

What Helps with Joint Problems

written by Tessa Jupp RN OAM

We have been using gelatine and borax to alleviate arthritis successfully for many years now but there are so many other ways that our bodies also need and use all of these nutrients we should be getting from the foods we eat.

Each of us is a unique person and our bodies can end up with a wide variety of health problems that differ from person to person - but the answer may be the same vitamin, mineral or amino acid - things like gelatine or borax!

So from the long lists in the next few pages, find the main problems you might be having and see if you can fix or improve them with some of these solutions. You won't have all of the listed problems, (I hope), but the more things that are going wrong, then the more of that item you are likely to need to take to fix them.

For lists of problems that are indicators for other nutrients, buy my booklets *"Signs & Symptoms - be your own Detective"* \$6 (lists and explanations) and/or *"Putting a Face to Nutritional Deficiencies"* \$8 (to view in coloured pictures). **Postage** is an extra \$3 for up to 4 booklets.

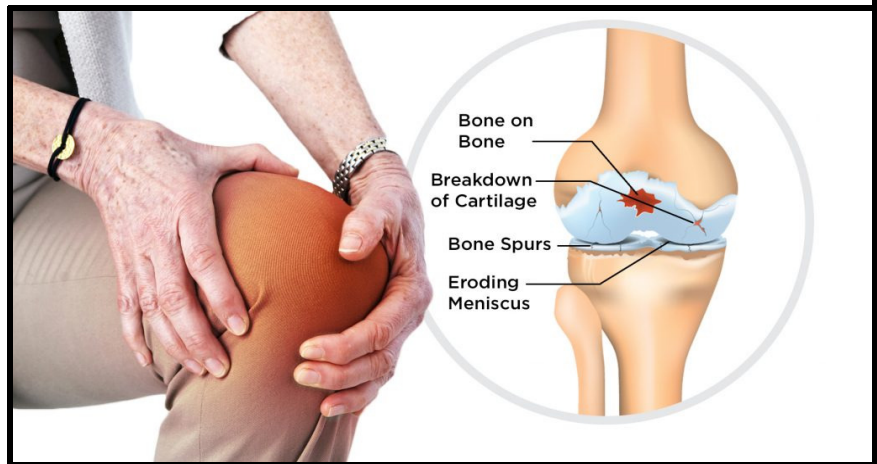
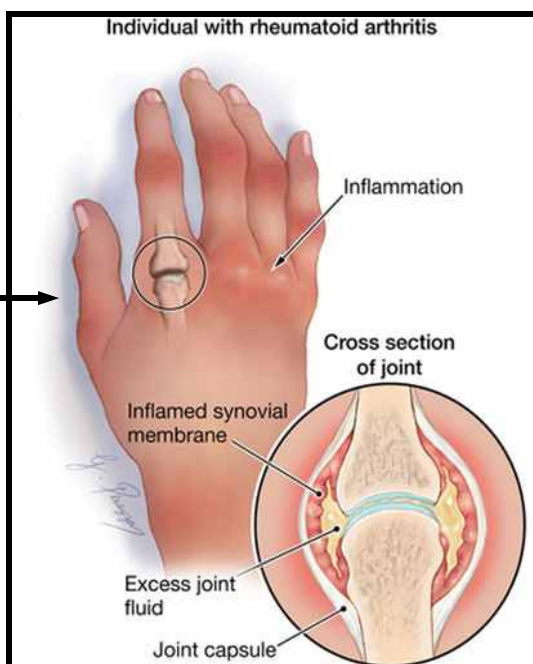
We need to have a symptom that we can say - **"Yes! I can see or feel that taking or eating this is helping me with this particular problem."** Don't just take something because it has been recommended by someone. Always have a way of evaluating whether it is working for you.

There are 2 types of arthritis - the most common being **osteo-arthritis**. Caused by wear-and-tear (polio walk) or aggravation on the body part; often in an old injury area, due to lack of the nutrients needed to maintain the joint or an inflammatory reaction to foods we eat or other things we are exposed to in our environment - like changes in weather

Rheumatoid arthritis is thought to be caused initially by an infective agent that sets up chronic inflammation. So we need to get rid of the dormant infection and reduce the inflammation. Borax has all of these features (see page 10)

