"BORON for BONES Written by Tessa Jupp RN

ARTHRITIS IS A MINERAL DEFICIENCY BORON IN PARTICULAR."

So claims Rex Newnham PhD DO ND, in his book "Away with Arthritis" (2nd edition printed 1993). Rex, a Western Australian now resident in the UK, lived at Guildford in the early 1960's. He taught chemistry, biology, geology, soil science and agricultural botany. In 1963 Rex moved to a house in a sandy area of Perth rather than the clay soil at Guildford. He had grown his own vegetables at both places but found that in sandy soil his crops showed signs of mineral deficiencies and he developed arthritis. With

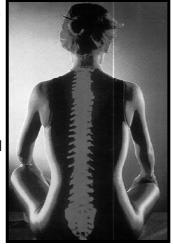
his scientific background Rex looked for the cause in recent changes. As an agriculturist he knew that boron was necessary for green plants, where it helps in calcium metabolism. In pursuing this he decided to trial it on himself using borax, a boron extract.

Rex took 30 mg of borax, twice a day. In 3 weeks the pain swelling and stiffness had gone. He stopped taking it. A year later the symptoms came back and disappeared quickly again on resumption of his borax dose. (older people may take longer)

Over the next 10 years he told many people he met and they tried borax with similar results. In 1976 Rex had some boron tablets made up. By the early 80's he was selling 10,000 bottles a month. Rex approached a drug company marketing a common painkilling drug for arthritis. They were only concerned about loss of their own profits and ended up instigating a government law that boron be declared a poison in any concentration. This resulted in Rex being fined and made boron unavailable. Boron is toxic if taken in large quantities. Rex points out that ordinary salt is toxic as well if too much is taken but salt is not banned.

Rex has since researched the effects of boron . It is well known that Carnarvon is a good place for arthritis. Many elderly people go there for a couple of months at a time to get rid of their arthritis. In 1981 Rex employed a number of school leavers to carry out a survey in Carnarvon. This showed that only 1% of the local population had arthritis. Other main Australian towns had a 20% rate of arthritis. Rex investigated further and found that it was not the climate that helped but the high boron content in water & food grown in the Gascoyne River bed.

Rex researched many areas of the world looking at arthritis incidence and soil content. Israel has some of the best soil in the world and a high boron content.



An independent survey in 1978-1980 at the Kaplan Hospital showed arthritis for the whole country to be less than 1%.

In New Zealand a number of spas pools are recommended as being good for arthritis. They all have high boron readings. One motel at Ngawha has a collection of wheelchairs and crutches left behind by people no longer needing them when they leave.

The NZ green lipped mussel extract that is claimed to relieve

arthritis was originally gathered from White Island, a volcanic island with vents under the sea. The mussels absorbed boron from the sea in this way and this was the secret to their success. Mussels gathered from other areas do not have the same effect as they lack the boron.

There are a number of degenerative diseases that appear to benefit from boron supplementation.

RHEUMATOID ARTHRITIS

- An autoimmune disease whereby the body attacks its own joints. The synovial membrane is affected causing degeneration and deformity of the joint. It is more common in women and often later develops into osteo arthritis. Work by a Prof Wyburn-Mason identified an amoeba as a parasite in the joint. Certain common minerals in the blood, including boron, can control these parasites.

OSTEO ARTHRITIS

- A wearing away of the joint, generally in joints that have done the most work or that have been damaged. The cartilage or tough fibrous matter around the joint wears away, then bone rubs on bone causing pain and permanent damage to the joint. Osteo arthritis occurs more often in men.

JUVENILE ARTHRITIS (Still's Disease)

- Similar to rheumatoid but occurs in young children. Can involve spleen, lymph and heart. On the increase. Often seen as 'growing pains' Responds well to certain minerals, like boron.

PYORRHOEA

Loose teeth with swollen gums. It is really arthritis of the teeth and gums. Boron mouth-washes are recognised treatments available for pyorrhoea.

SPONDYLITIS

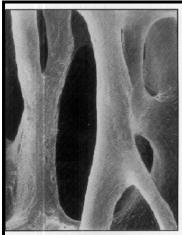
- Arthritis of the spine with inflammation in the joints. Calcium is lost from the vertebrae resulting in fusion and disc degeneration. Spondylitis also responds to mineral treatment like boron.

