

## Answer on Question #42793 - Chemistry - Inorganic Chemistry

### Question:

From the examples below, select one acid, one base, and one salt and describe specifically how and where they are used in therapeutic processes.

Boric acid

Salicylic acid

2-acetoxybenzoic acid

Ammonia hydroxide

Calcium sulfate

Sodium bicarbonate

Sodium fluoride

Magnesium citrate

Morphine sulfate

### Answer:

#### **Boric acid**

Boric acid and borates are used in over-the-counter nutritional supplements as a source of boron. It is thought that boron has a potential therapeutic value in promoting bone and joint health as well as having a limiting effect on arthritis symptoms. It is important to note that the health effects of boric acid and boron-based supplements are based on recent studies and/or are based solely on the claims of the manufacturers' of the supplements. It should not be implied that boric acid should be directly ingested as a supplement or for any other reason.

#### **Ammonia hydroxide**

Ammonia hydroxide is used as the first aid steps inhalant for fainting. When reviving someone suffering from syncope (loss of consciousness; Vasovagal episode, a common form of fainting;) you need a strong stimulant - first aid for fainting can include passing ammonia inhalants (smelling salts in lay-terms) under the nose.

#### **Calcium sulfate**

It has been demonstrated that calcium sulfate is a completely and rapidly resorbable material with the ability to guide new bone formation occurring in association with its resorption. Also calcium sulphate barrier is used to collagen membrane treatment of intrabony defects with the use of decalcified freeze-dried bone allograft.