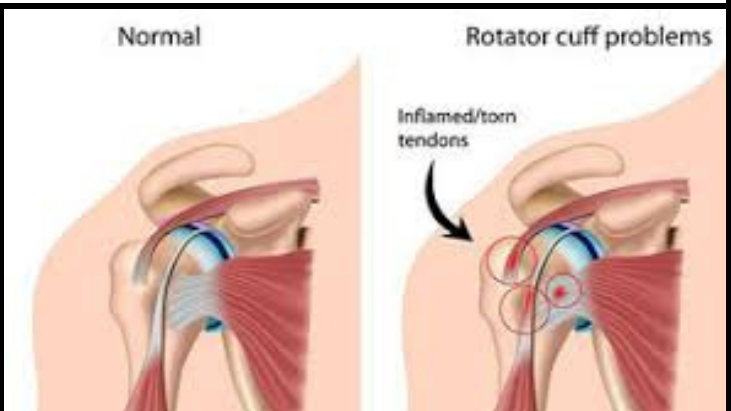
If we don't fix it soon enough then permanent thickening causes distortion of the joints.

See opposite →
- so calcium is deposited in the inflamed excess fluid area, binds in the joint so it becomes stiff, immobile, painful and out-of-shape.



With knees, hip and shoulder joints, we have extra tendons and ligaments holding the bones in place. This is where gelatine and **manganese** particularly are needed. Cartilage is like the "plastic" buffer on the end or outside of bone. **Gelatine** is the precursor for cartilage and bone, as well as being needed for tendons and ligaments. **Vitamin C** is part of maintaining these structures too - to get better results.

When you get "grating" in a joint then the cartilage has been eroded and "bone-grinding-on-bone" causes bone damage - so **borax** helps. If you have tight muscles, this makes the tendons (which attach muscle to bone) pull on the attachment site on bone, which stimulates extra bone growth at that point, and this causes spurs! So take extra magnesium to allow the muscle to relax and to stop cramps.



Shoulder pain can be caused by injury - pulled, strained, torn, by twisting the tendons and ligament or by lifting awkwardly. We use our arms to help us stand, to reach out, to use walking sticks or elbow crutches and walking frames. Manganese, gelatine and Vitamin C, all together, over time, will help to repair damage to tendons. If you get a sharp stabbing pain, then either a nerve is being trapped or there is inflammation in the synovial membrane. For either of these causes, **Vitamin B6 is the answer**. The taste will tell you. The sweeter B6 tablets taste, the more you need. They taste really YUK when you don't need B6. Your body is very good at letting you know - to take it or not?

I have found that an ache in shoulder or hip joints that was waking me up after lying on them for a while, does respond well to taking regular gelatine in a hot drink daily - no pain! It was not arthritis as such - just the tendons complaining.

"Gelatine - more to jelly than meets the eye!"

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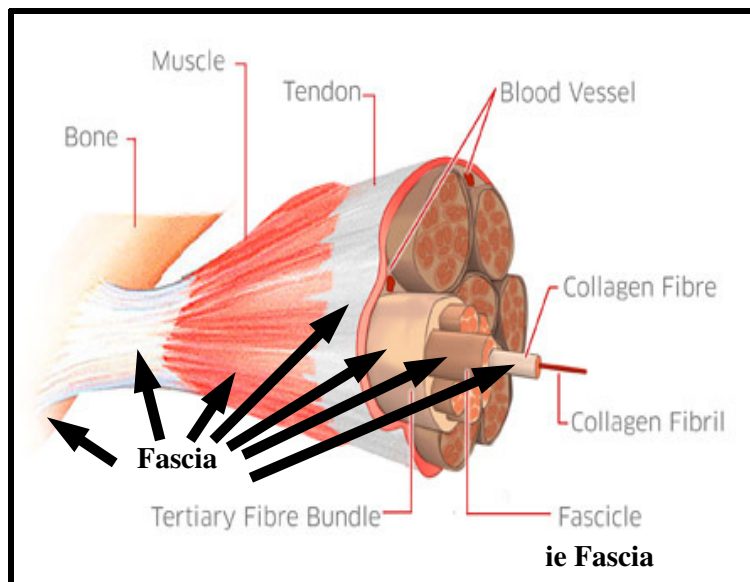
I always find it helps to know how and why it works, so I want to tell you what I have found out about gelatine - jelly. I recently saw a DVD that showed highly magnified real-life photography inside the body. This **"fascia"** picture just below shows the **gelatinous coverings** that we have, like a sticky three-dimensional spider web. It extends from head to toe and front to back in a continuous sheath of tissue that surrounds all of our internal organs, bones, muscles, nerves, lymph and blood vessels. It is made up of collagen and elastin fibres supported in a gelatinous matrix that infuses the muscles down to the cellular level. The body is made up of approx 70 trillion cells, and the fascia is responsible for holding them all together in their proper alignment. Here is a **description from the internet** -



"Fascia has many functions within our bodies. One of the most obvious is to serve as a container, a boundary for the liquid in our body. Without it, we would leak out all over the place.

