
The Ultimate Joint Pain Solution and the Hidden Reasons You May Be In Pain

How The Joint Grease® 2 Step System Can Give Your Sore, Painful Joints A New Lease On Life!

Imagine a product that actually repaired your joints, turned back the effects of aging to a time when you could get out of bed in the morning, and feel rested and refreshed.

Remember when a morning stretch started at the tips of your toes and ran right on up through your fingers? A time when no matter what the weather was like, you felt great. Quite different I'm sure from being able to predict the weather with your joint pain. Well we're here to tell you that those distant memories are not out of reach, and are actually much closer than you think.

Though this may seem farfetched and near impossible, it's not. In fact it's real, and when we say real, we mean 100% scientifically based, show me the numbers real.

Joint Grease® Liquid Drops

Joint Grease® Step 1 consists of capsules and liquid drops. The main ingredient in Joint Grease® liquid drops is CoLRx™. CoLRx™ is like nothing available on the market today. There is no single natural joint care product with more research and development than CoLRx™.

To date in excess of \$45 million dollars has been spent on bringing Joint Grease® liquid drops with CoLRx™ to the market. Research involving real people suffering from joint pain just like you has taken place at universities all over the world involving CoLRx™.

So what is CoLRx™ and how does it work? CoLRx™ is biologically active peptide fragments of collagen Type II-n1. This is actually the principal structural protein in cartilage and ligaments. So think of it as the building blocks of healthy, strong joints.



Unlike over-the-counter or prescription painkiller medications, Joint Grease® liquid drops with CoLRx™ do not mask or cover up your pain, or come with a list of side-effects a mile long.

CoLRx™ works over time to rehabilitate and rebuild damaged joints. This is one of the main reasons there are 2 steps to the Joint Grease® program. Joint Grease® Step 1 includes 2 products, Joint Grease® capsules and liquid drops. The capsules are designed to quickly reduce joint pain and inflammation while the liquid drops start the healing process.

We live in a make it quick kind of world, and being in pain is definitely something we all want to get rid of as quickly as possible. As the Joint Grease® capsules work on getting pain under control, Joint Grease® liquid drops with CoLRx™ continue working on the long term healing and repair that's actually causing the pain and inflammation in the first place.

Rebuilding anything takes time, and is not something that happens overnight. The rebuilding nature of Joint Grease® liquid drops with CoLRx™ is no different. Remember CoLRx™ is not masking pain or focusing solely on symptoms. CoLRx™ is actually helping to rebuild and repair your joints at a level never seen in other joint products.

This is also why long term clinical testing in humans has been so successful. Yes there were short term benefits, but the real payoff, the life-changing results take 6 or so weeks to really kick in.

Imagine having a new lease on life with pain free joints! Would that be worth mixing 5 drops of Joint Grease® in a glass of water each day? Of course it would.

**It is possible
to rebuild
and heal
joints
naturally
and safely**

Joint Grease® Step 1 Capsules

Joint Grease® Step 1 is the initial phase of the program. It contains both Joint Grease® capsules and Joint Grease® liquid drops with CoLRx™. It is specifically designed to help get joint pain under control as fast as possible and to start the long term healing process.

We recommend using Joint Grease® Step 1 for 63 days.
Each box = 1 one cycle which is 21 days.

The Joint Grease® capsule's proprietary formula includes: Perluxan, Boswellin, Bioperine, Curcumin C3 Complex, Bromelain Extract and Ginger Extract. These cutting edge ingredients are combined to produce one of the most powerful all-natural joint pain reduction products currently available.

Perluxan

The story of Perluxan begins almost 20 years ago. A handful of research companies set out to find natural ways to improve joint health and reduce pain. An extensive review of over 230 botanicals gave way to 20 possible candidates. Of the 20, only one ingredient was identified as having the ultimate chance of success. That ingredient of course was Perluxan.

The next phase involved numerous human clinical trials, and this is where the results really started to amaze the researchers. In only two hours following the first dose, Perluxan significantly reduced average pain levels versus placebo. Researchers were amazed! After the completion of this 2 week study, it was clear how effective Perluxan was at relieving pain during everyday activity and at improving joint mobility.

Head to head comparisons also showed Perluxan to be as effective at reducing pain as Ibuprofen 400 mg. Not only is Perluxan an effective tool to reduce pain, it has also shown profound ability to reduce and manage inflammation safely and, of course, naturally.

Source: M. Lemay, M.A. Murray, A. Davies, H. Roh-Schmidt, K. Randolph: Cyclooxygenase inhibiting activity of antiinflammatory dietary supplements. Information provided by Nutrilite Health Institute. Access Business Group LLC, 5600 Beach Boulevard, Buena Park, CA, 90622 USA.





Dr. John Gannage on Boswellia Serrata

"One of my favourite herbs for inflammation is Boswellia serrata. I have observed its effectiveness in both inflammatory bowel disease (IBD) and arthritis.

In Germany, a study noted that Boswellia was rated as one of the top three CAM interventions for IBD, along with probiotics and acupuncture. A human study on patients with osteoarthritis of the knee showed that Boswellia decreased pain and swelling and increased range of motion and endurance."

Boswellin

Boswellin, a proprietary combination of boswellic acids, tackles one of the primary causes of joint pain and joint degradation; inflammation. Inflammation is caused by many biologically active substances in the body. Boswellin helps reduce inflammation by suppressing 2 primary substances known to trigger inflammatory responses; 5-lipoxygenase (5-LO) and human leukocyte elastase (HLE).

Simply put, these 2 substances (5-LO and HLE) are needed to complete the process responsible for inflammation. By blocking these 2 pathways to inflammation, Boswellin exerts powerful anti-inflammatory effects.

Bioperine

Bioperine is a very interesting compound derived from black pepper. Its purpose is not to prevent joint pain or inflammation, but rather enhance the bioavailability of other ingredients. When it comes to product effectiveness, you can have the absolute best ingredients in the world, but unless you are able to absorb them into the body they can't make much of a difference.

Bioperine works with all of the ingredients in Joint Grease® capsules to dramatically increase their absorption by the body. This simple little addition to the Joint Grease® propriety formula gives you more of all the proven ingredients that work together to give you significantly stronger results.

