Efficacy and safety of ketogenic diet in infants with epilepsy: KIWE RCT

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Plain language summary

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Plain language summary

Many babies with epilepsy continue to have seizures ('fits'), despite taking medicines. These babies are unlikely to make the same developmental progress as babies without epilepsy. Ketogenic diets are high in fat and low in carbohydrate and have been shown to reduce seizures in older children and adults.

Babies (age 1–24 months) with epilepsy, who still had seizures despite having tried medicines, either started a ketogenic diet or another medicine. They then stayed on this treatment for 8 weeks. We wanted to know whether there was a difference in the number of seizures in the last 2 weeks of treatments compared to before.

Seventy-eight babies started a ketogenic diet and 58 started another medicine. Overall, the number of seizures babies had every day was similar in both groups.

A similar number of babies in both groups either had to go to hospital for some reason or stay in hospital for longer. This was mostly because of seizures. Two babies suffered 'sudden unexpected death in epilepsy' and another died during a planned surgery. These deaths were not thought to be related to the ketogenic diet.

Both the ketogenic diet and the medicines helped to reduce the number of seizures in the babies. Babies in both groups had similar side effects. Doctors could consider starting a ketogenic diet in babies who continue to have seizures even though they have tried medicines to stop their seizures.

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