Every cell is compartmentalised by fascia. Fascia anchors our intestines to our rib cage. Fascia encapsulates every bone and organ. Fascia wraps around every muscle, muscle bundle, and fibril. Fascia not only wraps around muscles and organs but also travels through them. We are also supported, bound together, and held upright by the tensile strength of fascia. We would be just a puddle of liquid and a bag of bones lying on the floor if it weren't for fascia."

This diagram of muscles and tendons show the fascia, and collagen fibres that form it. **Collagen** is made in the body **from the gelatine we get in our foods**. Two primary amino-acids in Gelatine are **glycine and proline** and they are critical for giving this connective tissue throughout the body, its **strength and durability**.

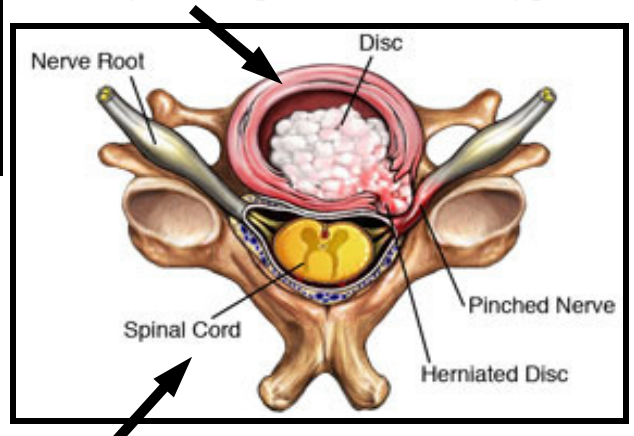


"Throughout our lifetime most of us begin to **stiffen** and to **shrink with age**. This does not have to happen. The health of our fascia determines the state of our body as we age. Lack of muscle movement and increased pressure will stiffen it. When this happens the **fascia tends to glue together**. This process is further advanced by stress because **stress tends to shorten muscles** as part of our

protection from fear. Each muscle and muscle layer, gland, blood vessel, and nerve is surrounded by fascia. As the fascia dries out and glues together all the tissues and organs within this region get pulled tighter, lessening movement.

Fascia requires movement, warmth, and adequate hydration to remain healthy. So we need to **keep up our fluid intake** as well as gelatine, to maintain fascia. Regular **movement** warms the muscles, which in turn **heats the gelatine matrix** in the surrounding fascia, (like we need boiling water to make jelly) and helps maintain the fluid-like nature of the fascia instead of turning it to rubber. Unhealthy and hardened fascia does not transport energy very efficiently. This is like trying to send an electric current through a rubber tyre. It will not work very well."

Gelatine and fluids are important for back and spinal function too. The discs require both. A squeezed, **herniating disc will pinch nerves, causing pain**.



Research shows that about half of the inhibitory **neurotransmitters** in the spinal cord use **glycine**, part of gelatine, which means it acts similarly to some **anti-anxiety** or **anti-depressant** drugs, so **gelatine** will also naturally boost mental clarity, calmness, lower **"stress hormones"** and **alleviate lethargy**.

*Research published Jan 2017 by Aust Institute of Sport of K Baar et al, shows benefit of **gelatine** and **Vitamin C** for sports injuries too.*

HOW to TAKE GELATINE

DRINKS - Add 1-2 heaped teasp of gelatine to hot drinks, coffee, cocoa, soup, bonox, 1-2 times a day, disguises taste

JELLY - Add 2 heaped dessertspoons of gelatine to a pack of jelly crystals + 4 cups of boiling water. Sets in 2 hours. Has less sugar etc. Eat quarter or half of jelly daily.

MEALS - Add gelatine to pot of soup, stews, jellied fruit

21 Reasons to add gelatine to your diet today!

From the internet - www.grassfedgirl.com/top-20-health-benefits-of-gelatin-helps-prevent-arthritis-cellulite-stretch-marks-wrinkles-brITTLE-bones-and-more/ and www.westonaprice.org/food-features/why-broth-is-beautiful

1. Skin Health: Gelatine has amazing skin healing properties because it is a rich source of dietary collagen. Gelatine makes up 25% to 35% of the total protein content of human body. This protein content is vital for skin elasticity and tone, plus the continuous renewal of skin cells. Gelatine makes up the connective tissues of the skin that are responsible for giving skin its strength and firmness.