Curcumin C3 Complex

C3 is a proprietary compound derived from the herb curcumin used in many traditional styles of cooking. C3 however is vastly different from what you used in last night's dinner. C3 has been standardized and isolated for several key biomarkers found in the original herb.

In clinical testing C3 was shown to act as a powerful COX-2 (Cyclooxygenase-2) inhibitor. Many joint pain sufferers have to resort to more dangerous NSAIDs to help suppress COX-2. Unlike NSAIDs, C3 is completely safe to use and will not cause severe stomach upset or ulcers.

C3 also inhibits cytokine production. Cytokines can be thought of as immune system messengers that tell the body to begin the inflammation process. In normal healthy bodies this is fine, but when chronic joint pain is present, this mechanism is typically no longer functioning properly. By reducing cytokine production, C3 further supports the reduction of inflammation.

SOURCE: <http://www.curcuminoids.com/Pharmacological.htm>

**Finally
a natural
alternative
to NSAIDs
that really
works**

Bromelain Extract and Ginger Extract

Both Bromelain and Ginger Extracts are high in naturally occurring proteolytic enzymes. These types of enzymes have a long history of use for joint and pain related conditions. In fact they play a key role in enzyme therapy which has been used throughout Europe for many years, and is just now gaining popularity in North America.

One of the ways proteolytic enzymes reduce pain is by targeting chemical messengers in the body called circulating immune complexes, (CIC) that trigger the inflammation process. This is similar to what other NSAIDs target, except these natural enzymes only target CICs produced by chronic inflammation, not those produced from healthy injuries which are a normal part of how our body maintains its health.

These enzyme complexes also have anti-fibrosis properties, meaning they eat scar tissue. This is vital for rehabilitating joints with years of damage built up. These enzymes work as a natural cleaning tool for damaged tissues all around the body, especially the joints.



How to use this Pain Killing 1, 2 Combo

Using the Joint Grease® products is extremely easy. In Step 1 your box will contain Joint Grease® capsules and liquid drops. For the capsules simply take 1 capsule, twice a day, that's it. No handful of pills to choke down, just 1 pill, twice a day.

For Joint Grease® liquid drops with CoLRx™, simply add 5 drops to any liquid (excluding grapefruit juice) and drink at least 10 minutes before a meal. You only need to do this once a day. Joint Grease® liquid drops have no colour and are tasteless.

Joint Grease® Step 1 is used for the first 63 days. After that you move to Joint Grease® Step 2 which contains only the liquid drops. After your first 63 days, all you have to do is use just 5 drops a day and you're maximizing the joint healing power of Joint Grease®.

Now that you see how easy Joint Grease® is to use, and have a solid understanding of the science behind it, let's get into understanding why your joints hurt, and how we're going to transform your joint health together.

Understanding Why Joints Hurt

Before we get into the how to reduce joint pain, we first need to look at what causes joint pain. Chances are you've heard the word inflammation tossed around in relation to various joint pain conditions. More often than not, inflammation is portrayed in a very negative light, often seen as the cause of joint pain.

Inflamed joints are the first step to other more serious conditions

In reality, inflammation is a natural safety mechanism present in each and every human being. It works hand and hand with our immune system to keep us safe from the billion or so micro organisms that try to invade our body from something as simple as a paper cut.

Using the paper cut as an example, when the protective barrier of the skin is breached, the immune system kicks into high gear and inflammation begins. Blood rushes to the scene, platelets get to work on slowing blood loss around the wound, and the entire area around the cut becomes red, swollen and painful....AKA inflammation.

Inflammation is a vitally important part of all injuries as it alerts us to a problem and encourages us to stop, relax and leave the area in question alone to facilitate healing. Once healing takes place, inflammation naturally subsides and life returns to normal.

Now let's relate this to joint pain. Anytime the joint is stressed or damaged, an immune response is again triggered which calls in our old friend inflammation. The idea is the inflammation will cause pain, which will slow you down, and allow the joint to heal. This of course is the process in a normal healthy joint.



**Dr. John Gannage
on Inflammation Biomarkers**

"Biomarkers for inflammation are important to measure. The most important indicator for risk of Coronary Artery Disease and a future cardiac event is the CRP level, measured in one's blood, even more predictive than cholesterol, blood sugar or high blood pressure.

CRP is a marker for inflammation, indicating the importance of the inflammatory process even in heart disease."

For people suffering from chronic joint pain like you, there is often a little more at play than meets the eye. If you suffer from chronic day in day out pain, chances are you fall into the more than meets the eye category. Weekend warriors, bumps, falls, sprains and everything in between, is just a normal part of living an active life, and the temporary pain you experience from inflammation is simply part of the healing process.

For everyone else who falls into the chronic pain side, we've got a bunch of other issues that need to be addressed. Now with regards to arthritis, there are many different kinds. Some are more bone related, others cartilage based, and others even more unique and rare.

For simplicity, the information presented here is applicable to most joint pain situations. There will always be exceptions here and there, but for the vast majority what we discuss here will dramatically improve one's standard of living if, and this is a big if.....if you follow through and take action based on the information you learn here. With that, let's get into the good stuff.



The Secret Double Life of Inflammation

Not all inflammation is created equal. There is the normal and healthy high grade inflammation that accompanies most injuries to facilitate healing. And then there's the little known, extremely naughty and troublesome little brother named Low Grade Inflammation.

Much of the research for conditions ranging from heart disease, arthritis right on down to IBS (irritable bowel syndrome) are all finding strong links with Low Grade Inflammation (LGI). Heart disease was previously thought to be caused by elevated levels of bad cholesterol, which lead to a clogging of the arteries and eventually a heart attack or its precursor angina.



Dr. John Gannage on Inflammation Risk Factors

"There are an infinite number of risk factors for low grade inflammation and oxidative stress, by virtue of living on this planet in current times.

In fact, inflammation, immune modulation and oxidative stress are the finite pathways for the infinite number of insults. In other words, with contamination, denatured food, EMF exposure and a myriad of other negative stimuli, inflammation is almost unavoidable - unless one knows how to manage it through diet, detoxification and proper supplementation."

New research is showing that the real cause, or more influential one at least is.....drum roll please.... you guessed it, inflammation based. Your dentist has probably mentioned to you how poor gum health or gum disease can lead to heart disease. What the research has shown is something as minor as bleeding gums initiate that immune response we talked about earlier.

