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Effects of Acute Altered Gravity During Parabolic Flight and/or Vestibular Loss on Cell Proliferation in the Rat Dentate Gyrus

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### Graphical abstract

- The effects of altered gravity on the hippocampus are poorly understood
- We investigated the effects of parabolic flight on cell proliferation in the dentate gyrus (DG)
- We quantified the number of BrdU-labelled cells in the DG of rats undergoing parabolic flight
- Some had an intact vestibular system and others bilateral vestibular deafferentation (BVD)
- BVD caused a large and significant reduction in the number of BrdU-positive cells irrespective of parabolic flight.

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