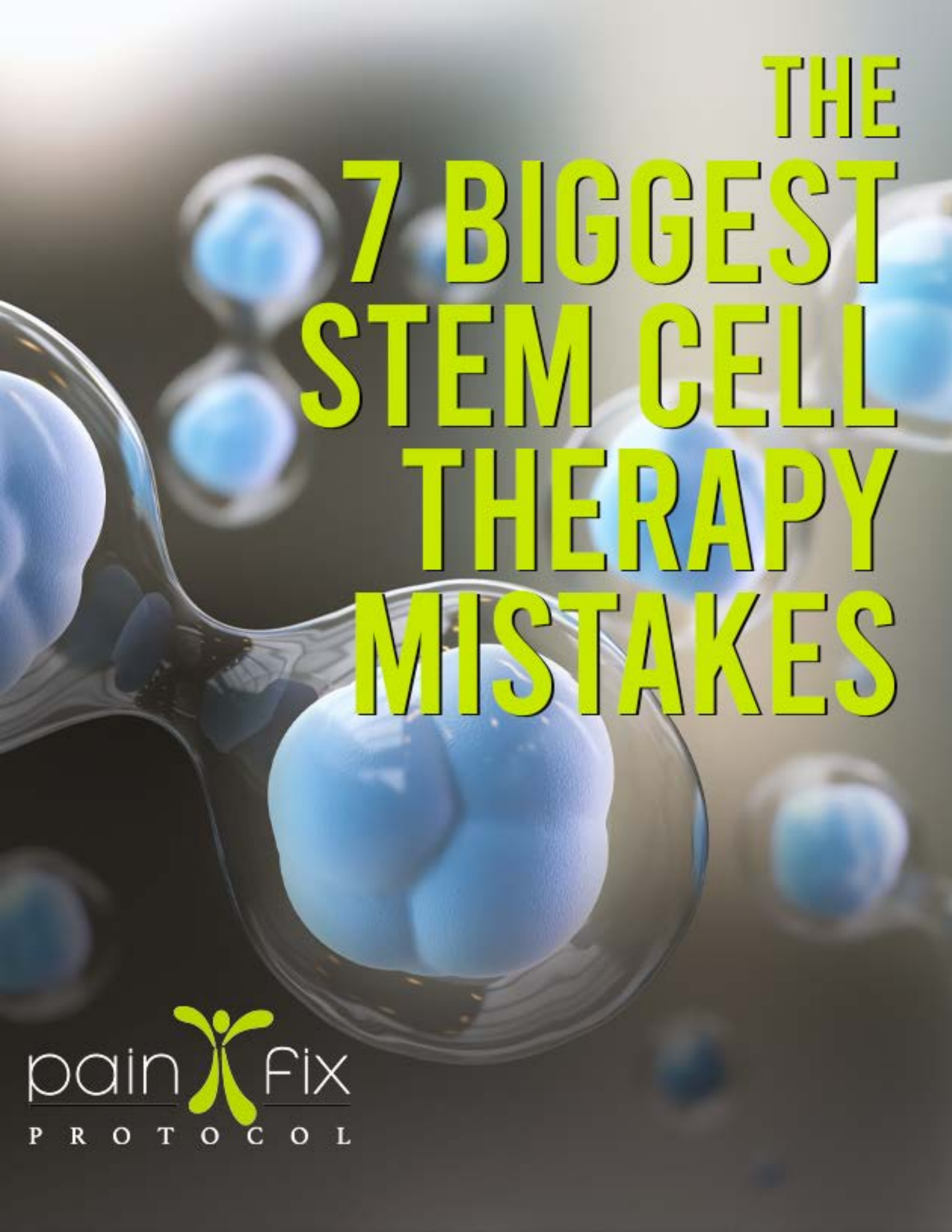


The background of the entire page is a microscopic view of stem cells. Several cells are visible, each consisting of a light blue nucleus and a darker blue cytoplasm, all enclosed within a thin, translucent membrane. The cells are scattered across the frame, with some in sharp focus and others blurred in the background, creating a sense of depth. The overall lighting is soft and clinical.

THE 7 BIGGEST STEM CELL THERAPY MISTAKES

The Big Question:

If you were going to spend several thousand dollars on stem cell therapy, wouldn't you want to do everything possible to help ensure the best possible outcome?