It's often so minor we are not even aware of it, but to the body it doesn't matter. Even something as tiny as a bleeding gum gets the inflammatory process started, and because gum disease is a very slow moving, gradual condition, often ignored for years, the inflammation goes on unchecked.

Year after year, this state of Low Grade Inflammation (LGI) persists unchecked. What leading edge researchers are now discovering is the LGI leads to something called Advanced Glycation End Products which the body sees as an invader and tries to breakdown. This breakdown leads to the production of other inflammatory substances. Regarding arterial damage, without getting too technical, an oxidative process takes place within the arteries which basically starts burning the excess blood sugar. This sugar oxidation then interacts with the arterial wall and causes the arterial wall to become inflamed.

In essence the arterial walls become microscopically damaged from the sugar oxidation, which then becomes inflamed to facilitate healing, and over time the arterial wall starts to form minute amounts of scar tissue. This process happens over and over in an endless loop which eventually leads to a narrowing of the artery, which then starts to constrict blood flow to the heart, and well you know what happens from there.

Your Joints Are An Early Warning Sign For Cardiovascular Disease!

So why all the talk about heart disease, you've got sore joints right? Well yes and no. Sore joints are one of the early warning signs of LGI Low Grade Inflammation, which may eventually lead to heart disease. I don't know about you, but I'd much rather deal with the joint issue now, than deal with the heart issue 10 years from now.

So with all that being said, now we can address the process of reducing Low Grade Inflammation, and rehabilitating your joints so not only will you feel far better than you do today, but more importantly, you'll be doing everything you can to prevent the more serious Cardiovascular Disease years from now.

**A simple 5
step plan to
take back
your health
safely and
naturally**



The Plan of Attack

There are several areas that need to be addressed to provide a complete long term solution to your joint pain. As you may have guessed, the primary goal of this program is to reduce Low Grade Inflammation.

The remainder of this book will be broken down into the following 5 sections followed by an all encompassing, easy to follow program that connects the dots and ties it all together.

1. Reduce Insulin/Increase Insulin sensitivity
2. Reduce total body acidity/increase alkalinity
3. Engage in activities that support joint health and enhance insulin sensitivity
4. Alter food intake to enhance alkalinity and reduce inflammation
5. Incorporate safe natural supplements to support joint health and reduce inflammation

Section 1 – INSULIN The Joint Pain Paradox

Insulin? You say, “I thought we were talking about joint pain not diabetes.” You’re absolutely correct, but insulin plays a huge part in the fantastically confusing feedback loop of Low Grade Inflammation. For those of you new to the world of insulin, here is a quick rundown of what it does.

Insulin is a hormone produced by the pancreas. Insulin and another lesser talked about hormone glucagon work together to help manage our blood sugar levels. Keeping blood sugar stable is the top priority for the big boss known as the brain. This makes sense seeing as how sugar/glucose is what the brain lives on. Whenever there is a drop in blood sugar, the brain goes into panic mode.

Here’s how insulin and glucagon dance together 24/7 to help keep blood sugar as stable as possible and the brain as happy as can be. For demonstration purposes we’ll see what happens when we eat a typical bowl of pasta with tomato sauce.

Pasta is made from flour, which is made from grains. This provides primarily carbohydrates, AKA sugar. When we eat a wonderfully tasty bowl of pasta, it ends up in our stomach of course.

Being primarily flour based, AKA carbohydrate, AKA sugar, the pasta is quickly broken down into sugar and released into the blood stream. Later on we’ll discuss how to avoid this rush of sugar and still enjoy your pasta with some simple nutrition tricks.

Anyway once the sugar starts to rush into the blood stream, the brain senses something is up. The brain is constantly monitoring blood sugar. As soon as blood sugar begins to spike it sends a signal to the pancreas to release insulin. Insulin’s main job is to grab the extra sugar floating around in the blood and pull it out and put it into storage.

The only problem is when we consume a high sugar meal like pasta, the pancreas gets a little too enthusiastic about doing its job and tends to release too much insulin.

This results in too much sugar being removed from the blood. You’ve felt this scenario many times, you simply may not have known what was going on. If you’ve ever felt lethargic or tired after

**Controlling
insulin is
key to
controlling
joint pain
naturally**

a big bowl of pasta or a candy bar, you've experienced a sugar crash.



**Dr. Alwyn Wong
on High Fructose Corn Syrup**

When it comes to how your brain reacts to regular sugar or carbohydrates, and how it reacts to HFCS (High Fructose Corn Syrup) the difference is profound. For example, when you eat other sugars, fat, and protein, a signal is sent to your brain telling to you stop. However, when you eat foods containing fructose, there is no such signal. This means it's much easier to just eat and eat and eat. No wonder it's used in so many processed foods and soft drinks.

Furthermore, fructose passes through your digestive tract much faster than other sugars. Because of this, it is stored as fat much quicker too! Research has shown that fructose promotes the formation of fat cells, as well as the increased storage of fat into pre-existing fat cells. In this study, the consumption of a diet consisting of 17% fructose resulting in a 32% increase in fat formation and concentration.

Finally, due to sweetness associated with foods high in HFCS or fructose, people tend to overeat these foods, leading to an increased caloric intake.

In 1970, less than 1% of all caloric sweeteners was HFCS. This number increased rapidly between 1980 and 2000, with HFCS making up 42% of the caloric sweetener market!

In summary, fructose, especially found in HFCS is partially responsible for our inability to lose fat. Reducing HFCS from your diet requires that you know what, exactly, to avoid.

HFCS has become the major substitute for sucrose (table sugar) in not only carbonated beverages, but baked goods, canned fruits, jams and jellies, and dairy products. HFCS is the major source of fructose in the United States.

When insulin removes too much blood sugar, the brain freaks out yet again, except this time it's worried about where its next meal is coming from. To help protect itself from starving it starts shutting

down various systems around the body to limit energy use. The easiest way to do this is to put us to sleep, or at least create a sugar induced haze which leaves us lethargic and dreaming of taking a nap.

As we enter this near comatose state, a second hormone is released called glucagon. Glucagon does the opposite of insulin and puts sugar back into the blood stream. Glucagon is typically not as overzealous as insulin, and takes things a bit slower to balance our blood sugar. And so is the dance of bipolar insulin and calm cool and collected glucagon.

