceutical products aimed at the dietary management of DAO deficiency and its associated pathologies.

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