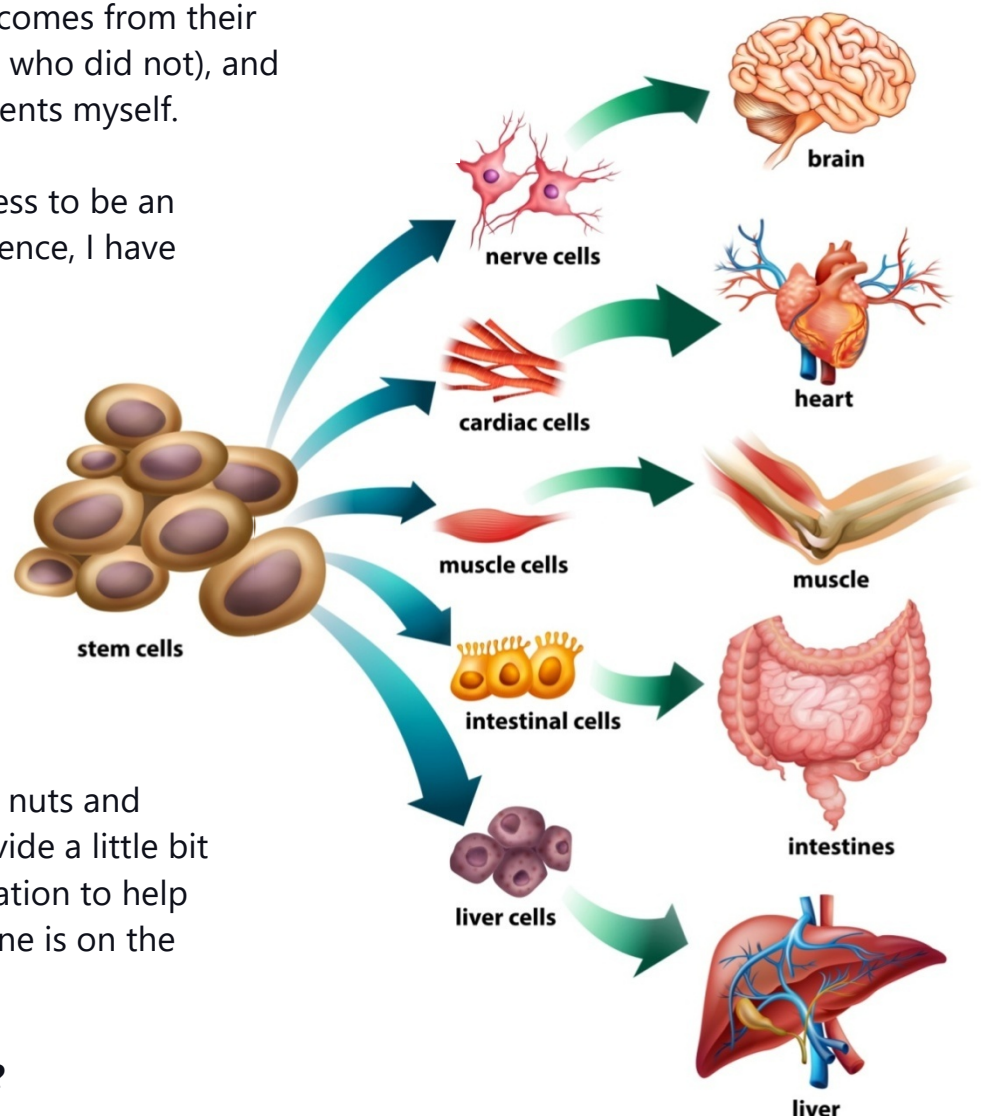
I have spent the last few years reading papers and studying the topic. I've had the chance to interview experts, spoken with people who had excellent outcomes from their procedures (and some who did not), and even had a few treatments myself.

And while I don't profess to be an expert on stem cell science, I have learned a lot about it. And have put a strong emphasis on what works and what doesn't, and that's what I want to share with you in this short guide.

Before we get into the nuts and bolts, allow me to provide a little bit of background information to help make sure that everyone is on the same page.

What Are Stem Cells?

In the purest sense, the term "stem cells" refers to a class of cells that are "undifferentiated". Meaning they have not yet undergone specialization. These cells are the body's most basic building materials and they have the ability to



develop into any cell in the body: blood cells, brain cells, heart muscle cells, bone cells, etc.

A Variety of Stem Cells:

There are several different types of stem cells – and this leads to great a deal of confusion.

- 1. Embryonic Stem Cells:** These cells are known as "pluripotent stem cells" – meaning they have the ability to divide into many more cells, and they can literally become *any* cell in the adult's body (through a process known as "differentiation.")

As you probably expect, these are the kind of cells that you find in embryos during the earliest stages of development (3-5 days old).

At this early stage, an embryo - or "blastocyst" - as it's called, consists of about 150 of these cells.



Incredibly, those few cells will eventually become a human body. These types of cells are also found in induced pluripotent stem cells (iPSCs). iPSCs are stem cells generated from adult cells through genetic engineering in a lab. The creation of iPSCs is a fascinating development, but they are so new that there needs to be more research into them.

- 2. Adult Stem Cells** - These cells are found in all of us – in varying amounts. They function mainly as an internal repair system responsible for creating replacements for cells lost through injury, disease, or normal wear and tear over time.

Technically speaking, these cells do not fit the true definition of a stem cell as they are already partially differentiated (specialized).

Examples of adult stem cells include:

A. Hematopoietic stem cells (HSCs) – Have the ability to generate different types of blood cells – think RBCs & WBCs

B. Mesenchymal stem cells (MSCs) – While these cells can differentiate into multiple mesoderm-type cells, including osteoblasts, myocytes, chondrocytes, and adipocytes, they are only able to do so under very specific conditions in vitro.