Now obviously if we're talking about this stuff there must be a connection with joint pain, and here it is.....BLOOD SUGAR. Multiple studies have proven beyond a shadow of a doubt that chronically high blood sugar levels increase inflammation.

"No problem," you say, "insulin and glucagon look after that so what's the big deal?" Well you're right, the dynamic duo of blood sugar do look after this, but the body was never designed to look after it to the extent blood sugar wildly fluctuates, as it does here in North America. Thanks to our SAD (Standard North American Diet) instead of this sugar crash thing being a here and there issue, it's an everyday occurrence with virtually every meal.

Sticking to low GI foods has a huge impact on blood sugar fluctuations

Overtime we begin to develop something called insulin resistance. When insulin is released, it needs somewhere to set up shop and get to work pulling sugar out of the blood stream. The shop locations are located all over our muscle tissue, also known as receptor sites.

Bit by bit these receptor sites become less friendly to binding with insulin, and as a result insulin becomes less and less effective at removing excess sugar from the blood stream. As a result more and more insulin is released to create the desired effect.

The result is elevated blood sugar levels for longer periods of time, which of course leads to more Low Grade Inflammation. As well, this also sets the stage for developing diabetes, which is a whole other story we'll save for another day.

So how do we keep our blood sugar levels healthy and manage-

able, insulin receptor sites happy and “receptive”, and as a result LGI (Low Grade Inflammation) low to nonexistent?



**Dr. Alwyn Wong
on Eating Frequency**

Not only is what you eat important, but when you eat is also important. With every meal, certain changes take place in your body. Similarly, in the absence of foods or in a “fasting” state, as in between meals, predictable changes also occur.

When you wait too long between meals, your blood sugar levels drop. When these levels drop too low, you enter a state, known as hypoglycemia. Not only do your muscles need fuel, but your brain absolutely requires sugar or glucose to survive. As such, in a state of low blood sugar, your body will crave high sugary foods, such as chocolate bars and other sweets.

After consuming these sugary foods, your insulin levels will spike in response. It is during these insulin spikes that your body is susceptible to storing fat. It is only when we can stabilize our blood sugar levels, and ultimately insulin levels, that our fat loss efforts can be successful.

It has been shown that even if we do not account for what is actually in our meals, infrequent meals reduce insulin sensitivity, increase energy intake due to this lack of insulin sensitivity, and reduce our caloric expenditure. One of the keys to stabilizing blood sugar, and preventing obesity (and type II diabetes) is to control insulin levels.

The first and most powerful method is by altering our nutrition program. We’ll get into the nutrition side of things in the food section where we tie everything together. Second are some very specific exercises which basically wake up the receptor sites on the muscle tissue, and increase insulin sensitivity. We’ll go over this in the exercise section.

Before we move on though, there’s an important tool you should be

familiar with called the glycemic index. Though it's not a perfect system, it does help to give us a good idea of how quickly a particular type of food is digested and converted into blood sugar. The faster it is converted, the higher the glycemic index rating.

Below is a small listing of foods from the high side of the glycemic index to the low side. What you'll notice is the more unrefined or less processing involved, the lower the glycemic index. It's kinda like mother nature knows what's going on and the less we mess with it the better.

Baked potatoes	98
Carrots cooked	92
Cornflakes	92
White rice instant	91
Honey	74
White bread	72
Bagels	72
Pumpernickel bread	46
Whole grain rye	42
Pinto beans	42
Apples	39
Yams	37
Other Sweet Fruits	35 and under

**Over time
insulin
becomes
less and less
effective**

Fruit juices also rank very high on this scale. Think of most juices whether from a can, a box, from frozen concentrate or anything in between, as flavoured sugar. Your main drink should be water. If you'd like to add a little zing, squeeze in some lemon.

If your sweet tooth really wants more, a drop or sprinkle of something called stevia will do wonders. It's a herbal sweetener found in all health food stores and many regular grocery stores. It has zero calories and packs a naturally sweet punch.

As for diet or sugar-free soft drinks, avoid those as well. We'll talk more about these in the acid section. Herbal no caffeine teas are also an excellent alternative to plain water if you're looking for more taste.

Flour-based or starchy foods should also be limited whenever possible. These include pasta, breads, muffins, bagels, cookies, breakfast cereal, rice cakes, most jams and spreads, candies and sweets, you get the picture.

Now with that being said we all live in the real world, and unless you decide to move to a vegan yoga colony in southern California, you'll probably come face to face with some tasty treats. So what are you supposed to do? ENJOY THEM!

Really, eat them. The more you torture yourself by not eating any of the fun foods you enjoy, good or bad, the more you'll want them. A nice rule of thumb to keep in the back of your head is 80% of what goes in your mouth is the good stuff, and the other 20% is just for fun.

TIPS TO CHEAT The Glycemic Index

Now there are some sneaky little tricks that will allow you to reduce the glycemic index of foods like pasta or even starchy sandwiches. Of the 3 macronutrients (carbohydrate, fats and proteins) fats and proteins slow the breakdown of carbohydrates and the release of blood sugar.

So all this means is if you're going to have some pasta, avoid the plain tomato sauce and include some chicken. The chicken will help to balance out the glycemic index of the pasta. With sweet treats, go for something that has fat vs something that is pure sugar. The fat in say a scoop or two of ice cream helps to reduce the speed at which the sugar enters the blood stream.

Again we're not saying these tricks will allow you to put these foods back into the 80% side, but they will allow you to enjoy them while minimizing the potential issues.

Glycemic Index Cheat Sheet Review:

- Ensure protein is included in the meal
- Go for sweet treats that include naturally occurring fats
- Fibre also slows digestion and sugar release. Fruits are a great sweet snack vs candy
- Avoid overly processed starchy foods, flours and anything with High Fructose Corn Syrup
- Drink a large glass of water 20 minutes before a major meal to reduce appetite and prevent over eating
- Eat until you are no longer hungry vs full



SECTION 2 The ACID CONNECTION

Insulin and blood sugar aren't the only things we need to concern ourselves with if we want to reduce Low Grade Inflammation and get rid of joint pain. Next on our hit list of joint pains most wanted is ACID. You may recall from science class, or more recently shampoo commercials, something called PH balance.

