

Living With Arthritis

[The Rub](#)

[The Rub Clinical Notes for Health Care Professionals](#)

[The Rub Product Information Sheet](#)

Rheumatoid and Osteo-arthritis are the two main forms of Arthritis. Rheumatoid Arthritis is characterized by swelling and pudginess around joints whilst osteoarthritis is characterized by hard bony protrusions in joints with generally no swelling. Arthritis is an auto-immune disease where the body's own immune system attacks the cells in the joints and this can cause a loss of lubricating fluid, overgrowth of bone and inflammation in the joints and surrounding soft tissue. Its hard to inherit good genes because good parents are hard to find and in the case of Rheumatoid Arthritis the bad news is that inheritability is around 55% (21)

There is no cure for Arthritis but a number of things can be done to maintain a good quality of life. This Kit is intended to provide you with information on a huge range of measures that can improve your life living with Arthritis and to make informed decisions about treatments.

In the first part of this article the topics covered refer to life style issues such as diet, exercise and stress and non-drug pain relief. In the second part topics covered are conventional and alternative symptomatic relief and non-drug symptom relief. Our discussions of Arthritis are based on our own research and observations and on published data thus we may make comments about a particular treatments that suggests it is of limited benefit but that you find excellent. **If it works for you stick to it and forget about science.**

FOOD

A study found that around 30% of people living with Arthritis have observed that when they eat certain foods that their Arthritis flares up (11). This has led to a number of arthritis diets being published. The following is a summary of the effects of diet.

FASTING

For around 33% of Rheumatoid Arthritis sufferers fasting for 7-10 days resulted in reduced pain and stiffness and reduced drug intake and smaller finger size compared to controls(14). In another study of fasting involving only drinking water for 7 days a majority of Rheumatoid Arthritis suffers had significant improvements in all symptoms. For people living with Osteoarthritis elimination and or starvation diets can lead to significant improvements in symptoms also. The likely improvement to symptoms from fasting is most probably

caused by suppression of immunity associated with weight loss but could be as a result of removing a food allergen(see below). If you don't fancy the 7 day water diet it is possible to obtain similar benefits by maintaining yourself in ketosis.

This is achieved by reducing food intake until you can detect ketones in the urine. You will need to purchase some ketone sticks from the chemist and cut down on sugar fat and bread intake.

FOOD ALLERGY/ELIMINATION DIETS

Food allergies can be related to Arthritis because foods can evoke immune responses. A number of studies have suggested that people living with rheumatic disease have abnormal digestive tracts and absorb food in abnormal ways. The scientific literature contains a huge number of papers discussing the various effects of food on Rheumatoid Arthritis. The methodology of many is not very good however as various

foods have been conclusively shown to effect the Arthritic symptoms of specific persons all the reported foods are worth looking at. The following foods and exposures were reported to cause problems, corn, wheat, pork, bacon, oranges, grapefruit, lemons, milk, oats, rye, eggs, beef, coffee, malt, cheese, tomatoes, peanuts, sugarcane, butter, lamb, soya and house dust, petrochemicals and tobacco smoke. In short just about everything we ever come in contact with. Further studies have indicated that around 30% of people living with Arthritis think that they have food allergies however rigorous studies indicate that only around a third of these people suffer from proven allergies. Taking into account people living with Arthritis who have never considered food allergies as a source of their Arthritis the estimate of 30% of rheumatoid arthritis sufferers having food allergies is probably correct. Thus diet studies are of major importance in assisting your arthritis.

Cows milk is the most common allergen mentioned followed by cheese and we think that it is a good idea to try an elimination of these products as a matter of routine. It takes between 7-14 days to clean out and on reintroduction of these foods symptoms will peak between 24 to 48 hours. It is also possible to exclude other foods in the list on a similar basis. This process will give you a good idea whether your arthritis is caused by food allergies. For a definitive method you will need to undergo a complete elimination diet under medical supervision. There are a number of clinics specializing in this and your medical practitioner can refer you. These clinics can be extremely expensive and we believe that they are only warranted where you are positive that you have multiple food/substance allergies. Food allergies are most likely where you suffer from other allergies such as Rhinitis or skin allergy.