Ongoing Debate:

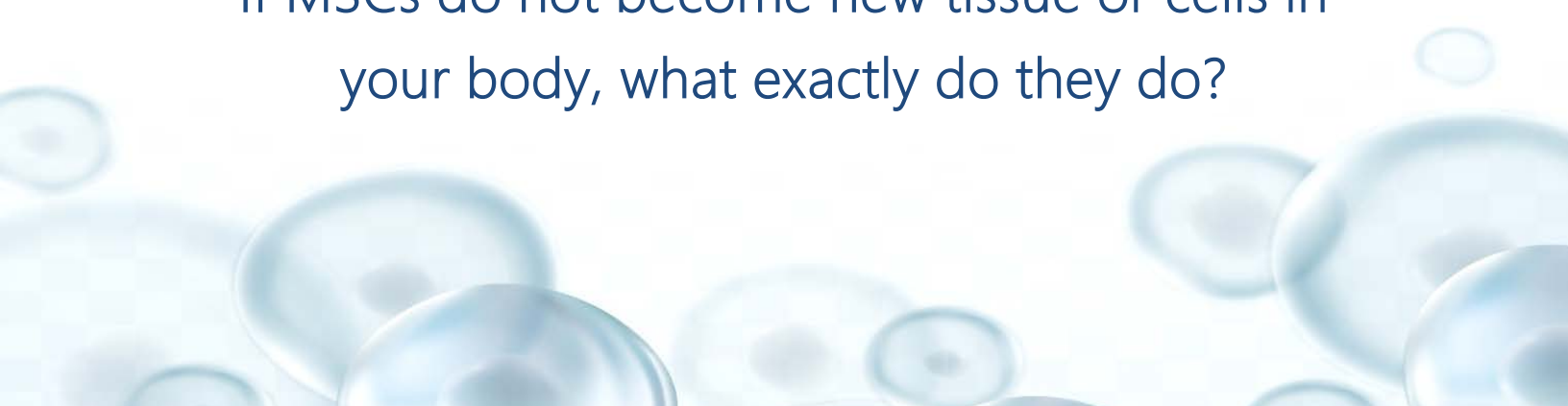
Once inside the human body, MSCs do not transform into different types of cells or tissues.

That's the reason why there is an ongoing debate as to whether MSCs are *actually* stem cells.

In fact, the man responsible for naming Mesenchymal Stem Cells back in 1991, Dr. Arnold Caplan himself, has firmly pushed for renaming these cells to "Messenger Signaling Cells" precisely because they do not fit the definition of a "stem cell."

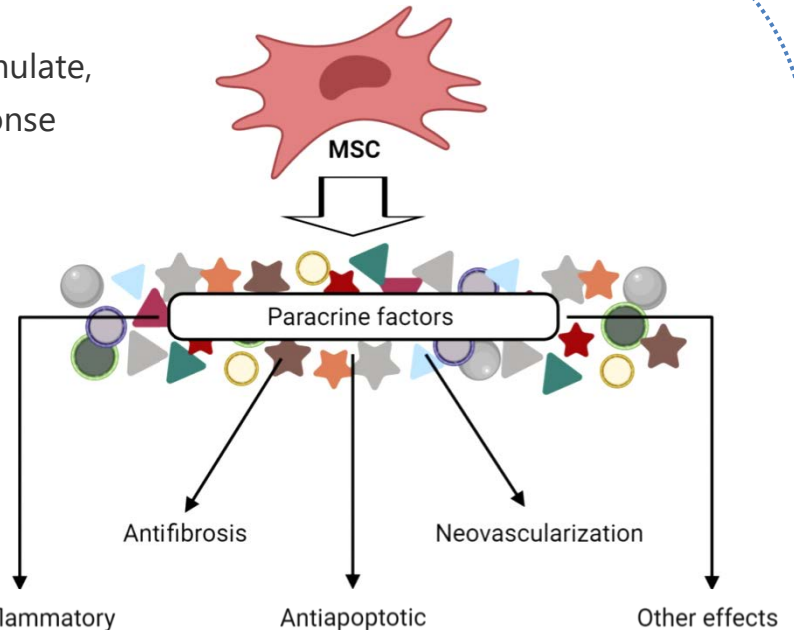
So, this, of course, begs the question:

If MSCs do not become new tissue or cells in your body, what exactly do they do?



Mesenchymal Stem Cells (MSCs) stimulate, guide and manage the healing response inside the body.

They work via something called the "Paracrine Effect"- Meaning that MSCs secrete a bunch of biologically active molecules that create health-promoting effects on injured tissues such as:



- **Increased circulation**
- **Enhanced tissue regeneration**
- **The formation of new blood vessels**
- **Increased recruitment & activation of endogenous MSCs**
- **Decreased osteophyte formation**
- **Decreased scar tissue formation**
- **Reduced Inflammation**

And so, these are the cells we're looking for when we opt for stem cell therapy.

The Mesenchymal Stem Cells (MSCs) used in stem cell therapy tend to come in a couple of different forms:

1. **Autologous MSCs**
2. **Allogenic MSCs**

Autologous Mesenchymal Stem Cells

These are cells taken from your own tissues

- Due to regulations, these are the only type of MSCs available in the United States, Canada, Europe and Australia
- They are typically harvested via bone marrow aspiration and/or liposuction
- There are a few challenges to using Autologous MSCs:
 - Harvesting the cells is highly-invasive and painful
 - The cells must be administered the same day they are collected
 - The cell count is too not enough to produce optimal results
 - These type of cells are not recommended for auto-immune conditions because often times the MSCs themselves are dysfunctional

Allogenic Mesenchymal Stem Cells

These are cells come from healthy donor tissue

- Medical governing bodies in many countries outside of the United States do allow for the cultivation, expansion and therapeutic use of MSCs.
- These are typically harvested from healthy umbilical cord and placenta tissue which is readily available after a live birth (and would normally just be discarded as medical waste).
- There are quite a few benefits to using Allogenic MSCs:
 - No invasive, painful or traumatic harvesting procedures
 - Zero risk of rejection by the recipient because MSCs harvested from umbilical cord and placenta tissue have no genetic "host markers"
 - You can get a much higher cell count for various therapies
 - The best choice for auto-immune conditions because they are as "brand new" as cells can get and they have had no interactions with the immune system. These cells have lived their entire lives in a perfect little bubble and their functionality is tip-top.
 - The obvious choice for anti-aging treatments because these are derived from the youngest possible tissue their telomeres are extremely long.

