

METANX®

DESCRIPTION

Metanx® is a medical food dispensed by prescription for the clinical dietary management of endothelial dysfunction in patients with diabetic peripheral neuropathy. Use under medical supervision.

Each round coated purple colored tablet contains:

L-methylfolate Calcium (as Metafolin®)*	3 mg	*CAS#151533-22-1
Pyridoxal-5'-Phosphate	35 mg	
Methylcobalamin	2 mg	

Dietary Ingredients:

Dibasic Calcium Phosphate Dihydrate, Microcrystalline Cellulose 90, Microcrystalline Cellulose HD 90, Pyridoxal-5'-Phosphate, Opadry II Purple 40L10045 (Polydextrose, Titanium Dioxide, Hypromellose 3cP, Hypromellose 6cP, Glycerol Triacetate, Hypromellose 50cP, FD&C Blue #2, FD&C Red #40, Polyglycol 800), Microcrystalline Cellulose 50, Opadry II Clear Y-19-7483 (Hypromellose 6cP, Maltodextrin, Hypromellose 3cP, Polyglycol 400, Hypromellose 50cP), L-methylfolate Calcium, Magnesium Stearate, Methylcobalamin, and Carnauba Wax. Metanx® tablets do not contain sugar, lactose, yeast or gluten.

Medical foods are intended for a patient who has a limited or impaired capacity to ingest, digest, absorb, or metabolize ordinary foodstuffs or certain nutrients, or who has other special medically determined nutrient requirements, the dietary management of which cannot be achieved by the modification of the normal diet alone.¹ This product is not an Orange Book product.

METANX® is a medical food dispensed by prescription.

CLINICAL PHARMACOLOGY

Metanx® is a medical food, which consists of a proprietary biologically active folate and B-vitamins, derived from food sources.

INDICATIONS AND USAGE

Metanx® is indicated for the distinct nutritional requirements of individuals with endothelial dysfunction^{2,3,4} who present with loss of protective sensation⁵ and neuropathic pain^{6,7,8} associated with diabetic peripheral neuropathy.

Metanx® is indicated for the distinct nutritional requirements of patients with endothelial dysfunction and/or hyperhomocysteinemia⁹ who present with lower extremity ulceration(s).^{10,11,12}

CONTRAINDICATIONS

Metanx® is contraindicated in patients with known hypersensitivity to any of the components contained in this product. Methylcobalamin is contraindicated in early Leber's disease.¹³

PRECAUTIONS

General:

Folic acid, when administered in daily doses above 0.1mg, may obscure the detection of B₁₂ deficiency (specifically, the administration of folic acid may reverse the hematological manifestations of B₁₂ deficiency, including pernicious anemia, while not addressing the neurological manifestations). L-methylfolate Calcium may be less likely than folic acid to mask vitamin B₁₂ deficiency.^{13,14} Folate therapy alone is inadequate for the treatment of a B₁₂ deficiency.

Patient Information:

Metanx® is a medical food¹ for use under medical supervision and direction.

Metanx® is a medical food dispensed by prescription

Interaction with Drugs:

Before using this product, tell your doctor or pharmacist of all the products you use. Keep a list of all your medications with you, and share the list with your doctor and pharmacist. No decrease in effectiveness of drugs has been reported with the use of Metanx®.

Metanx® may have interactions with the following:

- Antibiotics: Chloramphenicol, evidence from case reports indicates that chloramphenicol can interfere with the red blood cell response to methylcobalamin.¹⁵
- Antiepileptic drugs (AED): The AED class including, but not limited to, phenytoin, carbamazepine, primidone, valproic acid, phenobarbital and lamotrigine have been shown to impair folate absorption and increase the metabolism of circulating folate. Additionally, concurrent use of folic acid has been associated with enhanced phenytoin metabolism, lowering the level of this AED in the blood and allowing breakthrough seizures to occur.^{16,17,18,19}
- Capecitabine (Xeloda®) toxicity may increase with the addition of leucovorin (5-formyltetrahydrofolate) (folate).²⁰
- Cholestyramine, Cholchicines, Colestipol: may decrease the enterohepatic re-absorption of methylcobalamin.¹⁵
- Dihydrofolate Reductase Inhibitors (DHFRi): DHFRi block the conversion of folic acid to its active forms, and lower plasma and red blood cell folate levels. DHFRi include aminopterin, methotrexate, pyrimethamine, triamterene, and trimethoprim.¹⁸
- Isotretinoin: Reduced folate levels have occurred in some patients taking isotretinoin.²¹
- Levodopa: pyridoxal 5' phosphate should not be given to patients receiving the drug levodopa. Levodopa is antagonized by pyridoxal 5' phosphate. However, pyridoxal 5' phosphate may be used concurrently in patients receiving a preparation containing both carbidopa and levodopa.²³
- Nonsteroidal Anti-inflammatory Drugs (NSAIDs): NSAIDs have been shown to inhibit some folate dependent enzymes in laboratory experiments. NSAIDs include ibuprofen, naproxen, indomethacin and sulindac.¹⁸
- Oral Contraceptives: Serum folate and methylcobalamin levels may be depressed by oral contraceptive therapy.^{15,18}
- Methylprednisolone: Reduced serum folate levels have been noted after treatment with methylprednisolone.¹⁸
- Metformin treatment in patients with type 2 diabetes decreases serum folate and methylcobalamin.^{15,23,24}

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IPR2013-00117

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- Nitrous Oxide: can produce a functional methylcobalamin deficiency.¹⁵
- Pancreatic Enzymes: Reduced folate levels have occurred in some patients taking pancreatic extracts.¹⁸
- Para-aminosalicylic acid: may decrease absorption of methylcobalamin.¹⁵
- Pentamidine: Reduced folate levels have been seen with prolonged intravenous pentamidine.¹⁸
- Potassium Chloride: may decrease absorption of methylcobalamin.¹⁵
- Warfarin can produce significant impairment in folate status after a 6-month therapy.²⁵

ADVERSE REACTIONS

Allergic reactions have been reported following the use of oral L-methylfolate Calcium.¹⁸ Acne, skin reactions, allergic reactions, photosensitivity, nausea, vomiting, abdominal pain, loss of appetite, increased liver function test results, paresthesia, somnolence, nausea and headaches have been reported with pyridoxal 5'-phosphate.²⁶ Mild transient diarrhea, polycythemia vera, itching, transitory exanthema and the feeling of swelling of the entire body has been associated with methylcobalamin.¹⁵

DOSAGE AND ADMINISTRATION

The usual adult dose is one tablet twice daily (B.I.D.) or as directed under medical supervision.

HOW SUPPLIED

Metanx[®] is a medical food dispensed by prescription.

Metanx[®] is available as a round coated purple colored tablet. Debossed with "PAL" on one side and "M" on the other.

Commercial Product (90 tablets)	0525-8019-90*	Use under medical/physician supervision.
Sample Product – Bottle (6 tablets)	0525-8019-06*	Professional Samples – Not for sale.

*Pamlab LLC does not represent these product codes to be National Drug Codes (NDC). Product codes are formatted according to standard industry practice, to meet the formatting requirements of pharmacy and health insurance computer systems.

Storage:

Store at controlled room temperature 15°C to 30°C (59°F to 86°F) (See USP). Protect from heat, light and moisture.

PATENTS

Some or all of the following patents may apply:

U.S. Patent No. 5,563,126	U.S. Patent No. 6,441,168B1
U.S. Patent No. 5,795,873	U.S. Patent No. 6,451,360
U.S. Patent No. 6,011,040	U.S. Patent No. 6,528,496
U.S. Patent No. 6,207,651	U.S. Patent No. 6,673,381
U.S. Patent No. 6,254,904	U.S. Patent No. 7,172,778
U.S. Patent No. 6,297,224	and other pending patent applications

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Revised 05/11