DIETS

Vegetarian/Vegan Diets

A change to an uncooked, vegan diet rich in lactobacillus has been shown to lead to a reduction in Rheumatoid Arthritis symptoms (3). High Vegetable consumption has been shown to reduce the incidence of arthritis (4). 60% of patients in a 4 month study of a vegan diet (15) reported reduced pain and stiffness. In this study tea, coffee, sugar and spice intake was also reduced. Our own research shows that tea and coffee are not good for arthritis and that reductions in saturated animal fat and an increase in natural anti-oxidants found in fruit and vegetables are good for arthritis. Recent research has shown that fruit and vegetables are a rich natural source of salicylates the active ingredient in aspirin and the benefits of fruit and vegetables for arthritis may also be as a result of the natural anti-inflammatory effects of salicylates. The problem with vegan and vegetarian diets is that it is difficult to maintain a good nutritional balance without extensive knowledge and

dedication. We only recommend them for people with such attributes.

"Night Shade Diet"

The avoidance of tomatoes, potatoes, eggplant and peppers has long been touted to assist people living with arthritis. In an uncontrolled study (16) of 5000 patients lasting 7 years around 75% of people reported a gradual reduction in pain. When looking at this diet we believe it is worth doing an elimination of these foods as mentioned under elimination diet but benefits look relatively limited.

DIET COMMENTS

With all diets it is important to consider other quality of life issues. Thus removing certain foods may make you feel that life is not worth living and these issues need to be considered when eliminating foods. Fad diets like apple cider, brewers yeast, honey wheat germ etc have not been proven to be beneficial however if they assist in your general feeling of well being then use them.

Since you have 1 in 3 chance of improving your Arthritic symptoms through diet it is mandatory that you explore this area.

FOOD SUPPLEMENTS

Vitamins and Minerals

Low antioxidant status has been demonstrated to be a risk factor for Rheumatoid Arthritis (17). Vitamins A, B, C, D and E have been shown to be deficient in a significant number of sufferers (1),(19).

Copper, Zinc, Selenium, Magnesium and Calcium have also been shown to be deficient in Arthritis sufferers (1,2,5,20). It all looks a bit confusing. Arthritis like all chronic inflammatory diseases puts considerable strain on the body ability to resist oxidation hence the low levels of antioxidant minerals and Vitamins. What is of more interest is which supplements help your symptoms and which ones do not. A study of the scientific literature also helps to unravel some of this difficulty.

VITAMINS

Vitamin A intake does not appear to effect Arthritic outcomes. However as carrots are a major source of Beta carotene a precursor to Vitamin A they should be included in the normal healthy diet.

B Group Vitamins are generally deficient in a Western type diet and we recommend supplementation with B group Vitamins. Vitamin B6 seems to be particularly important for joint and nerve problems (22). Brewers yeast is a major natural source of B group Vitamins.

Intake of Vitamin C may reduce the risk of cartilage loss and disease progression in Osteoarthritis(19, 29). As Vit. C is freely available in any good diet we would only recommend supplementation at no more than 250mg per day. High levels of Vitamin C intake have been implicated with heart disease.

Vitamin D3 supplementation is mandatory or all arthritis suffers as it has been shown

to modulate the auto-immune response and for osteoarthritis sufferers progression of diseases appears to be slowed in persons taking Vitamin D3 (29).

Vitamin E

Hospitalized Arthritis sufferers taking Non Steroidal Anti-inflammatory (NSAID) drugs with 600mg of Vitamin E twice per day had significantly less pain than the control group taking just NSAIDs (18).

Vitamin E supplements are highly recommended as a way of reducing Arthritic symptoms. Natural sources include wheat germ oil, stabilized wheat germ, sunflower seed, canola and soya bean oil. If dieting to loose weight and improve your Arthritis it is important to take additional Vit. E as it is lost in low fat diets.

Minerals

Calcium is associated with bone strength and a number of inflammatory functions. As milk and cheese have been associated with significant Arthritic allergy and are

major sources of calcium we recommend taking a supplement of calcium. If elimination diets indicate Dairy products are a problem then additional calcium supplements will be required.

Copper supplementation has shown positive and negative results for people living with Arthritis. The published data suggests that copper bracelets etc do increase the circulating copper in the body and may have some effect on Arthritis. What is of more interest is the fact that Copper complexes of NSAIDs seem to be more effective when taken with Copper supplements. Although the data is conflicting we suggest trying a Copper Bracelet or supplement.

Magnesium supplements are not conclusively associated with improved Arthritic symptoms. As Magnesium and Calcium are closely associated in Biochemical function we believe that a Calcium supplement is more important.

Selenium is associated with a number of Biochemical pathways that should improve Arthritis, however a number of well controlled trials have not shown that it is of benefit in reducing Arthritic symptoms (23). Other trials have shown significant improvement after 8 months of supplementation with Selenium (20). The data seems to indicate that Selenium supplementation is of limited benefit unless you are prepared for long term treatment. We think that other supplements offer better results.