Our body is always trying to maintain a fairly neutral PH balance of around 7.3. The PH scale runs from 0, extremely acidic, to 14, extremely basic or alkaline. Water is one of the most neutral PH substances we can consume, with a PH of around 7. Ideally our body is always slightly alkaline.

The more we tend to lean towards acidity, the more prone we are to a wide range of diseases. InflammationSURPRISE SURPRISE is also closely related to acid levels in the body. The more acidic the blood, the higher Low Grade Inflammation tends to be.

There are many factors which play a part in how acidic our body is. These include environmental toxins or pollutants, the foods we eat, stress from life, and the fluids we drink.

By all means do what you can to use more environmentally friendly cleaners, live somewhere with lots of trees and low amounts of smog, but there's only so much you can do short of escaping to a Tibetan monastery in search of clean healthy living. And truth be told, there's no escaping pollution, we simply have to live with it as best we can.

Next are the foods we eat. This is where we can have some major impact on acid production. As a rule of thumb, processed foods increase acidity, and raw or less processed foods reduce acidity and enhance alkalinity.

Vegetables are #1 on the list followed by fruits to a lesser degree. Fruits are less because they are naturally higher in sugar than vegetables. Even though the sugar is naturally occurring, in large enough amounts it will still cause trouble, but moderate consumption is just fine.

Next we want to focus on drinking lots of water throughout the

A neutral to slightly alkaline PH is ideal for joint health

day. Most people are borderline dehydrated and don't even know it. A good target is 2 litres a day. This can be accomplished by drinking 4 small bottles of water each day. Herbal teas can be included as part of that number as long as they are caffeine-free.

Fruit juices don't count as they are loaded with sugar. Pops of any kind are loaded with acid as a preservative so they will only make things worse. Milk should also be avoided as it tends to increase acidity in the body too.



Dr. Alwyn Wong
on The Importance of Water

Your body is made up of 60% water. All of our biochemical processes depend on water and without it, we could not survive. We can go weeks without food, but only days without water.

In fact, water is ranked second only to oxygen as the most important nutrient for the body. In fact, it is the most common compound on earth. Our bodies are so sensitive to changes in water levels that a dehydration of 3% can result in fatigue, weakness, and loss of coordination. Furthermore, since our muscles consist of approximately 70% water, dehydration will prevent us from gaining lean mass. And without lean muscle mass, our metabolism slows down. Water also aids in protecting the joints, digestion, lubricating the skin, and is important for proper mental functioning.

We lose about 1.5 liters of water a day through our urine output, and an additional liter of water a day through other life processes (breathing, sweating, and bowel movements). It's important to replace these lost fluids daily. When we workout, we need to drink extra water to compensate for that lost in our sweat.

During hot or humid weather, our need for water also increases as we sweat more under these conditions. In addition, illness causes the body to lose more fluids.

Basically the greener you can get your food, and the closer to raw you can eat it the better. Include lots of water and you're off to an excellent start.

One nutrition aspect we'll focus on here are the highly acidic foods and drinks you must avoid if at all possible.

On the liquid side of things, the big ones to avoid are soft drinks and reduce coffee. Soft drinks are extremely acid-forming in the body. It's really as simple as that. If however you decide you really want a can of pop, follow it up immediately or as close as you can with a full bottle of water, about 500 ml. The water will help reduce the acidity of the pop, but of course avoiding is best.

Remember you're dealing with joint pain and joint issues. This is a tell tale sign your body is having a hard time dealing with things as it is. A normal healthy body free from joint pain can deal with a coffee here and there. In fact there are many health benefits related to coffee. But that's in a healthy body. When we're dealing with joint pain, we need to be extra careful and go above and beyond the norm to push things back into a state of health.

The Big Foods To Stay Away From

The Secret of The DEADLY Night Shade Family

Sounds like the perfect name for a mafia crime ring, but it's actually a botanical classification of plants. The deadly night shade plants include eggplant, the spice paprika, chilli peppers, potatoes, tomatoes, peppers and tobacco. This group of plants contains a toxin called sotanine that may influence pain triggers in those sensitive to it.

Do your best to simply avoid these foods as much as you can. With all the foods we have to choose from, this shouldn't be too hard for you. Avoiding potatoes will probably be the toughest, but it's a big one. Not only do they contain high amounts of sotanine, but when cooked at high temperatures they release a very toxic compound called acrylamide.

Governments all over the world are studying how to reduce exposure to this compound which has significant cancer causing links. Unfortunately, potatoes cooked at high temperatures via deep frying are a huge part of most diets, so who knows if they will ever take action. For your joint health it is simply one more thing you need to minimize. And remember, you don't have to swear off fish and chips forever, just limit them to the odd indulgence here and there.

The Flour Acid Connection

At times those tasty treats feel as though they are food from the gods high atop Mount Cookies and Cream, but in truth, they are the devil in disguise. Just about every highly processed food that uses flour only serves to tempt and tease our taste buds. Now we're not saying that's a bad thing. There needs to be fun in life, but too much of this flour fun will leave you wishing you'd consumed less.

There are a couple of big issues with most things made with flour. First they tend to sit high on the glycemic index; the previous section went over that. Unfortunately most foods made with flour are also very acidic. Without even realizing it most people incorporate these types of food into each and every meal of the day.

A typical day for kids and adults alike might include a bowl of processed cereal with milk, a glass of sugary juice like orange juice or

coffee on the side, and maybe a piece of toast with sugar laden jam. Breakfast is mostly sugar even though it looks much healthier than that.

Food from a box equals bad news for your joints and your health

Next, a snack mid morning of maybe a muffin, (if you're lucky you might get a fruit or vegetable) and a coffee. For lunch a sandwich, sub, or something on a bagel with a soft drink or coffee. Then mid afternoon another coffee or soft drink to help you get through the afternoon slump.

For dinner, more often than not it's something out of a box made with starches, overly cooked vegetables, and if the moon and stars are all aligned, you might get in a salad. Then an evening snack of chips and or ice cream, and a perfect day of eating is done.

This is a typical day for most people. If you look at what was eaten, you'll notice that there was almost nothing fresh or raw, very little in the way of fruits and vegetables, and very little water consumption. All of this leads to a very acidic selection of foods, and our body has to struggle to maintain its desired alkalinity.