2. Anti-aging: Collagen depletion usually starts when we are in our late 20's. It becomes more important to add gelatine to your diet after age 30 to help fight aging. Research at the University of Michigan shows the effects that collagen depletion has on the aging process.

3. Wrinkles: Collagen gives your skin its elasticity and helps to keep your skin wrinkle free. The proline found in gelatine, stimulates and enhances production of new and non-fragmented collagen in the skin.

4. Teeth, Hair and Nails: Gelatine provides beneficial minerals that are lacking in the processed western diet. This super-food supplies abundant calcium, magnesium and phosphorus, which builds strong nails, teeth, and hair. It improves the strength and shine of your hair.

5. Stretch marks: Gelatine helps prevent stretch marks by improving the skin's firmness, elasticity and functioning. It helps by boosting collagen production.

6. Cellulite: Cellulite is caused by a breakdown of collagen, which can be exacerbated by nutritional deficiencies. Many people take collagen supplements that cost a fortune. It is much easier and tastier to get collagen in a food form from bone broth and gelatine powder, ie add to jelly, to hot drinks like coffee, soup, cocoa, bonox.

7. Liver Detox: Glycine is needed for detoxification from exposure to chemicals in our toxic environment. People without enough glycine will not produce enough glutathione, which is crucial for liver detoxification.

8. Weight loss: Gelatine, full of protein, makes people feel full and so can help them to eat less.

9. Gut Health & Digestion: Gelatine helps to fill holes and damaged areas of the stomach lining and reduces inflammation. The amino acid glycine in gelatine can help increase hydrochloric acid in the stomach, which is needed for digestion and assimilation of nutrients. Levels of these vital digestive juices are lowered by stress and aging. A well-known researcher, Dr Gotthoffer, studied gelatine's role in digestion and he found that it increases utilisation and assimilation of protein from muscle meats.

10. Leaky Gut: Russian researchers found that gelatine healed the gut linings. Doctors in the 1920's had good results using gelatine to nourish coeliac patients who were malnourished from gluten reactions.

11. Strong Bones: Bones are actually living structures that can be built up or broken down daily by what we do or don't eat. Bones are made of collagen which is in

gelatine together with easy to digest calcium, magnesium, phosphorus, silicon, sulphur and other trace minerals, all of which help build a healthy bone matrix.

12. Arthritis Support: Gelatine contains Chondroitin, which has long been used as a supplement for helping people with arthritis pain and stiffness. Chondroitin found in gelatine supports joints, cartilage and tendons, because it is basically the dissolved connective tissue of animals. It has been discovered that therapeutic doses of cartilage, found in animal bones, (which always contains copious amounts of proline and glycine) dramatically improve rheumatoid arthritis as well as other degenerative joint conditions.

13. High Metabolism: Glycine in gelatine helps build and maintain muscle. Glycine also helps regulate insulin sensitivity and stops abdominal fat storage.

14. Adrenals: When under stress we need more minerals and amino-acids so gelatine helps. According to Dr Cate Shanahan,

gelatine may actually help rejuvenate the renal organs (kidney, adrenals, bladder) which help us to deal with stress and reduce excess cortisol.

15. Hormone balance: Glycine helps regulate insulin and prevent hypoglycaemia. It also helps to make glutathione and to remove excess oestrogen.

16. Wound repair: Glycine and arginine found in gelatine are abundant in the skin and connective tissue. The combination of these two allows faster healing.

17. Allergies: Gelatine can alleviate allergic reactions and sensitivities because it helps seal inflamed and porous gut linings.

18. Get more nutrition out of each bite: Broth with gelatine makes small portions of meat very filling, which saves money on groceries. Gelatine draws in digestive juices to help break down meaty protein more thoroughly. This effect has the added benefit of saving money because gelatine will stretch protein portions.

19. Muscle maintenance: People who are on bed rest lose a lot of muscle mass during an illness. When gelatine is added to their diets it has the benefit of preserving muscle mass while ill. It can also be very restorative for athletes that are over-training because it contains many amino-acids that speed recovery.

20. Lowers Inflammation: Because of low fat dogma many people get too much lean protein in their diet. This imbalance can be remedied by adding gelatine (and healthy fats) to meals. Lean protein in excess can be pro-inflammatory but gelatine provides proline and glycine that balance out the tryptophan and cysteine.

21. Joint Health: It's common knowledge that collagen is needed for healthy joints (the connective tissues and fascia in our joints are made up of collagen). According to this 2017 Aussie study, athletes who took gelatine and Vitamin C experienced less pain in their joints and saw an increase in muscle performance.



