Seizures are rarely predictable. Most people do not know exactly what causes their seizures on a given day, although many do suspect that certain things increase the likelihood of seizures. The most common trigger for seizures is missing a dose of medicine. Epilepsy medicines work best when blood levels are kept constant. Unfortunately for some people medicines do not control all the seizures and breakthrough events do occur even when the medicines have been strictly taken. Sleep and wake cycles, as well as hormonal changes at different times in the menstrual cycle can influence seizure occurrence.

In people with epilepsy it is helpful to know those things that might cause a breakthrough in seizures. In this way provocative situations can be avoided and seizure risk reduced where possible. Excessive use and/or sudden withdrawal of alcohol and certain drugs may trigger seizures. Adding or removing prescription medications can trigger seizures in some people, as can certain supplements. General illness including fever, diarrhea and vomiting, infection and various metabolic conditions such as low sodium levels, low blood sugar, low calcium levels, can also contribute to poor seizure control.

Many people with epilepsy identify emotional stress as a potential trigger for seizures. Worry, anxiety, and anger may contribute to seizures, especially if combined with fatigue or chronic sleep loss. Practicing relaxation techniques and treating disorders contributing to sleep loss (such as sleep apnea) may help decrease seizure frequency. Melatonin has been successfully given for sleep loss in children.

Some people are sensitive to specific seizure precipitating factors such as flickering lights (called photosensitive epilepsy), certain kinds of music, or certain thinking tasks. This is an inherited type of epilepsy known as reflex epilepsy. It is not common. The seizures may be experienced as generalized convulsions or complex partial seizures. They are epileptic and not psychogenic. Sometimes flashing lights may be used during a routine baseline EEG. An EEG response may be seen in small number of people with primary generalized epilepsy, but generally this is not diagnostically helpful.

The reflex epilepsies usually begin in childhood and are often out grown by adulthood. For people with photosensitive epilepsy, watching television is probably the most common trigger. TV and electronic screen games may cause seizures because of the frequency of TV screen flicker. This is more common with European TV because it has a lower flicker frequency than American TV. Viewing distance from the TV may also be a factor.

Other forms of reflex epilepsy include seizures triggered by activities such as complex thinking tasks and mathematics, reading, certain types of music, and even eating, or soaking in hot water. These are rare forms of epilepsy, and the causes are mostly unclear.

For the most part, once triggers have been identified exposure can be limited and appropriate antiepileptic treatment given. It is important to establish healthy routines as part of every day life. These should include a regular sleep pattern with a consistent number of hours of sleep, good nutrition and fluid intake, and a safe exercise regime. It is important to be aware of situations in which seizures are more likely. Recording seizures in a diary, as well as the possible triggers, may be helpful to tracking the pattern of seizures and determining how best they might be prevented.

To find out more, contact the Epilepsy Foundation at 1-800-332-1000 or visit www.epilepsyfoundation.org

Additional information may also be found at www.emedicine.com/neuro/topic687.htm.

This pamphlet is intended to provide basic information about epilepsy to the general public. It is not intended to be, nor is it, medical advice. Readers are warned against changing medical schedules or life activities based on this information without first consulting a physician.