Low Zinc levels have been reported with Rheumatoid Arthritis but correlation with disease activity is poor. However a number of trials have reported good improvements of symptoms with 220 mg of Zinc Sulphate 3 times per day (24). Unfortunately these results were unable to be reproduced by other researchers. The data indicates that Zinc supplementation is most likely of benefit to people with a serum Zinc

deficiency. This can be tested for by your Medical practitioner.

FISH OIL/ESSENTIAL FATTY ACIDS

All cells in the body contain fatty acids in their outer coat. Cell in response to external stimulus use these fatty acids. Thus when a cell is damaged some of these fatty acids are used to tell the immune system that damage has occurred and immune cells are needed to clean up this damage. Inflammation and pain are the result of this normal process. When these immune cells arrive to clean up the damage they trigger the surrounding cells to release fatty acid derived complexes that start an anti-inflammatory response and healing occurs. In Arthritis the inflammatory response is not suppressed as it is supposed to be. By altering the composition of the fatty acids in the cell it is possible to increase the degree of anti-inflammatory response and hence reduce your symptoms. This process has been well researched in Arthritis and consumption of so called n-3 fatty acids provides substantial

long-term relief of Arthritis symptoms. Our own research and published research on chronic inflammatory diseases shows that they are often associated with poor absorption of nutrients. This has also been shown to be the case with Arthritis. The argument in its simplest form is that once you have an imbalance in essential fatty acids in the lining of the gut you are unable to absorb essential fatty acids and nutrients. No amount of oral supplementation will make any difference. The easiest way to overcome this problem is to apply essential fatty acids to the skin for around 14 days. We have achieved excellent results with this approach in a variety of chronic diseases. We recommend rubbing approximately a teaspoon of Flaxseed oil into a fleshy part of the body twice daily for fourteen days. This alone often produces dramatic improvement in health. It also makes the skin very soft and supple where you apply it.

After following the above regime supplements with either fish oil, flaxseed, borage or evening primrose oil produced a reduction in morning stiffness, joint tenderness and occasional swelling for Rheumatoid Arthritis (numerous references) and Psoriatic Arthritis (26) but not for Osteoarthritis (25).

Supplementation with 5-6 grams of Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA or DHCA) has been shown to significantly improve Rheumatoid Arthritis symptoms (numerous refernces,27). Fish oil has proved extremely beneficial for pregnant and breast feeding women with Rheumatoid Arthritis and for patients with extreme intolerance to NSAID (28). Danish research has shown that a diet rich in deep-sea fish and anti-oxidants results in a significant improvement in Arthritic symptoms (12). Ideally natural sources of fish oil, deep-sea fish combined with natural anti-oxidants are the best and cheapest way to tackle supplementation. It

has been suggested that the high intake of n-6 fatty acids (present in safflower, soy, corn and sunflower oils) is the cause of a range of chronic diseases (including Arthritis) that seem to be becoming epidemic in Western countries. Most margarines contain these oils as do a lot of cooking oils. It is therefore worth looking at your n-6 fatty acid intake and attempting to reduce it significantly and increase n-3 fatty acid intake.(n-3 fatty acids occur in flax seed oil, canola oil, leafy green vegetables and fish and fish oils.).

Natural Anti-oxidants/Food Recommendations.

Our research indicates that a number of food herbs which contain powerful natural anti-oxidants have significant anti-inflammatory and muscle relaxant activity. If you have been taking nonsteroidal anti-inflammatory drugs your stomach lining may be damaged and the following herbs should be taken cautiously as they may further irritate your stomach. We

recommend at least 3 meals a week of a good quality curry and regular intake of cloves, nutmeg, turmeric, ginger and cayenne pepper. Nutmeg intake should be restricted to no more than 5grms per day due to it containing a compound that is toxic in large quantities. Where convenient water or alcoholic spirit (Brandy, etc) extracts of these herbs can be used to soak the effected joint. If in doubt seek expert advice before trying these herbs. Clove tea is preferred because of its mild nature and good anti-inflammatory and muscle relaxant properties. Red grape juice also contains beneficial anti-oxidants and anti-inflammatory agents and Linseed oil rubbed into the joints can also assist arthritic symptoms.

Caffeine (Cola drinks, tea, coffee), Nicotine (tobacco smoking) and saturated fats intake are not beneficial for arthritis and should be reduced or eliminated.

ve more unpleasant side effects involving skin, blood, bone marrow, stomach,

kidneys, liver, heart and central nervous system. Folic acid supplementation can dramatically ease some of the side effects of Methotrexate.(7). Our view is that they are drugs of last resort when everything else has failed.

