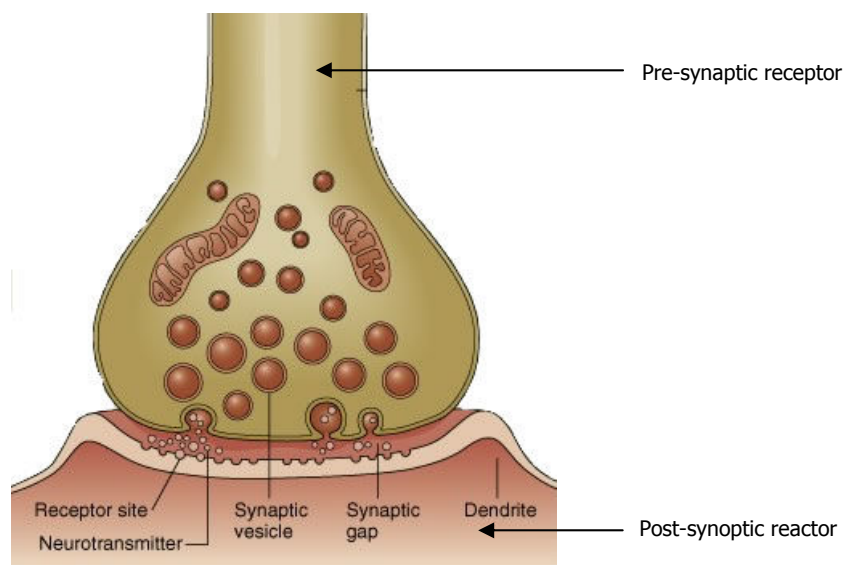


22nd September 2004

Psychology – Neurochemical Explanations of Depression

Anti-Depressants



Generation 1 Anti-Depressants

Tricyclics increase availability of noradrenaline and serotonin in the synapse by inhibiting reuptake on part of pre-synaptic receptors.

Generation 2 Anti-Depressants

MAOIs (monoamine oxidase inhibitors) neutralise the enzyme MAO in the synapse. MAO destroys noradrenaline and serotonin molecules, increasing levels of transmitters.

Generation 3 Anti-Depressants

SSRIs – Selective Serotonin Reuptake Inhibitors.

The Effects of the First Three Generations of Anti-Depressants

- 2-3 days: levels of serotonin are raised, no symptoms are relieved.
- 7-14 days: levels of serotonin are low again, but symptoms are relieved.

Which is strange, as it was thought that levels of serotonin were responsible for depression. Scientists did find, however, that these drugs affect the sensitivity of the post-synaptic reactor. As a test they designed drugs to target this dullened sensitivity, and ignore the serotonin levels. And these are the best anti-depressants yet!

Generation 4 Anti-Depressants

Called "Minaserin" – depression is apparently associated with a dullened sensitivity of the post-synaptic reactor. Minaserin targets this post-synaptic reactor but ignores the serotonin levels.