Now that you understand a little bit about the different types of “stem cells” and what they *actually* do, let’s go over the most common mistakes that people make when going in for stem cell therapy:

1. Getting the wrong kind of cells

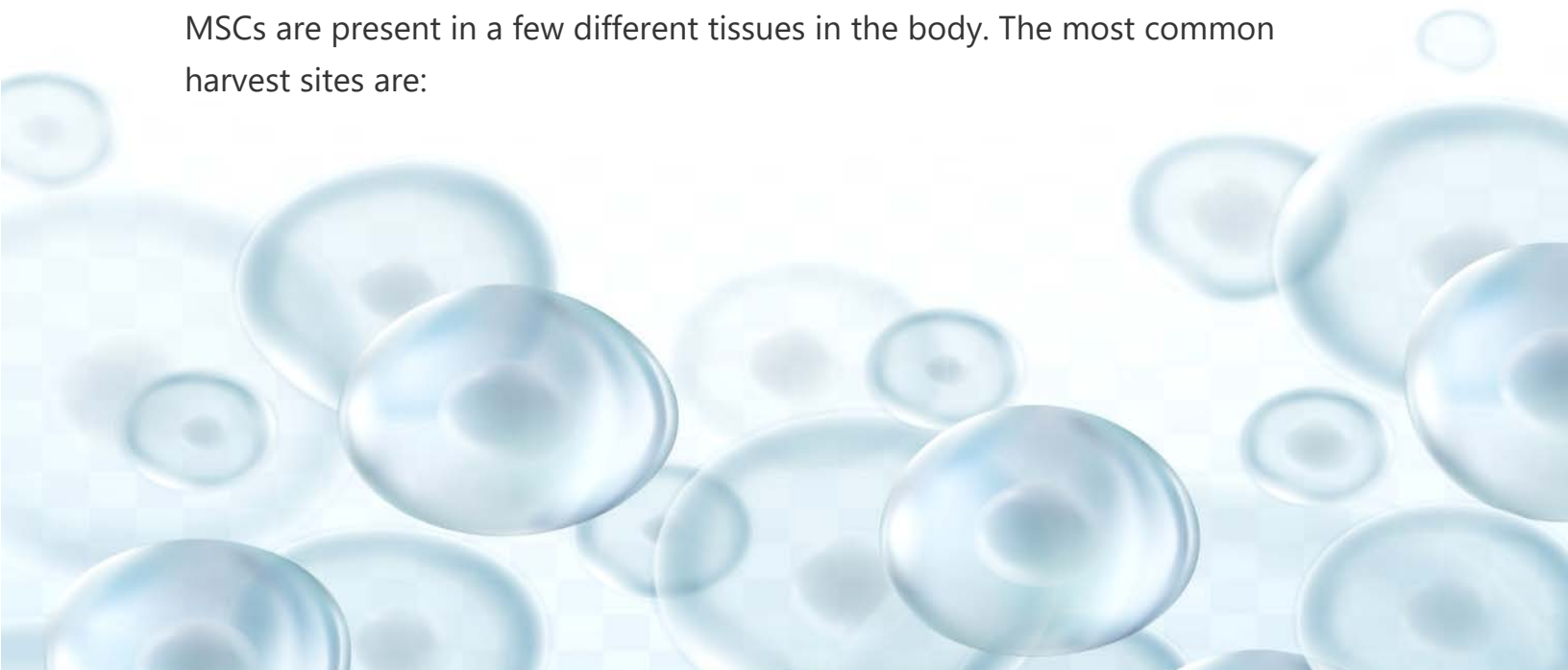
This is, by far, the biggest mistake that people make. And that’s not entirely their fault...

You see, the regulations regarding the advertising of stem therapy are pretty loose, and there are more than a few of clinics out there that will “promise you the world” when it comes to stem cell therapy.

I can’t stress strongly enough that you *need* to know what type of cells are going into your body.

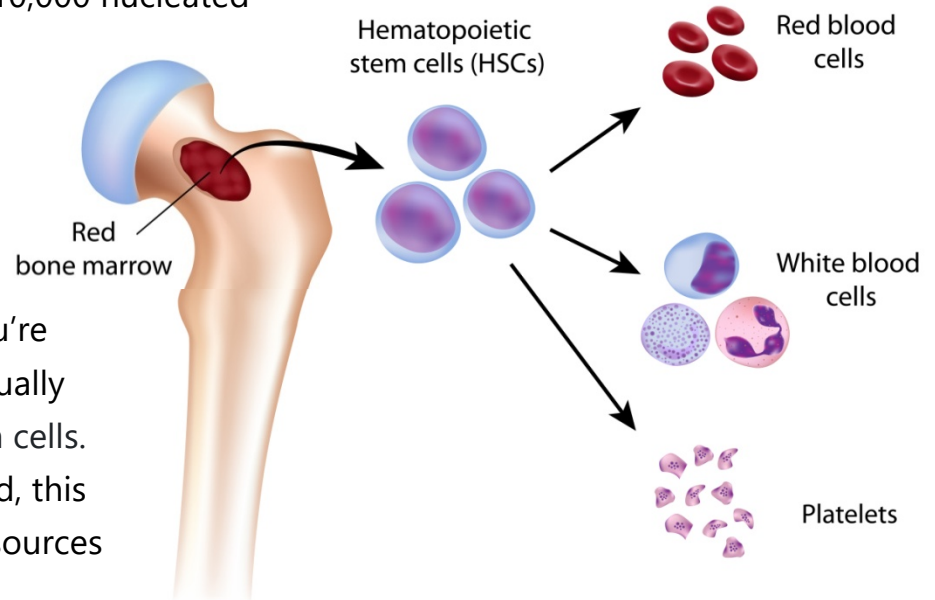
The dead giveaway here is the source of cells; so, the first thing you have to do is to find out where the cells that you’re getting came from.