So this is just another reason to work hard to keep all flour based products to a minimum. Aim for a maximum of 20% or less for the bad stuff, and focus on eating the good stuff the other 80% of the time.

Red Meat

Red meat should be reduced whenever possible. We're not saying you'll never have a steak again, but for the sake of your joint health we need to dramatically reduce the amount you eat. If you are a diehard red meat lover, save that steak or burger for your 20% splurge, and really take the time to enjoy it.

Red meat is high in something called arachidonic acid. Through a complicated process, once ingested, the body breaks arachidonic acid into a variety of inflammation causing compounds. So quite simply the more red meat you eat, the more inflammation you will create, case closed.



Eggs

Eggs are also high in arachidonic acid, so yes you should limit them as well. Again you don't have to completely eliminate them. If you love your morning eggs, set aside 1 maybe 2 mornings a week for your omelette or sunny side up masterpiece. There are a lot of wonderful health benefits that come from eating eggs, but for now, our main focus is on keeping inflammation to a minimum.

Dairy

Many people have allergic sensitivities to milk and milk products. This includes cheese, milk as a drink, ice cream, yogurt etc. Again the idea is not to completely cut everything out and drive yourself crazy, but rather to substitute where you can, and limit in other areas. So for example instead of drinking milk, try substituting almond milk. Unsweetened almond milk is mild, comes in a variety of flavours and works with most tastes.

Most dairy products have an alternative of some sort. Some are great and others, well.....not so much. Find the ones you like, and don't worry too much about swapping the ones you can't handle. Over time once you have made improvements in your joint health, you can slowly start introducing these products back into your diet. If you see a worsening of joint pain, you know you are extra sensitive to that food and should continue to avoid it.



Dr. Alwyn Wong on Chewing Your Food Slowly

The interaction between saliva and your food further breaks food down into even smaller chunks, making the entire digestive process more effective. Additionally, saliva releases the vitamins and minerals found in food. So, even though that snack you're eating may be healthy, you won't derive the full benefit of eating it if its nutrients are not made available to you.

Another function of saliva is it can kill bacteria and other contaminants found in food. Similarly, undigested food serves as a breeding ground for bacteria to thrive in the colon. This can lead to IBS, flatulence, and obesity.

When you take time to chew your food, the taste buds are able to fully register all of the flavours – bitter, sour, sweet, and salty. This stimulation enriches your eating experience, making food more enjoyable. This stimulation of your taste buds not only makes eating more enjoyable, it serves another important function. When your taste buds are stimulated, your brain signals the digestive tract that it must be put into action. As a result, your brain tells your stomach to produce hydrochloric acid, a powerful chemical required to break down protein.

Eating quickly and swallowing large chunks of food allows air to enter the digestive tract, causing reflux, burping, bloating, indigestion, IBS, and flatulence.

Chewing your food not only makes your meal more enjoyable, it is associated with many health benefits. You'll experience weight loss and reduced bloating.

SECTION 3 Exercise

Now you didn't think we'd get through all of this and not talk about exercise did you? Wishful thinking I know, but an absolute must if you want to reduce your joint pain, and more importantly, rehabilitate your joints and keep them healthy for years to come.

Now the obvious rock and a hard place irony here is you have sore joints. Sore joints make it hard to exercise. If you don't exercise, your joints will only get worse, and things will spiral down lower and lower. The good news is there are many forms of exercise that do not impact the joints, but still provide loads and loads of benefits.

One of the reasons we need to exercise, has to do with the anatomy of the joint. Basically a joint is where two bones come together. The ends of the bones are covered in a smooth soft substance called cartilage. Between the two ends is a fluid filled sack called the joint capsule and synovial lining. The capsule is filled with a super slippery substance called synovial fluid.

The synovial fluid allows everything to slip and slide without large amounts of friction or damage. In a healthy joint, the fluid is constantly replenished by the synovial membrane. In not so healthy joints the membrane may not be as effective as it should be at replenishing the fluid. This can actually lead to an acidic environment within the joint capsule, as well as one high in toxins and waste products.

Joints, like every other system in the body, produce waste. These waste products need to leave the joints as quickly as possible so they can be processed and eliminated by the body. If the joint is having trouble doing this on its own, exercise can help.

Safe healthy joint movements actually help force old synovial fluid out of the joint capsule and stimulate the synovial membrane to produce new fluid. Fresh healthy synovial fluid will help reduce overall acidity levels and help maintain the health of the joint cartilage.

The movements you're going to focus on are gentle smooth movements like what you do in Yoga or Tai Chi. These types of exercises have been used for thousands of years to promote overall health and longevity and are just as applicable to you today as they were 4000 years ago.

We've prepared several routines for you and a schedule of when to do them and for how long. Just click on the link below and you can pick and choose the ones you like. Ideally just 10 minutes a day is enough to get you started. One day you might do a yoga routine, and the next day some stretches. In just 10 minutes a day you can easily get started and complete the program. Bit by bit you'll improve your stamina while stimulating your joints to heal themselves.

www.jointgrease.com/exercises



SECTION 4

The Food Program - Eating For Healthy Joints.

The food side of things will be surprisingly easy to follow. Again how closely you follow through is up to you, but understand the closer you follow the program the better the results. The entire program is surprisingly simple.

Water intake:

One easy trick and extremely healthy routine you can work into your day is to start each morning with 2 big glasses of water. This helps to support cleansing and gets everything moving if you know what I mean. Feel free to squeeze in some lemon for taste and to aid in cleansing.

- Drink lots of water in the form of distilled or spring water.
- Herbal non-caffeinated teas are great. They taste great and often have added antioxidants.
- Lemon can be added to water with stevia if you desire some added sweetness.
- If you must have a fruit drink dilute it 1:4. 1 part fruit juice 3-4 parts water.

Here is a quick list of foods and the glycemic index of each. Your goal should be to stick to lower glycemic index foods, ideally under 60. Think of 60 as the borderline foods. The lower you go the better you'll feel.

