Glutathione Patient Information

What is it?

Glutathione is a dietary supplement used as an antioxidant to help protect the body from many diseases and condition. It is also used to treat infertility (difficulty getting pregnant), cancer, cataracts, and human immunodeficiency virus (HIV). **Glutathione** is used to detoxify various chemicals from the body.

Glutathione: An Essential Health AID

There are three major roles of glutathione in the body: Antioxidant, Immune booster and Detoxifier. Even cells in the healthiest of individuals constantly need to replenish their glutathione supply.

There are strong herxheimer type reactions to IV Antibiotics vs. Lyme Spirochetes which produce a number of byproducts including histamines, cytokines, and other free radicals which can produce symptoms ranging from mild malaise to severe headaches and vomiting. Glutathione is a powerful anti-oxidant that helps limit the effects of unstable oxygen species and thus reduces these symptoms.

Glutathione: The Master Antioxidant

Antioxidants participate directly in the destruction of reactive oxygen compounds called free radicals. These by-products of a of a cell's normal function cannot be avoided, but exposure to ultraviolet radiation from the sun or other sources promotes their emergence. Free radicals have been linked to muscle fatigue during exercise and aging.

For this reason, the body is equipped with a variety of antioxidants. Vitamins C and E are natural antioxidants but do not occur naturally in the body. These and other antioxidants actually depend of glutathione to function properly, which is why glutathione is called the "Master Antioxidant"

Food for the Immune System

Glutathione helps build your immune systems resistance and improve your chances of staying healthy.

Lymphocytes are cells of your immune system. Glutathione is essential for lymphocytes to increase in number, produce antibodies, and function efficiently.

Glutathione: A Natural Detoxifier

Our food and water sources are becoming increasingly contaminated with chemicals, as is the air that we breathe. Supplemental detoxifiers such as glutathione help to counter the effects of the toxins we inhale and ingest.

By physically binding to toxic compounds in cells, glutathione helps make them soluble – and harmless. The body can then eliminate these disarmed toxins in the bile and urine.

Magnesium Sulfate (Injection)

Magnesium Sulfate

Prevents seizures in a pregnant woman with severe toxemia (eclampsia).

When this medicine should not be used:

You should not receive this medicine if you have had an allergic reaction to magnesium sulfate, or if you have severe kidney disease or heart block (a problem with heart rhythm, sometimes requiring a pacemaker).

How to use this medicine:

- Your doctor will prescribe your exact dose and tell you how often it should be given.
- An intravenous injection is given.
- This medicine may need to be given slowly, sometimes over several hours.
- A nurse or other caregiver trained to give injections will give your treatment.

Drugs and Foods to Avoid:

Ask your doctor or pharmacist before using any other medicine, including over-the-counter medicines, vitamins, and herbal products.

- Make sure your doctor knows if you are also using antibiotics like gentamicin or streptomycin, a diuretic ("water pill"), cyclosporine (Sandimmune), digitalis (Lanoxin), amphotericin B (Abelcet, Fungizone), or cisplatin (Platinol).
- Make sure your doctor knows if you drink alcohol.

Warnings while using this medicine:

- If you are breastfeeding, talk to your doctor before receiving this medicine.
- Make sure your doctor knows if you have kidney disease.

Possible side effects while using this medicine:

Call your doctor right away if you notice any of these side effects:

- Flushing or sweating
- Lightheadedness or dizziness, especially when standing up
- Loss of muscle control
- Trouble breathing

If you notice other side effects that you think are caused by this medicine, tell your doctor. Call your doctor for medical advice about side effects.

Folic Acid (Injection)

Folic Acid

Treats Anemia

When this Medicine should not be used:

You should not use this medicine if you have ever had an allergic reaction to folic acid or benzyl alcohol.

How to use this medicine:

- Your doctor will prescribe your exact dose and tell you how often it should be given.
- An intravenous injection is given.
- A nurse or other caregiver trained to give injections will give your treatment.

Drugs and Foods to Avoid:

Ask your doctor or pharmacist before using any other medicine, including over-the-counter medicines, vitamins, and herbal products.

- Make sure your doctor knows if you are using medicine for seizures such as phenytoin (Dilantin) or carbamazepine (Tegretol).
- Do not drink alcohol while you are using this medicine.

Warnings while using this medicine:

• Make sure your doctor knows if you are pregnant or breast feeding, or if you have any type of infection.

Possible side effects while using this medicine:

 Allergic reaction: Itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, chest tightness, trouble breathing

If you notice other side effects that you think are caused by this medicine, tell your doctor. Call your doctor for medical advice about side effects.

Potassium Chloride (Injection)

What is this medicine?

Potassium chloride is a type or "electrolyte", or salt found naturally in your blood and tissues. It plays an important role in balancing your blood salts, affecting water balance, kidney function, red blood cells and much more. Potassium chloride is given via the vein in patients who have low amounts of potassium chloride in their blood, for various reasons.

What are the ingredients?

This injection contains Potassium Chloride USP. Please check your prescription label for the exact ingredients and amounts. Feel free to call the pharmacy to speak with a pharmacist regarding the exact ingredients in your formulation.

What should I tell my healthcare provider before I take this medication?

- If you are pregnant or breast feeding.
- If you have kidney problems.
- If you have high potassium levels.

How should I take this medicine?

- Your doctor will prescribe your exact dose and tell you how often it should be given.
- An intravenous injection is given.
- A nurse or other caregiver trained to give injections will give your treatment.

What may interact with this medicine?

Numerous medications may interact with Potassium Chloride. Provide your list of medications to your doctor. The following is a short list of medications that may interact with potassium chloride:

• Certain medication used to lower blood pressure such as Chlorothiazide and Hydrochlorothiazide. Spirinolactone, Ramipril, Losartan, Captopril.

What side effects may I notice from receiving this medicine?

Call your doctor right away if you notice any of these side effects:

- Allergic reaction: Itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, chest tightness, trouble breathing.
- Change in how much or how often you urinate.
- Diarrhea, headache, weight loss, muscle aches or stiffness, injection site irritation

Calcium Gluconate Injection

What is this medicine?

Calcium Salts are a calcium supplement. It is used to prevent and to treat low calcium levels. Please consult your healthcare provider if you have further questions.

What should I tell my healthcare provider before I take this medication?

They need to know if you have any of these conditions:

 Constipation, Dehydration, Heart rhythm problems, High blood calcium, phosphate or vitamin D levels, Kidney disease or stones, Parathyroid disease, Stomach bleeding, obstruction or ulcer, An unusual allergic reaction to calcium, other medicines, foods, dyes, or preservatives, Pregnant or trying to get pregnant, or breast feeding

What side effects may I notice from receiving this medication?

- Allergice reactions: Skin rash, itching or hives, swelling of the face, lips, or tongue
- Confusion or irritability
- Headache
- Loss of appetite
- Nausea, vomiting
- Unusually weak or tired
- Constipation, gas, stomach upset

What should I watch for while on this medication?

Follow a healthy diet. Taking a vitamin supplement does not replace the need for a balanced diet. Some foods that have calcium naturally are milk, cheese, yogurt, sardines, salmon, shrimp, and tofu.