

What is Ketogenic Diet Therapy (KDT) and who is it for?



There are 4 different versions of ketogenic diets². All have restricted carbohydrate, are rich in fat and provide sufficient protein to support growth and development. Research has shown that all versions of the diet are effective in reducing seizures:

Classical ketogenic diet (KD)

Medium-chain triglyceride (MCT) KD

Modified Atkin's diet (MAD) modified KD

Low glycemic index treatment (LGIT)¹



of children and Most people with epilepsy have a good up to

KDT in drug resistant Epilepsy

response to and become seizure free with treatment involving 1 or more anti-seizure medications (ASMs).3 Clinical consensus demonstrates that seizure control diminishes



resistant epilepsy.3

with each successive ASM trialed4 Updated recommendations from the International Ketogenic Diet Study

Group state that KDT should be considered after failure of 2-3 ASMs⁵



Patients who have failed 2-3 ASMs. Patients who do not tolerate and/or

KDT is indicated for⁵:

- experience severe side effects from ASMs

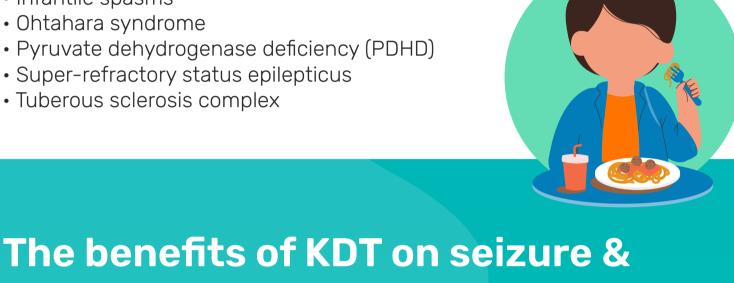
Epilepsy Syndromes and conditions for which KDT has been consistently reported as more beneficial (>70%) than the average

50% KDT response (defined as >50% seizure reduction)5: Angelman syndrome Complex I mitochondrial disorders

- Dravet syndrome
- Epilepsy with myoclonic-atonic seizures (Doose syndrome) Glucose transporter protein I (Glut1) deficiency syndrome (Glut1 DS)

and metabolic disorders5

- Febrile infection-related epilepsy syndrome (FIRES)
- Formula-fed (solely) children or infants
- Infantile spasms
- Ohtahara syndrome Pyruvate dehydrogenase deficiency (PDHD)
- Super-refractory status epilepticus
- Tuberous sclerosis complex



28%

59%

22%

55%

non-seizure related outcomes for people with DRE The effects of KDT in reducing seizures¹

24%



60% **52**% Up to 28% of children are seizure-free Up to 60% have greater than 50% seizure reduction

80

60

<50% seizure reductions

The effects of KDT on improving cognition and behaviour7

Subjective cognitive

improvements observed

Cognitive tests confirm diet benefits on alertness

and improvements

>50% seizure reductions

Seizure free



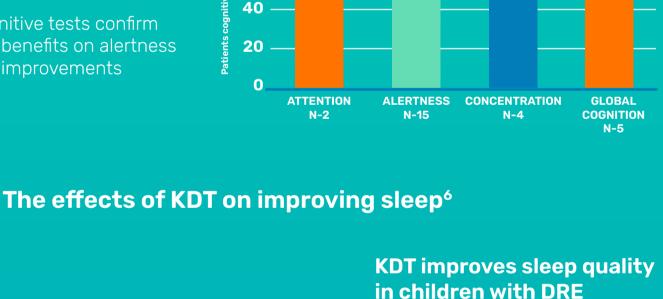
23%



69.5

62.5

KDT





120

100

80

60

0 p=0.01 **TDS Today Day Sleep** 12 months **Before** 3 months

116

after KDT

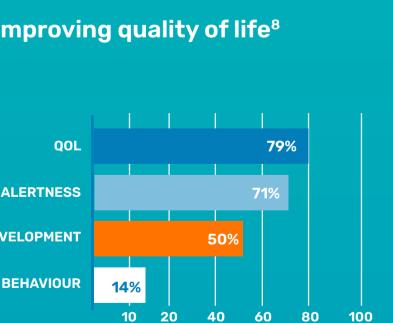
p = 0.04

p=0.58

after KDT

The effects of KDT on improving quality of life8 Parents self-reported improvements of KDT KDT was well tolerated and safe to use in this **ALERTNESS** group of infants and young children with drug **DEVELOPMENT** resistant epilepsy leading to improved seizure

ASMs - Anti-seizure Medications QoL - Quality of Life



A significant decrease in total

daytime sleep (p=0.01) and a

further increase in REM sleep

(p=0.04) after 12 months

REM Rapid eye movement

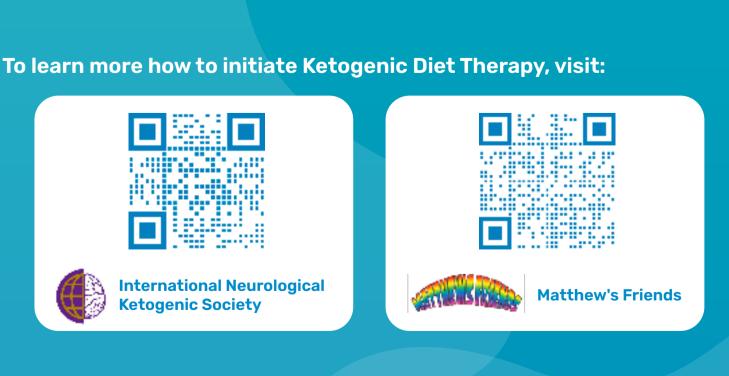
control and QoL.

KDT - Ketogenic Diet Theraphy

International Neurological

Ketogenic Society

Medicine and Child Neurology 2019:61:45.



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