MSCs are present in a few different tissues in the body. The most common harvest sites are:



1. **Bone Marrow** – Inside your bone marrow, MSCs are present in tiny amounts. According to the literature, they represent 1 in 10,000 nucleated cells. [a]

When you rely on bone marrow for your stem cell source, the vast majority of what you're getting here are actually Hematopoietic stem cells. All things considered, this is one of the worst sources of stem cells.



2. **Adipose (Fat) Tissue** – MSCs can be obtained in much larger quantities in fat tissue than in bone marrow. These cells are also collected with greater ease and safety than those from bone marrow. While this is clearly a better option than bone marrow – these cells still can't hold a candle to option number 3.
3. **Umbilical Cord** – The youngest and most active MSCs are obtained from umbilical cord tissue, specifically Wharton's jelly, which is a gelatinous



substance found within the umbilical cord. MSCs are found in very high concentrations in Wharton's jelly. And because, after a baby is born, the umbilical cord is readily available and would otherwise be discarded, cell collection is a piece of cake. These kinds of MSCs are prized for their primitive properties and rapid growth rate. [b]

2. Not getting enough cells

In the United States and Canada, there are 3 options for stem cell therapy as far as where to get your cells from:

- 1) **Bone Marrow-Derived:** To achieve this, the doctor will chip a hole in your hip, insert a needle and pull out some bone marrow. It goes without saying that this is a highly invasive and very uncomfortable procedure.

Clinics will then add some collagenase to the aspirate – this enzyme helps to break down any tissue in the sample – and spin it in a centrifuge to separate solid matter from liquid.

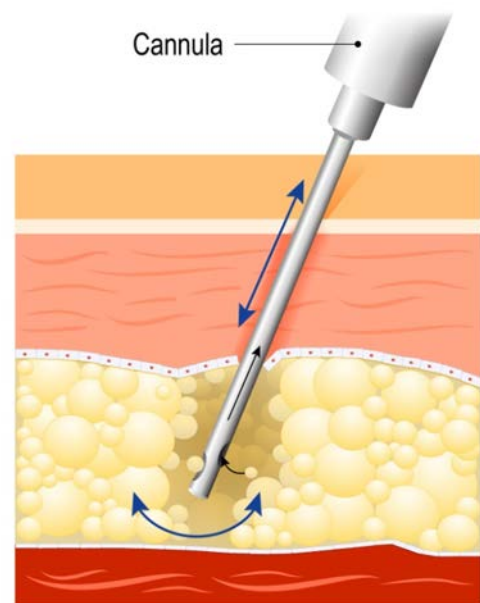


The final liquid product is a “mixed bag” of primarily hematopoietic stem cells, some blood cells, and a minuscule amount of mesenchymal stem cells (MSCs). According to Joshua Ketner, founder of the Dream Body Clinic, MSCs make up just 1% of the final solution injected back into you – when all is said and done, you’re getting about 10,000 MSCs.

This is why so many clinics in the US are obsessed with fluoroscopically guided stem cell injections – when you’re working with so few cells – you have to do everything possible to get them into the right spot. Otherwise, the treatment doesn’t even stand a chance.

- 2) **Fat-Derived:** This is another highly invasive procedure. Essentially, what’s involved is liposuction of your body – a very traumatic and unpleasant process. The clinic will then attempt to isolate as many stem cells as possible from the suctioned-out fat deposits.

The main problem with this process is that the number of cells you get when suctioning from fat stores is far too low to provide an effective dose.



LIPOSUCTION PROCEDURE

According to stem cell experts:

You’re lucky if you get 100,000 cells from fat-derived procedures.

- 3) **Umbilical-Derived:** In a few clinics in the US, it is possible to acquire a whole umbilical cord from which to harvest cells. Of these three options, this is, by far, the best as it results in a cell count of 10-20 million stem cells.

The problem is that even those numbers need to be *much* higher to achieve the best possible effects.

Clinics in other countries have one huge and indisputable advantage over their counterparts in the United States

...and that is the ability to culture stem cells and dramatically expand their numbers. This is not a matter of knowledge or technological advancements – it is a purely legal matter. Cell expansion is not permitted in the United States.



Why is this important? Because, outside of the US, 25 million cells is considered a minimum effective dose for even the smallest joint injections. That's significantly more cells than what can be harvested from an entire umbilical cord.

