## SAM-e

# S-adenosyl-methionine

#### DESCRIPTION

SAM-e vegetarian capsules deliver 200 mg of S-adenosyl-methionine in acid-resistant capsules that provide both protection and pH targeted release in intestinal fluid. SAM-e has been shown to support neurotransmitters and mood, methylation, liver health, and joints.<sup>†</sup>

### **FUNCTIONS**

SAM-e (S-adenosyl-methionine) is a naturally occurring molecule derived from the amino acid methionine. SAM-e has been shown to be efficacious in supporting numerous aspects of health. SAM-e, as a methyl donor, participates in a wide variety of biochemical reactions, acts as a precursor molecule for glutathione and polyamine synthesis, and supports healthy functioning of neurological processes, joints, and the liver. SAM-e is a methyl donor in the methylation reactions shown to form monoamine neurotransmitters such as dopamine, serotonin and norepinephrine. Human studies show SAM-e supports a positive mood and healthy central nervous system function. SAM-e is also essential to the development of the phospholipid bilayer that makes up the outer membranes of normal cells by contributing to phosphatidylcholine production and cellular membrane fluidity and integrity.

SAM-e's joint support lies not only in its ability to help regulate the body's normal physiological processes, but also on its putative participation in proteoglycan synthesis and joint cartilage synthesis.<sup>†</sup> SAM-e is thought to function physiologically as a signal of sulfur availability. Some suggest that supplemental S-adenosylmethionine may compensate for the decreased SAM-e levels in chondrocytes induced by the cytokine interleukin-1, and thus upregulate the chondrocyte's synthesis of joint proteoglycans. A randomized control study of 56 participants taking SAM-e offered statistically significant results for joint comfort.<sup>†</sup>

As a liver health compound, SAM-e has been shown to support the body's response to adverse biochemical alterations induced by lead and/or alcohol exposure.† SAM-e can be an integral part of a liver support regimen by supporting glutathione levels. Human studies indicate that SAM-e supplementation enhances glutathione production in hepatic tissue and red blood cells.†

### **INDICATIONS**

SAM-e vegetarian capsules may be a useful nutritional supplement for individuals desiring support of mood, joints, methylation, or liver health.<sup>†</sup>

## FORMULA (#202170-60X)

Each Vegetarian Capsule Contains:

Other ingredients: Capsule (hydroxypropyl methylcellulose, gellan gum, water), microcrystalline cellulose, calcium oxide, ascorbyl palmitate, calcium chloride.

#### SUGGESTED USE

Adults take 1 capsule, 1-2 times daily between meals or as directed by a healthcare professional.

## SIDE EFFECTS

No adverse side effects have been reported.

### **STORAGE**

Store in a cool, dry place, away from direct light. Keep out of reach of children.

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#### **REFERENCES**

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† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Manufactured by Douglas Laboratories 600 Boyce Road Pittsburgh, PA 15205 800-245-4440 douglaslabs.com

