Dear Dr. Meinig: I would like to know about meeting the nutritional needs of epileptics in regard to calcium and magnesium.

Adele Davis in "Let's Get Well",1965, states on page 273 that supplements of B6 and magnesium were effective for seizure control. The book "Epilepsy" by Schmidt and Wilder, 1968, states that Dilantin "...prevents the hyperexcitability resulting from reduced Ca # levels".

I am aware that the ratio of magnesium is about 1/2 half the amount of calcium, that a quart of milk has 1 gm of calcium and magnesium can safely be taken in relationship to the amount of milk ingested. I know that pasteurization alters the nutritional value of milk but I have forgotten the exact amount of calcium available in raw milk.

I am curious to know if anyone has researched why epileptics have a magnesium deficiency, and low Ca # levels. That is, do certain individuals need more than others? Do individuals with epilepsy have digestive disturbance preventing adequate absorption?

I am a nurse (R.N., B.S.) who has used diet therapy and vitamin supplements very successfully in my own behalf and my families. I now have a friend with epilepsy who has been on medication (Dilantin and mysoline) for 22 of his 37 years. I would not do anything as foolish as to prescribe for him but with your help I would like to learn enough so that I can encourage him to seek appropriate care under a medical nutritionist. I would appreciate any assistance you could give us. Sincerely, Z.B.

Dear Z. B.: Magnesium is recommended most often because of its analgesic, depressant, tranquilizing type action. People with a history of convulsion or epilepsy should refrain from drinking milk because its high calcium content causes a magnesium deficiency. Children kept on high milk intake into their third or fourth year often develop epileptic attacks for this reason. Lewis Barnett, epileptics

M. D. showed that a group of all had low spinal fluid magnesium.

B6 was recommended because of its success in treating hand tremors and shaking. I do not know of any research showing it is also beneficial in these cases but convulsions in children on severe B6 deficient diets have been reported.

in milk

The amount of calcium present is the same whether it is raw or pasteurized. What is different is the amount utilizable. The heating of milk in pasteurization changes greatly the amount of calcium that is available.

Sugar is a great reducer of body calcium as are soft drinks and caffeine products. While these are not good for anyone they are dynamite for epileptics.

High fat diets have been successful in treatment of epilepsy but the high protein ketogenic diet is better treatment. This low carbohydrate regime offsets the excessive alkaline producing diet that is common to these individuals. Milk and fruit juices are the chief alkaline offenders. Sweet cream and butter and olive oil would be the fats of choice while hydrogenated oils must be completely avoided.

Your encouragement of your friend is to seek nutritional aid is commendable

as such help has controlled and stopped the seizures thus avoiding the need for drugs. Dilantin treatment, while a godsend, does cause gum problems and have other side effects.

Another question about this affliction will cover some other factors in a soon to come article.

Everyone has a question about nutrition. Send yours to: Dr. George E. Meinig, D.D.S. c/o OVN, Box 277, Ojai, CA 93023.