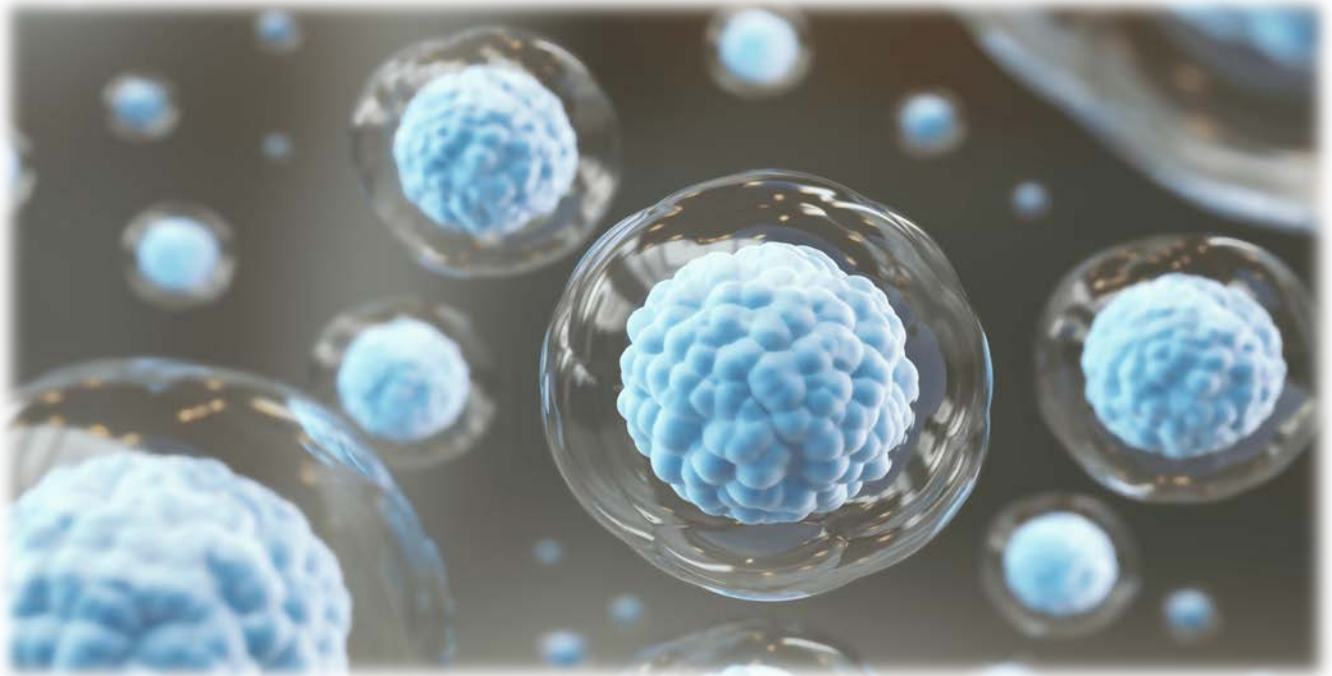
Consider this...

If you were to have a finger, thumb, or big toe treated at Dream Body Clinic, you would get 25,000,000 MSCs into that joint alone.

Shoulders, knees, and hips get 50 million MSCs each.

And a neck or back treatment involves *more* than 100,000,000 stem cells!

And for people receiving intravenous (IV) treatments for organ-related, chronic degenerative, and auto-immune conditions, the number of cells recommended is 1.4 million per pound of bodyweight (3 million cells/kg of body weight).



Cell expansion also influences the cost of stem cell therapy.

A 100,000,000 stem cell IV treatment in Mexico costs \$3,500 – That amounts to \$35 for every 1 million stem cells.

Even though that's a lot of money, it represents a *massive* savings over what you would pay in the United States – for far fewer MSCs.

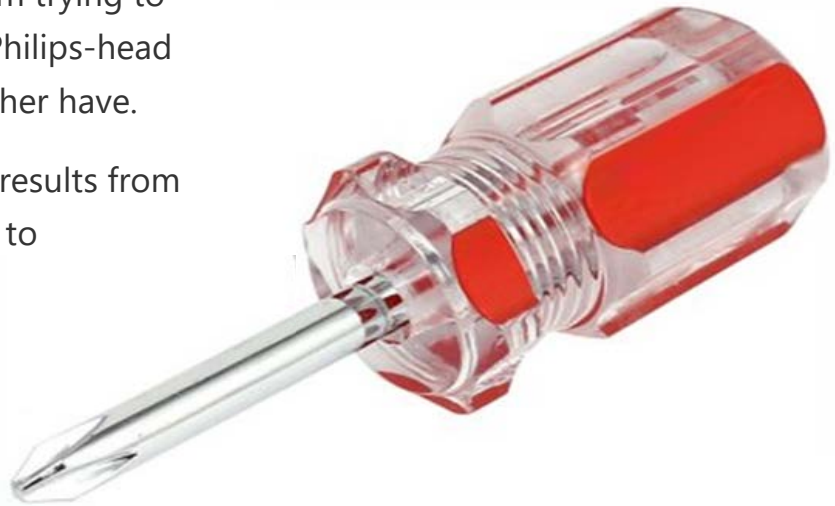
*In the United States, stem cell therapy treatments can cost anywhere between \$5,000 - \$50,000 (With the average is \$25,000).

And remember, if those cells come from your bone marrow and/or fat, you're lucky to be getting 100,000 cells.