STRESS, EXERCISE, and WEIGHT

he side effectsA new class of drugs known as biologics or TNF inhibitors have been developed. These are generally taken by a series of injection and can provide dramatic results. They are unfortunately extremely expensive and can have unpleasant side effects. TNF stands for Tumor Necrosis Factor a natural occurring substance in the body that assist with the control of cancers and infection. The worst side effects include increases in infection and cancer. AS with all drugs you need to weigh up your quality of life against

Recently published data indicates that Estrogen Replacement Therapy (ERT) can significantly increase the risk of arthritis

and presumably an increase in arthritis symptoms for existing sufferers. Risks increase with length of treatment (10). Discuss your drug treatment with your medical practitioner with regard to side effects and improved management of your symptoms.

ALTERNATIVE TREATMENTS

Herbal/Plant Extracts

Stinging nettle (*Urtica dioica*) has demonstrated anti-inflammatory properties and has been used as an anti-rheumatic for a considerable time (8). Cats Claw (*Uncaria tomentosa*) extracts have been traditionally used for treating Arthritis. Recent research has validated this use (9). Numerous traditional herbal treatments exist for arthritis and are generally worth experimenting with often in combination with existing drug treatments.

Harpagophytum procumbens extract, Phytodolor containing extract of *Populus tremula*, *Fraxinus excelsior* and *Solidago*

virgaurea mixture and Withanai somnifera, Boswellia serrata and Curcuma longa mixture all provided good relief for Rheumatoid and Osteoarthritis(33,34,35). Cloves and Ginger have also shown excellent anti-inflammatory properties. Peak is currently testing a new version of PNP 4 The Rub containing an extract of Swamp wort. We will publish results, as they become available. Capsaicin is the hot compound in chilies and has been shown to be an effective painkiller when applied to Arthritic joints (36). Beneficial effects are usually seen 3-7 days after application. Dimethyl Sulfoxide has variously been reported to be excellent or hopeless depending on what study you read. However on the available anecdotal evidence it is certainly worth trying.

For severe Arthritis the Chinese herb Tripterygium Wilfdii Hook F is worth looking at. It does have side effects but the reported results are quite impressive (37). Side effects include, mouth dryness 9%,

skin rash and colour problems 8% , nausea, vomiting 2% immune cell problems 4%. On average it appears to be at least as effective as Methatrexate with fewer side effects. We suggest that you consult a reputable Chinese Medical specialist.

Glucosamines are probably the most popular alternate drug for Arthritis available at the moment. Results from trials of Glucosamine are not clear cut but it would appear to have some benefits (38).

The available data suggests that most benefit is obtained from Glucosamines if they are injected into joints and considering the sales of Glucosamines it is hard to understand why a Rub on version has not reached the market. Oral Glucosamines take up to a 6 month treatment to obtain significant results.

Shark Cartilage has not been conclusively proven to assist arthritis (32).

As with all these alternate treatment stop taking them if you do not achieve measurable results in a reasonable time.

Homeopathy remedies have not proved to be effective on evidence based criteria, however we believe that they may be worth trying but keeping in mind that you need to observe an improvement in your symptoms.

As a general rule Peak believes that Rubs are preferable to oral ingestion of both conventional and alternative drugs except where the arthritis is so widespread and/or the mobility of the person makes a rub impractical.

Non Drug Treatments

Acupuncture has been shown in numerous studies to be highly effective for pain relief in treating osteoarthritis. In Rheumatoid Arthritis pain relief of 1-3 months was obtained in one trial (37). These results speak for themselves. We highly recommend Acupuncture for Arthritic pain relief.

Electromagnetic fields and magnets offer interesting possibilities in the treatment of Arthritis however the lack of proper trials makes it difficult to assess their usefulness (38).

Photophoresis and Apheresis are new techniques for treating Arthritis. On the available scientific evidence they are only of benefit as last resort treatments and we would recommend looking at some other treatments before exploring these.

Apheresis involves filtering all of your blood for certain immune complexes then putting the blood back into your body.

Photophoresis is similar except that a fraction of the blood is exposed to UV light and a sensitiser and then re-transfused.

Massage therapy appears to provide good pain relief for arthritis sufferers despite the lack of controlled scientific studies. If this treatment is applied with an appropriate Rub such as our product PNP 4 or similar Rub the improvement is quite dramatic. We believe that massage of the body has a

healing and calming effect related to nurturing and highly recommend massage with an appropriate product.

Ultrasound treatment can also be extremely beneficial for Arthritis as it stimulates repair to muscle cartilage and bone.