Why we all need a bit of Borax

written by Tessa Jupp RN OAM

I first had borax (boron) in the newsletter in 1997. It is a very old remedy, used by our parents and grandparents centuries ago. They just licked it off their fingers - and it works! Now more recent research is telling us why.

Boron is a very important part of a long chain that intertwines all the minerals necessary for individual cell growth and health! (1)

The body depends on Boron for performing most of its functions. Boron is essential for ALL life in plants as well as animals. But chemical fertilizers inhibit the uptake of Boron from the soil. This creates health problems due to Boron deficiency which is now very common.

Boron is essential for the integrity and function of cell walls and the way signals are transmitted across cellular membranes. We need a regular source of Boron as it is rapidly excreted in urine.

Some common symptoms of Boron deficiency are: arthritis, brittle bones, fractures, carpal tunnel syndrome, degenerative joint disease, hormonal imbalance, loss of libido, memory loss, muscle pain, osteoporosis, receding gums and weak joint cartilage. Boron deficiency causes

greatly increased amounts of calcium and magnesium to be lost with the urine.

A German cancer researcher, Dr Paul-Gerhard Seeger, has shown that cancer commonly starts with the deterioration of cell membranes. He said "Since Boron is essential for cell membranes and Boron deficiency is widespread, this may be an important cause for the initiation of tumor growth. Boron compounds have anti-tumor properties and are potent anti-osteoporotic, anti-inflammatory, hypolipemic, anti-coagulant and anti-neoplastic agents." (1)

1. <http://cheflynda.com/2015/03/the-inexpensive-arthritis-osteoporosis-cure/>
2. <https://www.earthclinic.com/remedies/borax.html>

"Boron deficiency can cause cell walls to become very weak and fragile, rendering the cells incapable of properly transferring nutrients into them." (1)

BORAX helps with:

- * Arthritis - both Osteo & Rheumatoid
- * Osteoporosis or Osteopenia, Spurs
- * Fractures - pain & healing
- * Repair of joint cartilage
- * High blood pressure & arterial diseases
- * Obesity, Insomnia
- * Swollen gums or loose teeth (pyorrhoea)
- * Urinary tract infection (UTI)
- * Other infections - can apply topically including Candida, ringworm, tinea, nail fungus
- * Gout, Spondylitis, bunions
- * Systemic lupus erythematosus (Lupus) (kills mycoplasma & parasites) (2)

WHAT BORAX CAN DO FOR YOU

Alleviates **arthritic joint** destruction and **pain**

Prevents loss of bone ie **osteoporosis**

Stabilises calcium, silicon, copper & **magnesium** levels

Inhibits abnormal calcification in bones and blood vessels

Prevents abnormal calcium deposition & **bone weakness**

Inhibits **copper accumulation**

Protects from **fluoride** that displaces iodine

Assists with **insulin** use and **blood glucose control**

Lowers **triglyceride** levels

Enhances **immune system**

Promotes **healing of wounds**

Reduces and **controls inflammation**

Normalises **oestrogen and testosterone**

Alleviates need for **HRT**

Toxic to **insects, parasites, protozoa and bacteria**

Fungicidal - kills **moulds & fungi**, internal & external

Anti-viral

Toxin removal - chelates & protects from **heavy metals**

Improves **attention**, both short and long term **memory**

Improves **hand-eye coordination** & manual dexterity. (1)

Where to find Borax

Boron ie borax, is **low** in most **soils** around the world. In WA, Carnarvon is one of the only places with boron - in the river water. So **buying Carnarvon bananas, tomatoes, mangoes** etc will give you some boron. Add borax to your soil if you grow your own.

How to buy

Borax in cleaning section of supermarkets is okay for gardens & as an insecticide, but Coles has withdrawn it sometimes due to contamination. So I don't trust it.

We have pharmaceutical grade Borax - \$12 for 100g at the Polio Office - pick up or \$10 postage.

How to take Borax

Easiest way to take is to lick the (clean) top one third of your forefinger, dip it into the borax powder and lick off whatever sticks, having a drink handy to wash it down. Take once a day. Your finger is in proportion to your body so you will get the right amount for your body size. This applies to children too eg for fracture.

Fractures and After Surgery

Borax and Magnesium (both taken twice a day - to bowel tolerance) will take the pain out of the fracture site within 48 hours. Keep taking for 6 weeks or until healed. Ensures a much stronger healing of the bone.

Pain in an old fracture site is an indicator that you need more magnesium and borax - relieves quickly.

NB. Signs of Overdose - nausea, vomiting, lethargy, dermatitis, diarrhoea. Antidote is to take extra B2.