Baked potatoes	98
Carrots cooked	92
Cornflakes	92
White rice instant	91
Honey	74
White bread	72
Bagels	72
Melba Toast	70
Mashed potatoes	70
Wheat bread	69
Table sugar	65
Beets	64

Raisins	61
Bran muffin	60
Pita	57
Oatmeal slow cooked	55
Popcorn air popped	55
Banana	53
Brown rice	50
Grapefruit juice no sugar	48
Pumpernickel bread	46
Whole grain rye	42
Pinto beans	42
Apples	39
Yams	37
Other sweet fruits	35 and under

Excellent vegetable choices all of which are less than 20 on the Glycemic Index include:

Arugula, asparagus, lettuces, chard, broccoli, avocado, cucumber, cauliflower, kale, celery, all seed sprouts, Brussels sprouts, zucchini, scallions, purple cabbage.

Meat has little to no carbohydrate, and as such a low GI. Remember however to avoid red meat and organ meats, and to keep eggs to a minimum. A couple of times a week is fine but less is best. You can still enjoy chicken and fish.

Oils to use include quality olive oil, coconut oil, and organic butter. Avoid highly refined vegetable oils like canola, corn oil, and palm oil. When cooking or frying, a small amount of oil will go a long way. AVOID deep frying foods during this program. Also stay away from highly processed fats or spreads like margarine. If you've got to have something, stick with natural unsalted organic butter.

We're going to give you a few examples of dishes you can prepare, but feel free to create whatever you like based on the food list above. It's very hard to prepare your meals wrong if you simply stick with the foods above.

Breakfast:

EGGS: 1-2 times a week you may have an egg omelette with about 60% vegetables. For example 1-2 eggs with approx 1+ cups of spinach or asparagus, mushrooms, beans etc. Really it is more



vegetable stir fry with some added egg than it is omelette. Simply add the vegetables to the hot pan with a little bit of olive oil. Cook for a minute, add the eggs, cook just until eggs are done and remove. The vegetables should still be near crunchy vs completely soft and overcooked.



Dr. Alwyn Wong
on The Importance of Breakfast

Experts attribute our hectic lifestyles to the increased tendency to skip breakfast in the last decade. Skipping breakfast deprives us of the energy we need to work, study, look after our family, and enjoy life. Skipping breakfast also has many other negative effects. Regular breakfast consumption reduces your risk of chronic disease, lowers cholesterol levels, and improves learning abilities...in both children and adults.

The word breakfast simply means breaking a fast. Whether you're getting your recommended number of sleep hours or you're barely getting by on five hours – upon waking, you're coming out of a fast. Remember the importance of meal frequency? Unless you discover a way to eat while you're sleeping – we're all susceptible to this.

OATS: Oatmeal, though largely a carbohydrate still provides some protein and is high in fibre. It also scores midway on the glycemic index at around 50 or so. Be sure to use the slow cooked no sugar added variety vs the instant oatmeal loaded with sugar.

This is really easy to cook. Just follow the instructions on the pack and let it simmer. When ready you can add a raw or no sugar added nut butter like almond, cashew or peanut, a little dab of honey and some fruits like banana, blueberries, apple etc. No cooking the fruit, just put it in raw. To make it even more nutritious add a little scoop of your favourite protein powder. Not too much, maybe half a scoop. This will help balance the glycemic index rating and prevent blood sugar from spiking which will also ensure your energy stays nice and steady all morning.

CEREAL: Various granola, nuts, fruit etc combined in a bowl with almond milk make a great quick and easy breakfast. As well you can add in a bit of protein powder if you like, but just a bit. High protein intake is not a huge component of this joint health plan.

Lunch:

SALAD: Lunch is one of the easiest meals, and you can make it ahead of time or find a decent salad at just about any fast food restaurant. If making your salad at home, fill one container with your desired washed greens/lettuce, some other cut up vegetables of choice (remember no tomatoes or peppers) maybe some berries, nuts or seeds etc. In a separate container add some balsamic vinegar, olive oil, and a pinch of natural sea salt or rock salt (NOT PLAIN TABLE SALT) and you're done. At lunch simply pour your dressing on the salad, cover the salad with the lid, shake and enjoy. If making your dressing is not for you, look for one as natural as possible that is low in sugar.

STIR FRY: These are a great way to get lots of vegetables and some good quality proteins like chicken or fish into your meal. Again many options are available at fast food restaurants. You can also prepare these at home and reheat at work or eat cold. Remember we want to avoid overcooking our food. Ideally vegetables should still have some crispness to them.

WRAPS: These are a great alternative to subs or bagels or sandwiches which use lots of white bread. A wrap can be loaded with fresh raw vegetables, some added protein like tuna or chicken, and they're available at countless fast food restaurants or made at home. Do your best to limit or avoid deli meats as they are loaded with harmful chemicals and preservatives. Stick to whole pieces of fresh meat like chicken, turkey, fish etc.

Dinner:

Roasted Chicken with vegetables of choice and a side salad, or chicken, pork or pure vegetable stir fry. Feel free to use a natural flavouring sauce if you desire like teriyaki. Remember to include a salad. Or how about whole grain brown rice with your choice of proteins IE grilled or baked chicken, fish etc. Include side vegetables and a salad.

We've kept the dinner ideas simple just to give you an idea. There

are thousands of recipes available on the internet that you can access almost instantly. So be creative.

Snacks:

Snacks are a very important part of your eating plan. Planning for snacks gives you the power to avoid the bad stuff. When you're starving, and nothing good is in view, it's much easier to go for poor quality fast food. Here is a list of some great snack options to give you an idea of the basics.

- Approved vegetables with natural dip
- Almonds or walnuts
- Fruits like apples or pears
- Low sugar granola
- Natural protein bars for a sweet fix a couple of times a week

Do your best to always pack a few snacks for the day so they are handy. Often the desire to eat has little to do with hunger, and everything to do with just wanting something to chew on to take our mind off something else. A handful of a healthy snack will easily look after your appetite until your next meal.

For late night eaters, use every ounce of will power to limit snacking after 7:00 pm. Going to bed on an empty stomach is the best thing you can do. Not only does it enhance the release of the restorative hormone GH (growth hormone) it also allows for a much deeper sleep free of any acid reflux or stomach distress.

**Eat until
you are no
longer
hungry. Not
until you
are full**

Final Tips For Happy Joints

No More Filling Up To The Brim

When eating, do your best to avoid over eating. As bizarre as it sounds, tests performed by the National Institute on Aging revealed when animals were fed 50% fewer calories per day, their immune response improved, and this is the big one, the amount of inflammatory cytokines in circulation was reduced. Who would have thought not stuffing our face would have so many benefits.

