WHAT IS CLAIMED IS:

1. Use of ~~B~~beta-hydroxy-beta methylbutyrate ~~for use~~ in the manufacture of a medicament for improving cognition in an older adult.

2. Use of ~~B~~beta-hydroxy-beta methylbutyrate ~~for use~~ in the manufacture of a medicament for the treatment of a cognitive disease associated with a neurodegenerative disease in an older adult.

3. Use of ~~B~~beta-hydroxy-beta methylbutyrate ~~for use~~ in in the manufacture of a medicament for improving cognitive function in a toddler, child, or adolescent.

4. The use of ~~B~~beta-hydroxy-beta-methylbutyrate according to any of the preceding claims, wherein the beta-hydroxy-beta-methylbutyrate is to be administered daily.

5. The use of ~~B~~beta-hydroxy-beta-methylbutyrate according to claim 4, which is administered in a dosage of from 0.1 g/day to 10 g/day, or which is to be administered in a dosage of from 0.1 g/day to 5 g/day.

6. The use of ~~B~~beta-hydroxy-beta-methylbutyrate according to any of the preceding claims, which is to be administered for a period of at least one year.

7. The use of ~~B~~beta-hydroxy-beta-methylbutyrate according to any of the preceding claims, which is in a form selected from the group consisting of a nutritional powder, a nutritional emulsion, and a clear liquid.

8. The use of ~~B~~beta-hydroxy-beta-methylbutyrate according to any of the claims 1 and 4 to 7, wherein the older adult is suffering from cognitive decline, or wherein the older adult is suffering from neural dysfunction.

9. The use of ~~B~~beta-hydroxy-beta-methylbutyrate of claim 2 or any of claims 4 to 8 wherein the neurodegenerative disease is selected from the group consisting of Alzheimer's disease, Huntington's disease, ~~and~~ Parkinson's disease, dementia, amyotrophic lateral sclerosis, stroke, and schizophrenia.