Topic: The Use of Ketogenic (Very Low Carbohydrate) Diets the treatment of epilepsy

Some key things to remember about searching in databases:

1. Databases only look for the keywords you enter. When you search with keywords, you are making assumptions that certain words MUST appear in articles that are about your topic. Remember articles can be on the same topic but use different words to describe it.

2. You use logic to tell the database what you are looking for:
   - AND, OR, NOT, (), *, and “” can be used to specify relationships between keywords
   - Examples:
     ketogenic AND diet AND epilepsy
     “ketogenic diet” AND epilepsy
     (ketosis OR “ketogenic diet” OR ketones) AND epilepsy
     (keto* AND diet*) OR “low carbohydrate” AND epilep*

A. PRIMO – the Morgan Library Discovery Tool

PRIMO allows you to search all library resources from a single search bar. This is a good place to go if you want to just do a quick search, but it can be overwhelming without wise use of search limits. Can be hard to narrow down results from a giant list with mixed resource types.

The limiters on the left side bar can be helpful to narrow your list. Commonly used limiters are limiting the “Resource Type” to only Books/ebooks as many prefer to search for journal articles in specific databases for more searching flexibility.
Electronic resources such as journal articles in PRIMO will have a link to take you to the full text.

1. eBook (click “online access” link)

2. Electronic Journal (click “full text available” link)

B. Food Science and Technology Abstracts

Results are in date order with the newest items first
Use limiters on the left side menu as needed.

Click on a record to see the abstract and other information.
Use the “Find it at CSU” button to look for full-text or place an interlibrary loan request.

C. Web of Science

lib.colostate.edu – A-Z database list - W - Web of Science

You can also use multiple fields and field delimiters to search your terms in different fields

Web of Science searches can be filtered for narrowing in the left sidebar.
The “Find it at CSU” button will take you to full text, if available, or a link to order it through interlibrary loan.

Web of Science lets you generate a list of items that cited an article as well as the items it cites

Use the “Find it at CSU” button to look for full-text or place an interlibrary loan request.
D. PUBMED
lib.colostate.edu – A-Z database list -P - PubMed

PubMed will return your results with the newest items first.

You can limit your search by using the limiters on the left side bar.

Clicking on an article shows more details.
Ketogenic diets in the treatment of epilepsy.

Abstract

BACKGROUND: Although a larger number of antiepileptic drugs became available in the last decade, epilepsy remains drug-resistant in approximately a third of patients. Ketogenic diet (KD), first proposed at the beginning of the last century, is simple and has anticonvulsant effects, yet not completely understood. Over the last decade, different types of ketogenic diets (KDIs) have been developed, namely classical KD and modified Atkins diet (MAD). They offer an effective alternative for children and adults with drug-resistant epilepsy.

METHODS: We review several papers on KDIs as an adjunctive treatment of refractory epilepsy of children and adults, discussing its efficacy and adverse events. Because of the heterogeneous, uncontrolled nature of the studies, we analyzed all studies individually, without a meta-analysis.

RESULTS: KDIs may be considered first choice treatment in some specific metabolic conditions, such as glucose transporter type 1 and pyruvate dehydrogenase deficiencies, and mitochondrial complex I defects. Preliminary findings indicate that KDIs may be specifically effective in some epileptic syndromes, such as West syndrome, non-epilepsy epilepsy of infancy, myoclonic-astasic epilepsy, tuberous sclerosis complex, and intractable epilepsy of childhood origin. In short term, adverse events are usually mild in both children and adults, including gastrointestinal symptoms, polyuria, and hyperammonemia. Potential long-term adverse effects include nephrolithiasis, increased bone density, and liver problems. Possible adverse effects remain a concern. Patients on KDs should be carefully monitored in specialized centers during initiation, maintenance and withdrawal periods, in order to minimize such adverse effects, and improve compliance. Although the majority of KD trials on children and adults with drug-resistant epilepsy are promising, controlled studies based on small samples, an increasing number of randomized controlled trials have provided better quality evidence on its efficacy in recent years.

CONCLUSION: There is a need for future randomized controlled trials aimed to confirm the efficacy of KDIs in specific epileptic syndromes, and to provide further information about some practical unsolved problems, i.e. how long KD treatment should be continued.

Keywords: Ketogenic DIets; Ketogenic diet; children; drug-resistant epilepsy; pyruvate dehydrogenase deficiency.

Note the “similar articles” generated for any article you like:

Similar articles

- **Review** Ketogenic diet and other dietary treatments [Cochrane Database Syst Rev. 2016]
- **Establishing an Adult Epilepsy Diet Center:** Experience, efficacy and cost [Epilepsy Behav. 2016]
- **Review** Dietary treatment in adults with refractory epilepsy: a review [Neurology. 2014]
- **Ketogenic diet in patients with myoclonic-astatic epilepsy** [Epileptic Disord. 2006]

See reviews...

See all...

Note the MESH headings for any article you like – this will help you search using indexing terms rather than keywords. Articles newer than 6 months generally won’t have received MESH headings yet.
Make sure you use the “Find it at CSU” button to see if we have the full-text at Morgan Library or to place an interlibrary loan request. Ignore other full text links.

E. CINAHL – Comprehensive Index of Nursing and Allied Health Literature
lib.colostate.edu – A-Z database list - C- CINAHL

Results are returned with newest items first

You can limit your search with the facets on the left side:
Clicking an article allows you to see an extended view:

Practice Paper of the Academy of Nutrition and Dietetics: Classic and Modified Ketogenic Diets for Treatment of Epilepsy.

Use the “Find it at CSU” button to look for full-text or place an interlibrary loan request.