

Supplementary table 2: Suggested vitamin dosing

Treatment	Suggested dosage
Pyridoxal phosphate	Initial dose of 10mg/kg. If clinical response to continue at 30-50mg/kg/day enterally in 3-4 divided doses.
Pyridoxine	Neonatal: Initial dose of 100mg intravenously. If clinical response to continue at 50-100mg once daily enterally. >1month: Initial dose of 100mg intravenous. If clinical response to continue maintenance treatment at doses of 15-30mg/kg/day in 4 divided doses (increase if required up to 1g daily)
Folinic acid	3-5mg/kg/day enterally
Biotin	5-10mg once daily enterally. Maintenance dosing 5-20mg daily

There is variation within the literature with regards to the recommended dosing in the treatment of vitamin responsive epilepsies. This table depicts a range of dosing based on the available literature. Ideally initial treatments with pyridoxine should take place with concurrent EEG monitoring to assess response which has been reported to be rapid in some cases. The cardio-respiratory status of patients should be closely monitored during and following the initial doses as pyridoxine treatment is associated with apnoea. Higher daily doses of pyridoxine (>200mg) are also associated with sensory neuropathy. Pyridoxal phosphate treatment has been associated with derangement in liver function tests (which are reversible on discontinuation of treatment) and GI disturbance. We note that whilst many cases may respond to initial test dosing (clinically and in terms of EEG response) some may not and as such it is usually accepted that maintenance treatment of these medications should be continued before conclusions are drawn with regards to their efficacy. We would suggest withdrawing treatment with these supplements after 14 days if there is no clinical improvement.

