## Nutritionally Speaking why against fruits? acid? chewing gum Too much fruit drink bad for you

by George Meinig, D.D.S. Dear Dr. Meinig: You advised that my tennis elbow could be caused by the fruit juice I drink. Is there something else besides citrus juices that are acceptable? R.B.

Dear R.B.: Orange juice is a common thirst quencher for tennis players. In my opinion it is also the main reason for so many tennis elbows.

Fruit drinks are high in acid, high in sugar and high in potassium. All three of these have a detrimental effect on one's calcium phosphorus balance, causing an increase in calcium and a decrease in the balance level of phosphorus. The increase of calcium in the blood stream is not due to any increase of calcium in food eaten but represents calcium being taken from one's storage warehouse, the bones and teeth.

It is felt that the painful elbow is caused by this calcium increase, but it may also be due to an inability to digest the heavy dose of organic acid. Most people cannot digest large amounts of such acid foods. Some can't even handle small amounts. This is particularly true of oxalic and benzoic acid foods, such as prunes, plums, cranberries, sour cherries, rhubarb and spinach. On the other hand, citric acid foods such as orange, grapefruit, lemon, tomato or malic acid fruits, such as apple, apricot, grapes or cherry can be used by some but not all. A piece once or twice a day is all most individuals can handle. Drinking fruit juice is a problem, because it usually contains several pieces more of the fruit than would be eaten at one setting.

On a hot day a tennis player has no trouble downing a pint to a quart or more of juice during a game. We must be aware that represents the juice of eight-20 oranges. Heavy perspiration quickly uses the water in the juice leaving the body to solve the chemistry problem created by the high remaining concentration of citric acid, sugar and potassium, not to mention other ingredients in the fruit. This high concentration imbalances the normal min-



George Meinig, D.D.S.

eral content. One of the principle problems is potassium, which has a thing about calcium. When too high, it also attracts calcium from one's bones and teeth.

A strange paradox exists in this situation as calcium is needed for muscle activity. Cramps are a frequent result of this need in athletes. It would seem juice drinking should help if it increases one's blood calcium. The problem is that we can't use that calcium unless it is accompanied by phosphorus and one of the effects of the excess acid and sugar is to LOWER the phosphorus. All minerals have an interlacing effect upon one another. Excesses or deficiencies, therefore, affect a number of body needs and functions.

I hope the picture is unfolding. Tennis players and other athletes who drink a lot of juice are also more prone to sensitive teeth and/or cold sores and allergies.

While orange juice seems to be a favorite, any of the other fruit juices have the same problems. Soft drinks are equally bad because of their sugar content and their main ingredient, phosphoric acid.

**BY NOW**, you have probably guessed what the acceptable drink must be.....water. Water is a most essential part of our diets. Still and all, most people drink very little of it, thinking they are getting their share in coffee, tea, juices, soft drinks. All of these are no longer water but foods or chemicals and must enter one's digestive mixture.

Athletic participation places great stress upon one's body structures. The demands for high valued foods to supply energy needs must be met for successful living and peak performance. Athletes can get by with more carbohydrates than the rest of us, but this doesn't mean they can stint on protein, fats and vegetables. Calcium and potassium are particularly necessary to runners as is magnesium. Foods high in these elements are called for and supplements may be necessary if physical symptoms of deficiencies exist.

If a person is short in stomach hydrochloric acid, and many are, they are most likely to have these problems, as the digestive process is necessary to utilize the organic acids in fruit.

You don't have to be a tennis player to get tennis elbow. The common kink in the shoulder and hip are other locations of the same problem. Neuritis and bursitis are fancy diagnostic names we professionals give such problems, but the name only says one has inflammation present in these areas. It says nothing about the chemistry responsible for the pain.

Those of you who have suffered in pain and game will find this data a valuable introduction to the importance of nutrition. Pass a word to me about your particular experience. It would be helpful and appreciated.

Dear Dr. Meinig: Please comment about the use of chewing gum. It seems to me it might help keep our teeth clean. P.B.

Dear P.B.: The action of chewing gum does help to clean one's teeth, but it's other detrimental effects eliminate any advantage that it may have.

Most gum contains one half teaspoonful of sugar per stick. It is not uncommon for people to go on the gum kick and chew it most of the day. Those who take new sticks repeatedly have sugar bathing the teeth continually. This often happens to smokers who quit and take up gum chewing. The dentist can spot them rather quickly as many develop six to 10 gum-line cavities in but a few months' time with such continuous bathing of the teeth with sugar.

The articficially-sweetened chewing gums use coal tar products instead of sugar to entice you to use them. Such non-food chemicals are not my idea of what we should stomach.

Americans spend \$800 million on chewing gum. This amounts to 200 sticks for every man, woman and child in the USA.

The amount of wear one will sustain in their teeth just from eating food is minimal. However, all day chewing of gum or anything else does cause excessive wear of teeth. Those with irregular bite arrangements are particularly susceptible to severe problems in the joints of their jaws. Popping and clicking during eating or talking is a frequent abnormality that is present in many people's mouths, but such grating in the jaw is easily encouraged in the gum chewer. This affliction is known as the tempero-mandibular joint syndrone. In simpler terms it resembles a sprained ankle or wrist...that is, a sprained jaw. Dentists treat these problems regualrly, but some of the need could be avoided.

Besides these reasons for not chewing gum, one wonders why people do it so much as it is so difficult to chew gum in an attractive manner. For a cow chewing the cud is a must.... for humans it's a bust.

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