Based on the research assumptions, findings of the present study the following is the conclusion ie., insulin together with glucose promotes memory or reverses the memory deficit associated with AD developed due to various causes. The rationale behind this combination could be as follows;

1. Insulin enhances cholinergic neuronal survival, growth (branching and length of neuron) and reduction of neuronal cell death (apoptosis).
2. Glucose prevents the peripheral hypoglycemia associated with insulin. Besides, it enhances the cholinergic neuronal charge with neurotransmitter namely acetylcholine. It does this by supplementing large amount of acetyl CoA enzyme necessary for synthesis of acetylcholine. Together these produce an additive effect in overcoming learning and memory deficit associated with AD.

**Proposed hypothetical scheme for mode of action of insulin and glucose combination**

![Proposed hypothetical scheme for mode of action of insulin and glucose combination](image)

Figure C.2. Proposed hypothetical Scheme for mode of action of insulin and glucose combination