Escherichia coli strain Nissle 1917 (EcN) is now 100 years of age and due to its unique properties is today arguably the most investigated bacterial strain.
In this series we revisit the strain specific properties of this unique bacterium and also where research and experimental application of bacteria, in particular EcN may lead us in the future.

Serotonin (5-Hydroxytrytamine or 5-HT) is best known as a neurotransmitter.

An estimated 90% of serotonin is produced in the gut largely by enterochromaffin cells (EC) and our gut microbiota, including EcN play an important role in its production.
Serotonin levels can influence and regulate gut function and motility and also via the gut-brain axis, influence behaviour and brain function.

We have included a recent paper regarding E.coli Nissle 1917 and its role in serotonin synthesis. Click below for full paper.

SCIENTIFIC REPORTS

OPEN *Escherichia coli* Nissle 1917 enhances bioavailability of serotonin in gut tissues through

Nzakizwanayo, J. et al. Escherichia coli Nissle 1917 enhances bioavailability of serotonin in gut tissues through modulation of synthesis and clearance. Sci. Rep.5,17324; doi: 10.1038/srep17324 (2015)