3. The *Wrong* Tool for The Job

Stem cells are a fantastic tool, in much the same way that a Philips-head screwdriver is a fantastic tool. If I'm trying to tighten down or remove a Philips-head screw, there's no tool I'd rather have.

To achieve the best possible results from stem cell therapy, you need to make certain that your goals - what you're trying to achieve - are directly in line with the known benefits of MSCs.



MSCs are not magic! Nor are they a cure-all!

Many people get themselves into trouble by opting for stem cell therapy out of sheer desperation. But stem cell therapy is not a viable option for every type of problem.

On the next page, you'll find a list of conditions that respond well to Stem Cell Therapy:



Orthopedic Conditions:

- Joint Problems - Old Injuries & Degeneration
- Arthritis - Inflammatory & Non-Inflammatory
- Tendon Injuries & Tendonitis
- Disc Bulges & Herniations
- Meniscus Tears
- Labrum Tears
- Rotator Cuff Tears
- Bursitis
- Muscle Tears
- Ligament Damage
- Scar Tissue-Related Problems

Pain Conditions:

- Nerve Pain & Neuropathy
- Post-Surgical Pain
- Phantom Limb Pain

Auto-Immune Conditions:

- Type II Diabetes
- Multiple Sclerosis
- Ulcerative Colitis
- Rheumatoid Arthritis

Other Conditions:

- Alzheimer's
- Heart Disease
- Chronic Obstructive Pulmonary Disease (COPD)
- Graft vs. Host Disease (GvHD)

Reputable clinics will tell you upfront whether or not you are a good candidate for stem cell therapy.

Take the time to talk to knowledgeable people at the clinic, ask lots of questions, and get a second, and even third opinion *before* deciding whether stem cell therapy is a good fit for you and which clinic you want to work with.

4. Tampering with your body's natural inflammatory response after therapy

Mesenchymal stem cells seek out inflammation. That's how they locate areas needing of repair and know where to act inside the body.

If, after receiving stem cells, you take drugs to actively inhibit the body's natural inflammatory process - like Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) or corticosteroids – you are interfering with the stem cells' ability to do their job.

Essentially, you covering up your body's cry for help and making it less likely that the stem cells migrate to areas that need them the most.

The inflammatory process is a critically important component of the body's healing process, and more & more research is finding that tampering with the inflammatory process leads to lots of problems.



A large-scale study published in July of 2022 found that the risk of developing chronic pain was *dramatically* increased as a result of taking NSAIDs and corticosteroids.

As a part of this study, researchers analyzed 500,000 pain patients in the UK's Biobank and confirmed that people taking these specific types of drugs were far more likely to still have pain 2-10 years later. [b]

The lead researcher in this study, Dr. Luda Diatchenko stated that the chronic pain they saw in these subjects was likely a result of “...**the absence of the active biological process of healing and resolution.**”

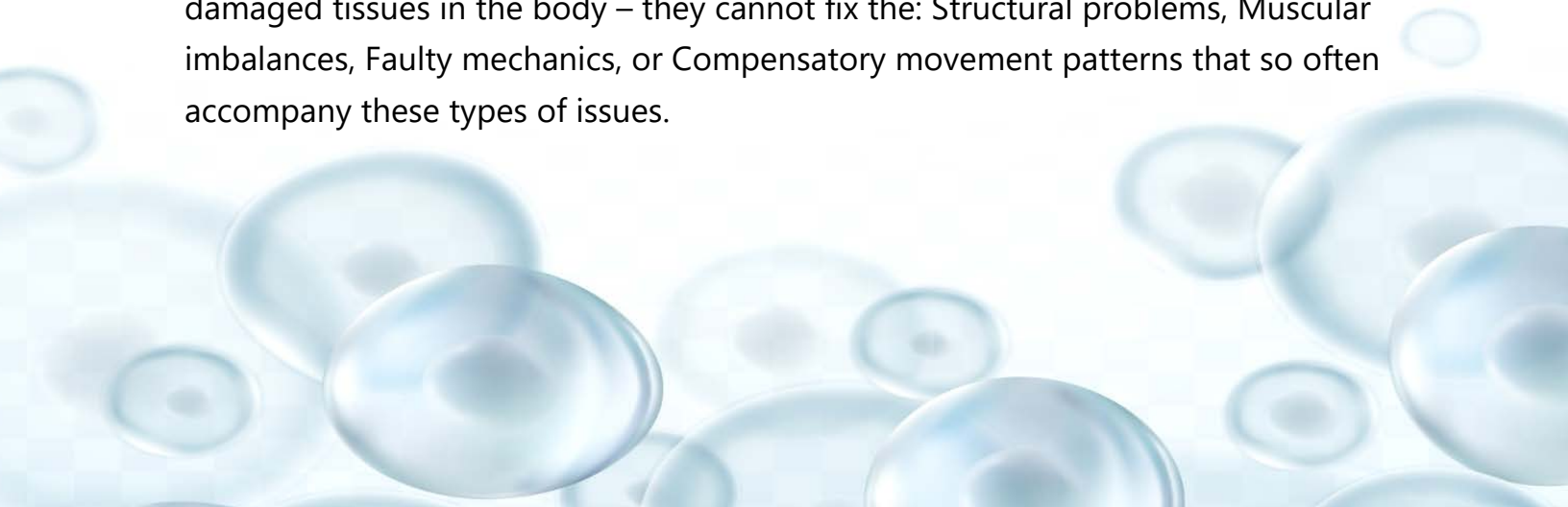
By tampering with the inflammatory cascade, NSAIDs and corticosteroids directly interfere with the body's ability to heal itself.

