Saccharin

Sweet and Low, Sweet'N Low, Sweet Twin, Necta Sweet, E954

Although saccharin was discovered as a sweetener “accidentally” in 1878, it was not until the sugar shortage during World War I (1914 – 1918) that saccharin became popular as a sugar substitute. After the advent of processed foods, when obesity and diabetes began to rise significantly, saccharin once again gained popularity, this time for its value as a low calorie sweetener.

In the U.S., Sweet’N Low, known as “the pink packet” is the most commonly used brand name. Because it was the first on the market, it tends to be the most well known and used even though there continues to be much controversy over its safety.

USES

Saccharin tablets are 300-500 times sweeter than table sugar (sucrose) and is used to improve the taste of many products, including, diet foods and beverages, toothpaste, medications such as cough syrup, candies and cosmetics.

Saccharin has gained popularity with people who are trying to lose weight because it has zero calories. Many diabetics also choose saccharin because it does not convert to glucose and is reported not to affect blood glucose or insulin levels. However, lab results have shown that saccharin can trigger the release of insulin in humans and rats, resulting in changes of blood sugar levels.

Because of its bitter, metallic aftertaste, saccharin is often blended with other sweeteners. The extremely toxic artificial sweetener, aspartame, is commonly used to sweeten diet sodas, however it has a relatively short shelf life and thus is often blended with saccharin in case the soda is consumed after aspartame’s sweetness has expired. (Unlike aspartame, saccharin when heated does not react chemically with other ingredients.

Researchers suspect that many of the health issues reported by military personnel serving in the Gulf War are a result of their consumption of diet sodas that had reached high temperatures while being stored in the sun, changing the chemical structure and making these drinks extremely toxic.)

SAFETY CONCERNS

Saccharin has been in use since 1878 and researched for possible health hazards since 1907. In 1977, there was a of bad publicity about saccharin in reaction to the publication of a 1960’s study showing that high levels of saccharin caused bladder cancer in lab rats.

In 1977, the FDA planned to ban the use of saccharin, however Congress stepped in and placed a moratorium on the ban, allowing its use to continue, although requiring a warning label of its possible cancer-causing properties. Further research showed that the bladder cancer in rats was not applicable to humans due to differences in the way each metabolizes saccharin.
As a result, the mandated warning labels were removed in 2001, yet many countries still ban the use or regulate the allowable levels of saccharin.

Saccharin is a chemical compound, generally beginning as toluene, which is commonly known as paint thinner! Many believe that Saccharin is safe because it is reported to pass through the digestive system unchanged and is excreted through the kidneys. However, it is advisable for pregnant women to avoid products containing saccharin because of its unknown affect on fetuses. Like all other substances, some people may have allergic reactions after ingesting saccharin.