

Magnum Compounding, LLC 9960 NW 116<sup>th</sup> Way, Suite 4 Phone: 7866222301

Toll Free: 8554036028



**COMPOUNDED MIC B12 (25/ 50/50/1mg)** (Methionine 25mg/1ml, Inositol 50mg/1ml, Choline Chloride 50mg/1ml, Methylcobalamin 1mg/1ml), 30ml MDV. (SC/IM)

**Dosage**: Seek advice from a licensed physician, medical director, or other healthcare provide. Typically, Injections can be administered up to twice a week.

**Storage**: Controlled refrigeration. Protect from light. Store under refrigeration 2° to 8°C (36° to 46°F).

**Overview**: The different ingredients in this mixture are known to aid in Proper metabolism of fats and removal of fat from the liver reducing fatty liver disease, Boost your metabolism by playing a key role in digestion and metabolism of fats, proteins and carbohydrates, Provide an energy boost, Improve mood, thought processes and memory, Provides essential components for normal cell and brain function. Lowers cholesterol levels. Reduces homocysteine levels. Elevated homocysteine levels are associated with increased risk of heart attack, stroke or dementia. Helps keep skin tone healthy and nails strong. Promotes healthy hair growth

#### **METHIONINE**

It is an essential amino acid which means it cannot be synthesized in our body so we must get it from other sources. It is found in meat, fish and dairy products and has an important role in many cell functions. It helps the liver process fats reducing fat build up in the liver which helps to ensure proper functioning of the liver. It is required for Glutathione synthesis. Glutathione is the body's most abundant, natural anti-oxidant which is produced in the liver to help us rid our body of toxins. It has a role in creatine synthesis which is a nutrient found primarily in muscle tissue. It is necessary for all muscular function. Methionine also reduces the level of histamine in the body which may be beneficial for anyone with chronic allergies or inflammatory conditions. It is also essential for the formation of healthy collagen used to form and maintain skin, hair, nails, connective tissue and cartilage. Methionine also functions to protect our neurological system. Patients with sulfa allergy should not take it.

#### **INOSITOL**

is a nutrient belonging to the B vitamin complex. It is closely associated with choline. It functions to aid in the metabolism of fat, reduces cholesterol levels within the blood and helps to convert food into energy. Inositol helps neurons communicate better with the body's nervous system and participates in the action of serotonin, a neurotransmitter that helps to control mood and appetite. Has been shown to help treat patients with depression, anxiety and OCD. It is now established as a significant mediator of calcium mobilization in the endoplasmic reticulum, the power house of our cells.

# **CHOLINE**

is similar to the B vitamins. It is a nutrient that is water soluble. Choline can be made in the liver. It is also found in foods such as meats, fish, nuts, beans, spinach and eggs. Choline is required for the transport and metabolism of fats and cholesterol in the body. It helps to prevent accumulation of fat in the liver. Choline serves as a precursor molecule for the neurotransmitter acetylcholine and has been linked to a decreased risk of Alzheimer's disease and dementia. It has been used to treat neurological diseases such as Huntington's chorea, Tourette's disease, cerebellar ataxia and certain types of seizures.



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## **VITAMIN B12 - METHYLCOBALAMIN**

This is an important water soluble vitamin with a long list of benefits. Our bodies do not produce vitamin B12 so we rely on getting it in our food. Meat, milk and eggs are a primary source of vitamin B12. While vitamin B12 is found naturally in a healthy diet, factors like stress and poor eating habits can lead to a deficiency. It has a key role in the normal functioning of our neurological system and helps in the formation of healthy red blood cells. Vitamin B12 provides a boost of energy and plays a key role in digestion and metabolism of fats, proteins and carbohydrates. It has been shown to decrease homocysteine levels which reduces our risk of developing heart attacks, strokes or dementia. The B12 we use in the office is Methylcobalamin which is a highly absorbable form of Vitamin B12. It is felt that this form of B12 is better absorbed and retained within the body than cyanocobalamin which is another type of B12 injection.

## **Precautions/Side Effects**

Some medications, supplements, or over-the-counter drugs may interact with methylcobalamin. Always speak with your healthcare provider about everything you are taking. You should avoid eating grapefruit or drinking grapefruit juice. Before taking, speak with your doctor if you are allergic to vitamin b12, have a genetic condition called optic atrophy, have blood in your urine, polycythemia, an ongoing infection, low iron or folate levels, are pregnant or plan to become pregnant, are breastfeeding or plan to breastfeed. Some common side effects include, Anorexia, Vomiting, Headaches, Diarrhea, Nausea. Patients with sulfa allergy should not take this injection.

### **Shipping:**

This medication was shipped in a cooler or insulated bag with ice packs to preserve the integrity of the medication during transportation. If you suspect that your medication could have been tampered, or is damaged, or is outside the expected temperature, DO NOT USE IT and call the pharmacy to obtain advise.

#### References:

- 1. Lopez, M.J., Mohiuddin, S.S, "Biochemistry, Essential Amino acids", StatPearls. April 2020. Available: https://www.ncbi.nlm.nih.gov/books/NBK557845/ 2. Parkhitko, A.A., Jouandin, P., Mohr, S.E., Perrimon, N., Methionine metabolism and methyltransferases in the regulation of aging and lifespan extension across species", Aging Cell, vol.18 issue 6. December 2019. Available: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6826121/
- 3."What is methionine?", amino acid studies. Available: https://aminoacidstudies.org/l-methionine/
- 4."Methionine", Drug Bank. Available: https://go.drugbank.com/drugs/DB00134
- 5. Korsmo, H.W., "Choline: Exploring the Growing Science on its Benefits for Moms and Babies", Nutrients, vol.11 issue 8. August 2019. Available: https:// www.ncbi.nlm.nih.gov/pmc/articles/PMC6722688/#:~:text=The%20choline%20adequate%20intake%20(AI,day%20during%20lactation%20%5B3%5D.
- 6."Choline", Fact Sheet for Health Professionals. Available: https://ods.od.nih.gov/factsheets/Choline-HealthProfessional/#h8
- 7\_Vasavada, A., Sanghavi, D., "Cyanocobalamin", StatPearl. Available: https://www.ncbi.nlm.nih.gov/books/NBK555964/#:~:text=Mechanism%20of% 20 Action & text = Tissues % 20 absorb % 20 vitamin % 20 B12 % 20 by, particularly % 20 in % 20 erythroid % 20 progenitor % 20 cells.
- 8."Vitamin B12 Fact Sheet for Health Professionals", National Institutes of Health. Available: https://ods.od.nih.gov/factsheets/VitaminB12-

If you have any questions, or concern about your medication, please, don't hesitate to call us.