So, if you want to achieve the best result possible from your stem cell therapy – in terms of pain resolution, healing, and repair – you must allow your body to function normally.

5. Insufficient (or Inappropriate) Rehabilitation

This relates primarily to orthopedic and pain-related procedures; far too many people make the mistake of failing to rehabilitate after receiving stem cell therapy.

While stem cells themselves do an *incredible* job of rebuilding and repairing damaged tissues in the body – they cannot fix the: Structural problems, Muscular imbalances, Faulty mechanics, or Compensatory movement patterns that so often accompany these types of issues.



Stem cell therapy offers you a huge opportunity to maximize the results of the rehabilitation process. And there is a simple formula you will want to follow if you are going to get the best possible results.

Here's a very basic idea of what the rehab schedule looks like:

➤ **Weeks 1-3 : Rest & Relaxation**

- Lots of rest
- A few short walks & running errands is fine for most people

➤ **Weeks 4-7 : Reanimation**

- Introduce gentle therapeutic movement – restore range of motion
- Begin revitalizing the spinal curves (active & passive strategies)
- Reduce & eliminate muscle imbalances

➤ **Weeks 8-12 : A Foundation of Strength**

- Continue revitalizing the spinal curves – with regular progressions
- Actively build up a base level of strength of the postural muscles
- Daily stimulation for all stabilizing muscles
- Re-introduction of sport/activity

➤ **Week 13+:**

- Continue revitalizing the spinal curves – with advanced strategies
- Continue building strength & stamina of the postural muscles
- Increase strength & stamina of all stabilizer muscles
- Increase movement complexity
- Begin ramping up demand in sport/activity



- The key to this whole process is the restoration of normal structure & function.

If you'd to know more about the kind of therapeutic movement used in the initial stages of rehabilitation, here's a video where I go through a sample routine:

[Click Here To Watch The Video!](#)



6. Failure To Supply Building Materials

Mesenchymal stem cells (MSCs) act like the foreman at a construction site directing all the other workers. They tell them where to go and what to do and ensure the job get completed as quickly & efficiently as possible.

But, one thing that stem cells cannot and do not do is supply the raw building materials.

Those must be provided by your diet.

One of the absolute worst things you can do is to fail to provide adequate daily nutritional support after your treatment to make sure that you get the most healing possible for your money.

If you're not taking in *enough* high-quality protein - from the right sources - your body will not be able to build the new cells & tissue needed for healing, growth & repair.

What does *enough* protein mean?

For most people, a good rule of thumb is to take in 0.7 grams of protein for each pound of body weight every day.

Although, that amount may need to increase to 1 gram of protein for each pound of body weight in athletes & very active people.

And what are "the right" sources? In this case, what really matters is that the protein supplies all of the essential amino acids that your body cannot produce on its own. Those amino acids are needed to repair damaged tissues in your body – they are building blocks of life.

7. Joint Specific Nutrients

Joint tissue doesn't receive nutrients or repair itself the way that most other tissue in the body does. So, if you're receiving stem cells directly to your spine and/or one or more joints or for an arthritic condition, there are several key nutrients you should absolutely be taking.

Here's a short list of compounds that have been shown to radically improve joint health and provide a massive boost to your movement longevity.



1. **Hydrolyzed Type I & III Collagen Peptides**

– Collagen is the most abundant protein in the human body. Collagen supplementation has been shown to aid in everything from faster recovery and tissue repair, to increased muscle mass and tensile strength of ligaments and decreased incidence of re-injury. An ultra high-quality collagen supplement is a “*must have*” for anyone undergoing stem cell therapy for an orthopedic condition. [d,e,f,g,h,i,j,k]



2. **Chondroitin Sulfate** – Multiple independent studies have demonstrated that people taking chondroitin sulfate had no joint space loss whatsoever over a 2 years period! [l]



3. **ApresFlex®** – A 2023 study demonstrated over a 40% reduction in pain levels, improved functionality, and a significant decrease in the enzymes responsible for cartilage destruction after just 30 days of supplementing with ApresFlex. [m]

4. **Undenatured Type 2 Collagen** – Type 2 collagen can be found in high concentrations in all the tissues that cushion & protect your joint surfaces - Specifically cartilage and spinal discs. Studies have shown that just 6 weeks of supplementing with this specific type of collagen reduces morning stiffness and pain, increases range of motion, and improves functionality. [n]

5. **French Maritime Pine Bark Extract** –

Multiple studies have shown that 90 days of supplementation with this substance can reduce pain by over 40%, decrease stiffness & improve functionality by more than 50%! [o]



6. **Glucosamine Sulfate** – A

genuinely incredible substance. Has repeatedly demonstrated the ability to protect your cartilage and preserve joint space. Long-term studies have shown over a 50% reduction in the need the joint replacement. [p]

7. **Boron** – This trace mineral should be considered an inexpensive insurance policy for anyone looking to enhance & preserve the health of their joints. In addition to *massive* reductions in joint stiffness, studies have shown that populations that regularly consume enough boron have as much as 70% lower incidence of osteoarthritis! [q,r]

If you'd like to learn more about the best nutrients for eliminating pain and improving your ability to move & function well for a lifetime ...

[Click Here To Watch The Video!](#)



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