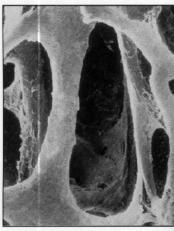
GOUT

- Again joint disease - often the big toe - where uric acid from the breakdown of proteins, concentrates in an area. The culprit again is a mineral imbalance from inefficient metabolism of sugars, alcohol and protein. Boron is needed to repair the damage.

OSTEOPOROSIS

- Decalcification of the bones. It is not a problem in primitive cultures. Osteoporosis is a disease of western civilisation due to the imbalance of bone minerals. As minerals are leached out for other body usage, the stability of bony tissue is eroded resulting in easy fracture. Crumbling limestone is a good example of osteoporosis.





Normal Bone Osteoporotic Bone

Our bones are our mineral bank - the body's survival mechanism. Minerals are deposited and are the matrix and strength of the the bone. However if the there is a shortage of a particular mineral in another part of the body, a withdrawal will occur from the bone to provide for the deficit. After all, what use are bones if the body doesn't survive?

Bone is composed of many minerals in differing proportions - calcium, phosphorus, magnesium, sodium, sulphur, potassium, zinc, manganese, copper, silicon, stronium, boron. Boron helps other minerals to incorporate into the bony matrix. Body hormones and Vitamin D are also necessary. Bone is destroyed and replaced periodically just like leaves on a tree. Another ongoing function of bone is the manufacture of blood cells in the bone marrow. So we have a continuing need for the appropriate vitamins and minerals. We should be getting these from our diet. Again we can only get the minerals if they were in the soil in the first place. Plants and animals can display deficiencies too.

SIGNS of MINERAL DEFICIENCY in VEGETABLES

Leaves streaked with yellow.

Brassicas, eg cauliflower - hollow stems/browning

Potatoes - hollowed or browned insides

Sweet corn - aborted grains on cob

Apples - sunken dark spots under skin.

Grapes - aborted berries

Tomatoes - dark hollow areas on skin

Another contributor to arthritis is Fluoride. We have fluoride added to our water so we can't avoid it. Mottling of the teeth is a sign of too much fluoride. At the same time fluorosis of the skeletal bones occurs. Boron is the natural inactivator of fluoride.

Teeth are the only bones that are normally visible and their state is representative of other bones. If teeth are missing, filled or with cavities we must expect to have similar problems in other bones.

Sugar requires phosphorous for its metabolism as does white bread and caffeine (tea, coffee). Phosphorous is removed from the bone to metabolise these common foods where processing has removed many of the original minerals. Sugar utilises phosphorus, magnesium and chromium. When phosphorus is withdrawn from bone, calcium comes out too and as it is not needed is excreted in the urine. Soft drinks have both sugar and more phosphorus than is needed for sugar metabolism. The excess phosphorous combines with calcium upsetting the calcium phosphorus balance resulting in less available calcium. Caffeine also requires phosphorus and magnesium to metabolise. Sodium and potassium are lost at the same time.

Using Borax for arthritis is an old remedy. Since we made this information available I have had a number of older people tell me that their grandparents used to lick their finger, dip it in the powder and lick off the Borax to rid them of their joint pain. Borax is in the washing powder section in the supermarket but Coles told me one lot had been contaminated and withdrawn so the quality is now suspect and some has been listed on the jars as coming from China.

We have sourced **100G** pharmaceutical-grade **borax** (boron) which is **available** at the **Polio Office** for **\$15** Your own finger is in proportion to your body so use the top one third of your forefinger to get the right dose. Your own finger corresponds with the size of your own body. Take once daily.

FRACTURES

Taking borax twice a day with extra magnesium to bowel tolerance will take the pain out of a fracture site within 48 hours and speeds healing. Keep taking for at least 6 weeks until healed. Heals well.

CAUTIONS

Extra boron should only be taken if people display signs and symptoms of deficiency as outlined in the problems above. Excess boron can cause problems. Your body will let you know if you need to take a bit more again later. A few niggles in joints will tell you to start taking borax (boron) again for a while.

Boron increases oestrogen and calcium levels. It normalises oestradiol and testosterone so HRT and calcium aren't needed for osteoporosis. Boron lowers blood sugar; also B6, zinc so may need more.

Signs of toxicity are nausea, vomiting, lethagy, dermatitis, diarhoea. The antidote is to take extra B2.