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# *Purple Picnic*

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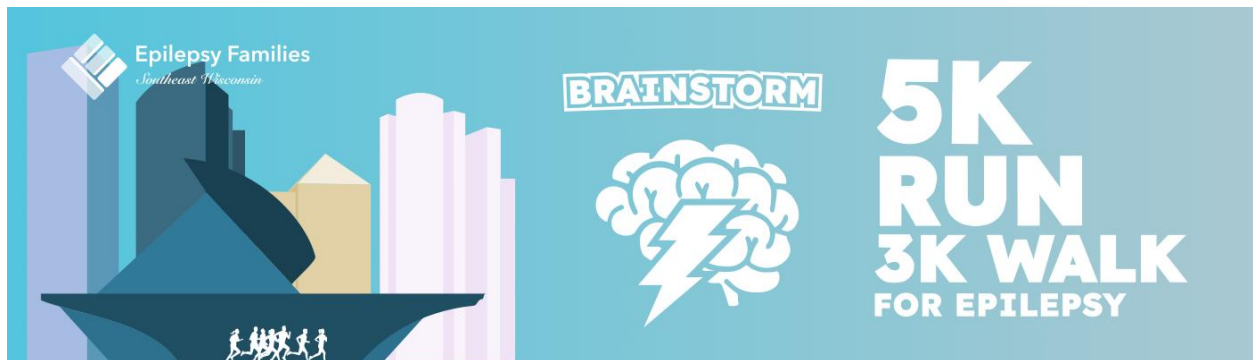
September 13, 2025

The 4<sup>th</sup> annual Purple Picnic is coming up on September 13. It will be held at the Blue Lotus Farm and Retreat Center in West Bend from 11 AM until 3 PM. Transportation from Milwaukee to West Bend will be available. The Center has many activities available. Lunch will be provided for all registered guests. Also, a goodbye to summer s'mores event will be held before we head home. More information and registration can be found on the website. [www.efsewi.org](http://www.efsewi.org)

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# *Brainstorm Walk/Run*

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The 23<sup>rd</sup> annual brainstorm walk/run event was held on Sunday, June 29<sup>th</sup>. A shout out to all racers. The overall winner of the males was T. Baker with a time of 17:37 and the overall winner of the females was S. Johnstone with a time of 27:28.

W. Gehl had a time of 18:58, A. Jepsen had a time of 19:20, M. Baker had a time of 21:04, J. Jepsen had a time of 21:30, H. Wright had a time of 30:13, R. Bilan had a time of 32:02, R. Jepsen had a time of 32:10, S. Bigley had a time of 32:29, M. Bigley had a time of 32:29, R. Swart had a time of 32.36, R. Reichert had a time of 33:23, K. Bigley had a time of 36:00, E. Johnstone had a time of 36:08, Z. Green had a time of. 37:10, N. Bilan had a time of 39:12,

S. Bilan had a time of 39:13, D. Bilan had a time of 39:51, A. Goodson had a time of 41:04, Q. Johnstone had a time of 41:55, M. DeJesus had a time of 42:15, L. Jepsen had a time of 46:27, C. DeBerry had a time of 49:30, K. Bennewitz had a time of 49:30, and D. Johnstone had a time of 51:44.

A shout out to all the Children's Fun Run racers. They were B. Collins and A. Jelinski.

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## *Comprehensive Study of SLC13A5*

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Citrate is essential for the metabolism and the development of neurons. A membrane transport protein called SLC13A5 plays a central role in this process and has previously been linked to a particularly severe form of epileptic encephalopathy. Scientists at the Center for Molecular Medicine have comprehensively studied the function and structure of the membrane transporter SLC13A5, experimentally investigating 38 mutant variants. Their findings shed new light on the mechanisms of this disease and lay the foundation for further research into epilepsy and other disorders.

Read more at <https://www.news-medical.net/news/20250630/Comprehensive-study-maps-genetic-mutations-in-SLC13A5-linked-to-epilepsy.aspx>

Website accessed on July 17, 2025

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## *Therapeutic Potential of Gut Microbiota Modulation in Epilepsy*

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Advances in high throughput metagenomic sequencing, a powerful technology that allows researchers to sequence DNA and RNA rapidly, have increasingly highlighted the role of gut microbiota imbalance plays in epilepsy. Recent studies have indicated that short-chain fatty acids not only regulate seizures by maintaining intestinal barrier integrity and modulating intestinal immune responses but also affect the structure and function of the blood-brain barrier and regulate neuroinflammation.

Read more at <https://www.cureepilepsy.org/news/therapeutic-potential-of-gut-microbiota-modulation-in-epilepsy-a-focus-on-short-chain-fatty-acids/>

Website accessed on July 17, 2025.

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## *High Blood Pressure in Pregnancy Linked to Increased Risk of Seizure in Children*

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A new study led by researchers at the University of Iowa Health Care has revealed a significant association between high blood pressure during pregnancy (gestational hypertension) and an increased risk of seizures in children. This study, published June 16 in the Journal of Clinical Investigation, used extensive clinical databases and innovative animal models to uncover this critical link. The findings also suggest that inflammation in the brain may play a role in connecting gestational hypertension to seizure risk and could potentially be targeted to prevent seizures in children exposed to hypertension in the womb.

Read more at <https://pediatrics.medicine.uiowa.edu/news/2025/06/high-blood-pressure-pregnancy-linked-increased-risk-seizure-children>

Website accessed July 17, 2025.

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# *Insulin Resistance May Link Alzheimer's and Epilepsy*

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Researchers at the University of Sao Paulo in Brazil have succeeded in showing, in an animal model, that the process of insulin resistance in the brain affects both Alzheimer's and epilepsy and may be a linking factor between the two diseases. The work confirms clinical evidence that people with epilepsy are at a greater risk of developing Alzheimer's disease as they age. It is also not uncommon for people with Alzheimer's disease to have seizures.

Read more at <https://www.news-medical.net/news/20250522/Insulin-resistance-in-the-brain-may-link-Alzheimer's-and-epilepsy.aspx>

Website accessed July 17, 2025.

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# *Possible Treatment for Rare Epileptic Disease*

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While extremely rare, encephalopathy (a condition affecting brain function) triggered by mutations in the UBA5 gene has devastating impacts, with affected individuals reaching few developmental milestones and experiencing frequent and early-onset seizures. Scientists at St. Jude Children's Research Hospital created a first-of-its-kind cortical

organoid model for the disorder, studying how it causes developmental defects and identifying potential ways to treat it.

Read more at <https://www.stjude.org/media-resources/news-releases/2025-medicine-science-news/unique-model-of-rare-epileptic-disease-helps-pinpoint-potential-treatment-route.html>

Website accessed July 17, 2025.