UNDERLYING CAUSES of ARTHRITIS

Although the underlying cause is not understood there is good evidence to suggest that some Arthritis is caused by infectious species mimicking naturally occurring proteins in the body. A large number of bacteria have been discovered in Arthritic joint synovial fluid (39). Although it is controversial some arthritis should be able to be cured by antibiotic treatment. This avenue is worth exploring as a group of common skin bacteria have been implicated in a range of chronic diseases. Certain Streptococcal and staphylococcal antigens have been shown to exacerbate chronic illness (40). A number of viruses have been implicated in Arthritis but as yet

there are only a limited number of anti-viral agents that may be of benefit. Fungal infections have also been implicated in Arthritis.

In a controversial article in Science and Medicine July/August 1999 54-63 it is suggested that the increase in chronic illness in the western world might be indirectly caused by immunization. Other than BCG immunization for TB all other immunization elicit a Th2 response. The suggestion is that this trains the growing immune system to favor Th2 response, which also favor the chronic illnesses that we suffer from. We find this a fascinating theory that seems to have some basis as a number of chronic illnesses seem to be alleviated if the sufferer is given a BCG vaccination. We strongly support vaccination but it is clear that all government should be pushing drug companies to make vaccines that elicit a Th1 response. This appears to have strong

possibilities of significantly reducing chronic arthritis and other chronic diseases for future generations. In the mean time it would be prudent to have your children vaccinated with BCG TB vaccine first to help educate the immune system. We believe that it is also worthwhile to have regular BCG vaccination if you suffer from chronic illness

SUPPORT GROUPS for people living with Arthritis are available. See your local phone book under Arthritis.

[Return to Peak](#)

[The Rub](#)

[The Rub Clinical Notes for Health Care Professionals](#)

[The Rub Product Information Sheet](#)

Refs:

- 1. Proc Nutr Soc 1998 May;57(2):231-234**
- 2. Patol Fiziol Eksp Ter 1998 Oct-Dec;(4): 17-20**
- 3. Br J Rheumatol 1998 Mar;37(3):274-81**

- 4.** Epidemiology 1998 mar:9(2):208-210
- 5.** Semin Arthritis Rheum 1997 Dec;27(3):180-5
- 6.** J Rheumatol 1998 Nov;25(11):2181-6
- 7.** Tidsskr Nor Laegeforen 1999 Feb 10;119(4):534-37
- 8.** FEBS Lett 1999 Jan 8;442(1): 89-94
- 9.** Aliment Pharmacol Ther 1998 Dec;12(12): 1279-89
- 10.** Prev. Med 1999 May;28(5) : 458-64
- 11.** Reumatizam 1998:46(1) ; 27-30
- 12.** Ugeskr Laegar 1998 May 18 ; 160(21)3074-8
- 13.** Nature Medicine 5:12 Dec 1999
- 14.** Arth Rheum 31:585-591,1988
- 15.** Lancet 338:899-902, 1991
- 16.** J In Aca. Prev Med 31-37 1985
- 17.** Ann Rhheum Dis 56:323-325 1997
- 18.** Ann Rhem Dis 56:649-1997
- 19.** Arth Rheum 4:648 1996
- 20.** Analyst 123: 3-6 1998
- 21.** Arth Rheum 43:1 30-37 2000
- 22.** Arth Rheum 38: 1 105-109 1995
- 23.** Analyst 120: 877-881 1995
- 24.** Lancet 2:539-42 1976
- 25.** Rheumatol Int. 14:231-234 1995
- 26.** Arthritis Rheum 35(sup)S:225 1992

27. Arthritis Rheum 35(sup)S:206 1992 **28.**Br. J Rheum 30:370-72 1991 **29.** Arthritis Rheum 41:1343- 1998 **30.** Nursing Cl Nth Amer 19:4 583- 1984 **31.** . Nursing Cl Nth Amer 35:1 199- 2000 **32.** Rhem Dis. Clin of Nth Amer. 25:4 1999 **33.** Le Magazine 15:27-30 1992 **34.** She Entz 8:55-58 1988 **35.** J Ethnopharm 33:91-95 1991 **36.** Sem. Arth rheum 23(Sup) 25-33 1994 **37.** Rhem Dis. Clin of Nth Amer 26:1 29- Feb 2000 **38.** Clin Ther3:260-272 1980. **39.** Arth Rheum 43:3 593-98 March 2000 **40.** British Journal of Dermatology 1988: 229-235

[Return to Peak](#)

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[The Rub Product Information Sheet](#)