

The Magnesium Stearate issue

Background

I suspect you are reading this article because you have been exposed to inaccurate circulating information which suggests that magnesium stearate is a harmful compound when used in supplements. In fact, some manufacturers appear to promote this myth as a marketing advantage to encourage sales of their products over those of their competitors.

The Facts about Magnesium Stearate

Magnesium stearate is a natural lipid (fat) component of animal foods and is also naturally present in human cells. In fact, we are eating it every day in a mixed diet. For every gram of fat naturally present in beef, there are about 15mg of stearic acid ¹. A 100-gram serve of lean beef steak contains about 18 grams of total fat². This means that for this modest meal portion, one would consume around 270 mg of stearic acid.

One capsule of a product such as GliSODin contains 4mg of magnesium stearate. Realising how small this amount is compared to the amount one could consume in just one single food in an entire day puts the issue into a completely different perspective. So in an average day of a mixed diet including various other animal foods, one GliSODin capsule would contribute less than 1% of the total stearate consumed. In any event, since humans are physiologically animals, our own cells make stearic acid every day.

The circulating myth starts by suggesting that stearic acid melts at a much higher temperature than the 37 degrees C of human cells; therefore *'it won't melt when you swallow it'*. The argument is further sensationalised with statements such as: *"so imagine your nutrients trapped in a sphere of waxy substances similar to candle wax"*. This is nonsense because the fat we consume does not need to melt; it digests in the presence of lipase enzymes at body temperature of 37 degrees C. Even in individuals with poor digestion, such a tiny quantity of stearate will readily digest and then release any molecule bound to it. Unfortunately, 'stories' like these simply cause confusion because most people don't have any way of knowing if they are true or false. This one is definitely false!

The GliSODin capsule is vegetable in nature (in fact, we use only vegetable caps for all our products). The tiny 4mg of magnesium stearate in each capsule is used to regulate the disintegration of the raw material in the digestive tract as well as to assist the manufacturer in making the capsules. The magnesium stearate prevents the GliSODin material from being released too soon in its passage through the digestive tract. Ideally, we need GliSODin to be active in the small intestine, not the stomach and so this tiny amount of stearate is needed to delay the disintegration of the active material until it reaches the intestinal wall where its nutrigenomic effect is activated.

Bottom Line

Magnesium stearate is a compound found naturally in the cells of animals, including humans. Not only is it made by our own cells for their own use but it is distributed widely in animal foods. The tiny amounts used in capsules are insignificant compared with the quantities we produce in our own cells and the amounts we consume in food. References to candle wax that can't melt when swallowed are sensationalised nonsense, clearly designed to mislead the reader.

¹ <http://www.nutritionj.com/content/9/1/10>

² [USDA Nutrition Database - Food Tables](#)