As a guide eat until you are no longer hungry, not until you are full. The two can often be very different. So once you've had something to eat, take a second to observe how your stomach is feeling. Are you feeling on the verge of over full or bloating? If so stop. Ideally you should eat just enough to feel good and satisfied.

Remember we're aiming to have 5 or 6 smaller meals a day. Breakfast, snack, lunch, snack, dinner, maybe a little vege snack if needed.

Sleep Your Joints Healthy

Sleep is the only time your body has to regenerate damaged tissues. The less you sleep, the less time you have to build healthy happy joints. As well, inflammatory cytokines are secreted at a higher rate by people who suffer from insomnia.

This is a major double shot of bad news for joints if you're not sleeping well. Do everything you can to get at least 7+ hours of sleep a day. If you have trouble achieving a deep restful sleep, look into using ear plugs, or herbal teas before bedtime to help you relax. There are all sorts of natural safe ways to improve your sleep. Take some time to find what's right for you.





Dr. Alwyn Wong on The Importance of Sleep

On average, we sleep less than 7 hours a night, compared to 9 hours a century ago. In fact, 30% of adults report sleeping less than 6 hours a night. Yikes! Interestingly, during this same time period, the incidence of degenerative diseases such obesity (and diabetes) had also risen. Coincidence? The answer is not that simple.

Sleep deprivation changes the way in which your body uses sugar. More specifically, lack of sleep causes insulin resistance, which increases your risk of getting fat. Lack of sleep will also increase the stress hormone cortisol, which also contributes to obesity. Finally, sleep deprivation lowers the level of the proverbial fountain of youth, growth hormone.

Scientists have quantified exactly what your risk of obesity is due to lack of sleep. So, what do the numbers say.

In summary, sleeping less than 5 hours a night increases your chance of obesity by 2.3 times for women and 3.7 times for men compared to sleeping 7-8 hours night.

Finally, not only is the number of hours of sleep important, but so is when you sleep. Due to circadian rhythms, which is a fancy way of saying the natural daily changes in your body, when we sleep is critical to our fat loss efforts.

With that being said, it is best to fall asleep between 10pm and 11pm. By doing so, your body detoxifies more effectively, as it detoxifies between the hours of 11pm and 3am.

SECTION 5

Using Joint Grease® and Other Natural Supplements

Using Joint Grease® is one of the easiest things you can do to dramatically improve your joint health. For the initial 63 days use Joint Grease Step® 1 which has both Joint Grease® capsules and Joint Grease® liquid drops.

Remember you only need to use 5 drops of the Joint Grease® liquid drops with CoLRx™ a day mixed with water. It has absolutely no taste or smell, so the easiest thing would be for you to take it first thing in the morning with your initial two glasses of water.

After your initial 63 days switch to Joint Grease® Step 2 which includes only the liquid drops.

Now optionally there are a few other supplement products you can add to your program. These are completely optional, so don't feel any pressure to use them if you don't want to. Joint Grease® is going to do all the heavy lifting for you during this program.

The first is fish oil. There is a lot of solid research showing multiple health benefits from using a fish oil supplement, with joint pain reduction being one of the big benefits. The best form is a liquid supplement versus capsules. This is for both economy and ease of use, due to the fact that therapeutic results require at least 1 tablespoon daily, which can equate to 6-10 capsules at one time.

If however you can't handle the taste, liquid capsules will do fine. Be extra sure the bottle lists the oil as being free of mercury or any contaminants like heavy metals, PCBs etc. Fish oil is your best option for essential fatty acid supplementation due to the fact that it is in a form the body can use right away.

Other oils like flax for example, are an excellent source of essential fatty acids too, but the body needs to convert the type of essential fatty acid to another type before it can be used. Normally this is no problem, but once we hit our 30's and beyond, the enzyme required to look after this conversion starts to disappear, and as such the conversion does not take place very efficiently.

Next is a simple multi vitamin and multi mineral. Think of these like a nutritional insurance policy. Thanks to the fact that you'll be eating lots of fresh fruits and vegetables, you'll be getting extra vitamins

and minerals, but to facilitate healing and maintain your health, it's always good to have a little extra rather than not enough. Stop by any health food store or pharmacy to find a good quality multi.

Some multivitamins we love that have been specifically formulated for men and or women can be found at:

www.bodylogix.com

We also love this totally new concept in multivitamin delivery from Vitamints. Basically they are vitamins in the form of a mint. Fresh breath and amazing nutrition, we love it.

www.vitamints.ca

These 2 supplements are the perfect add-ons to the Joint Grease® program. There are only 2, so they won't bog you down with handfuls of extra pills, but they'll go a long way in supporting your overall goals.

Some great protein powders to use with cereals, oatmeal, and a quick nutritious snack can be found at:

www.bodylogix.com

www.kaizencanada.com

Now Let's Get Those Joints PAIN FREE

So here we are at the end of the program. It may be hard to believe but you now have the tools and knowledge to completely transform your life from one of pain full to pain free. The process, to recap, has been set out for you.

1. Start using Joint Grease® Step 1 each day.
2. Begin a simple 10 minute low impact exercise program 5 or more days a week.
3. Make the dietary changes we've discussed.
4. Drink lots of water each and every day.
5. Get 7-8 hours of sleep each night.

Do these FIVE things and your life will change.

Along the way be sure to become part of our Facebook community to share your experiences, your struggles and successes with people just like you.

Connecting with like minded people who know what you're going through is a great way to stay motivated and positive.

There will be times when your day brings you down. Maybe it's due to a flare up of some sort, or something else that knocks you down either physically or mentally. Remember, these days will pass and things will get better.

From all of us at Joint Grease®, thank you, and enjoy your new future, you're gonna love it.

www.jointgrease.com

www.facebook.com/jointgrease

www.twitter.com/jointgrease

www.youtube.com/jointgrease



About The Contributors



Dr. John Gannage

Dr. Gannage is a medical doctor who practices Integrative medicine at his clinic located in Markham Ontario. For more information go to

www.integrative-medicine.ca



Dr. Alwyn Wong

Dr. Wong is a doctor of chiropractic and practices acupuncture. He currently practices in Toronto at Balance Integrated Healthcare and sits on the Editorial Board for Doctors Health Press Inc.

www.balanceih.com