

### **SPECIFIC COMMENTS TO AUTHORS**

This letter to the editor states that the physiological properties of magnesium create difficulties in magnesium supplementation for Alzheimer's dementia. Then it goes on to state (based on a single study) that "compared with other  $Mg^{2+}$  compounds (such as  $Mg^{2+}$  chloride,  $Mg^{2+}$  citrate, and  $Mg^{2+}$  gluconate), dietary intake magnesium-L-threonate could significantly increase  $Mg^{2+}$  levels in the brain." It is not clear what are the properties of magnesium-L-threonate that helps its ability to cross the blood brain barrier and enhance magnesium levels in the brain. The authors should provide a few more details about the study they have quoted so that this becomes clear to the readers.

Answer: Thank you very much for your comments. As you might think, it is not clear what the properties of magnesium-L-threonate are that help it cross the blood-brain barrier and increase magnesium levels in the brain. This is just a phenomenon, and no specific mechanism has been explored. This is also a question worth thinking about and needs further research.

### **SPECIFIC COMMENTS TO AUTHORS**

This letter points to some important points regarding magnesium and AD. I think the letter would benefit from a correction of the English language use at some points (for example it is not clear to me what they exactly mean with 'speciation' in the title). Also the exact questions to the authors of the manuscript they react to, could be formulated more clearly.

Answer: Thank you very much for your comments. The speech problem has been corrected by professionals.