### wellward

# **ORTHOBIOLOGICS**



# FOR MORE INFORMATION, VISIT WWW.WELLWARDMED.COM OR CALL 859.275.4878

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# We reignite hope that you can always live to your body's greatest potential!

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# A SPECIAL MESSAGE FROM THE WELLWARD TEAM

Are you tired of going through a revolving door of doctor visits and still not getting answers?

Have you been told your only options are to take pain pills or have body-altering surgery? **Is your quality of life suffering?** If pain has invaded your life and forced you to change who you are, then consider the Wellward Team your partner to reclaim from pain and reaffirm your identity.

Our unique, integrated **HEAL methodology takes the entire person in perspective** and offers comprehensive solutions addressing every impact of pain in your life. It would be our honor to help you **reignite hope that you can always attain your body's greatest potential!** 

Until recently, the only medical treatments offered for chronic pain and degeneration were cortisone injections, pain medications, or surgery. Fortunately, advancements in **Orthobiologics** and a greater appreciation for the **multiple body systems impacted by pain** have given us the **tools to actually regenerate a broken body.** Orthobiologic procedures like PRP (Platelet Rich Plasma), BMAC (Bone Marrow Aspirate Concentrate), and ATS (Adipose Tissue Scaffolding) **can halt or even reverse these degenerative processes,** without the side effects of cover-up medications or risks of invasive surgeries.

THESE TREATMENTS STIMULATE THE BODY'S NATURAL HEALING RESPONSE. AGING AND INJURY ARE NOT A LIFETIME SENTENCE OF PAIN. YOUR BODY CAN ORGANICALLY HEAL ITSELF!

Conventional pain management only numbs the symptoms with chemical cocktails and covers up the problem with steroids. Prescription pain pills poison the nerve networks that process pain in your body. Over time, they change your sensitivity to pain. Studies show that taking pain pills routinely actually intensify the sensation of pain.

Over time, people need higher doses, not because their condition is worse but rather because their nerves are being poisoned. As a result of this poisoning, people prescribed pills for years often take more medicine on a daily basis than what would be given to someone undergoing a major surgery!

And the worst part? You will not get better! You are led to a dead-end that only makes pharmaceutical companies richer and your life more difficult.

Now, imagine an injection of your own cells that frees you from pain and chemical drug dependency. The procedure takes place in 4 simple steps:

- 1. Anesthetize and obtain blood or tissue samples.
- 2. Process the samples to isolate the Orthobiologics.
- 3. Inject the Orthobiologics into the area of injury.
- **4.** Rehabilitate the tissue to heal the injury.

Wellward's proprietary process concentrates millions of Orthobiologic cells and puts them into an area of damage that otherwise could never amass the same amount of resources on its own.

### MOST WELLWARD PATIENTS HAVE LESS PAIN, BETTER FUNCTION, AND HEALTHY REGENERATIVE TISSUE WITHIN 6-8 WEEKS OF TREATMENT.

This can seem like science fiction, but the science of injury repair has been studied for decades and is well-established clinically throughout the world. Professional athletes have been using it for years and that same technology can help just anyone with painful joints. Aside from how remarkably effective this therapy can be, Wellward's Orthobiologic therapy is also...

**Minimally Invasive:** No incisions or stitches needed, so you will not have to endure a difficult recovery period. You will walk out of the treatment with minimal discomfort.

**Same day procedure with quick recovery:** Often completed within 1.5 hours. So, you will get in and get out and back to life with minimal to no downtime!

**Immune Privileged:** Since each patient receives his or her own Orthobiologics and no foreign tissue is introduced, there is no risk for rejection of cross-reaction unless recommended with medical consideration and consent.

#### WHICH CONDITIONS ARE TREATED WITH ORTHOBIOLOGICS?

Wellward has succeeded in pioneering treatments for a wide variety of athletic injuries, musculoskeletal problems, arthritic, spine, and neurological pains. These problems may take years to develop and linger, while treatments can take less than a few weeks and have lasting effects.

#### This is a just brief list of the conditions the Wellward team addresses with Orthobiologics:

#### **ARTHRITIS**

- o Osteoarthritis e.g. knee arthritis, hip arthritis, shoulder arthritis, etc.
- Rheumatoid arthritis or autoimmune. athritis
- Chronic inflammation

#### **SPINE**

- Neck & back pain
- Arthritis
- Degenerative disc disease
- Stenosis
- Whiplash
- Sciatic or pinched nerves

#### **SPORTS INJURIES**

- Rotator cuff tear
- Labrum tear
- o Tennis or Golfer's elbow, medial or lateral epicondylitis
- o Knee ligament tears, e.g. ACL tear, MCL tear. meniscal tear etc.
- o Sprains e.g. ankle,

- Plantar Efsciitis
- o Tendonitis e.g. achilles tendinitis, patellar tendinitis
- o IT Band dysfunction
- o Bursitis e.g. trochanteric bursitis, subacromial bursitis, etc.

#### **SOFT TISSUE INJURIES**

- o Fibromyalgia
- o Chronic pain syndrome

#### **OVERUSE / WORK INJURIES**

#### **NEUROPATHY**

- o Carpal tunnel
- Cubital tunnel
- Tarsal tunnel
- o Diabetic neuropathy
- o CRPS

#### **HEADACHES**

- Tension headaches
- o Migraines
- o Trigeminal heuralgia
- o TMJ

IF YOU HAVE SUFFERED AN INJURY OR HAVE LOST PROPER FUNCTION IN ONE OR MORE OF YOUR BODY PARTS, THERE IS A GOOD CHANCE THAT ONE OF OUR ORTHOBIOLOGIC THERAPIES COULD HELP YOU.

#### THE WELLWARD WAY TO HEAL OVERVIEW

**Wellward has developed a branded proprietary framework** by which we can help individuals achieve world-leading outcomes. It is called the Wellward Way to HEAL and it gives us the tools necessary to overcome chronic, degenerative structural conditions without relying on toxic drugs or invasive, irreversible surgeries. HEAL has four Dimensions and stands for:

#### **HEALTH - INTERPRETING WHAT YOUR BODY IS SAYING WITH PAIN**

Pain is your body's way of talking to you, but you weren't born with the translation guide. At **Wellward** we are "pain whisperers" and interpret messages within pain to root out the underlying problem causing it. We map out the problem with advanced 4-dimensional imaging so you understand what's broken and needs to be fixed, while calming the pain in the process.

### **ENERGY - REBOOT THE NERVOUS SYSTEM AND RE-IMAGINE YOUR IDEAL SELF**

Pain changes who you are. Over time, it erodes how you think about yourself and your future. **It's time to envision the life you deserve.** We teach you how to overcome the mental blocks and reboot from the energy drains that come from hurting. Our innovative treatments like **Ketamine-assisted therapy** and **Stellate-Ganglion blocks** supercharge treatment and give the clarity needed to rediscover your true self.

#### **ACTIVITY - FROM REHAB TO MED-FIT, MAKING MOVEMENT MEDICINE**

Pain changes how your body moves to accommodate the weakest parts of you. The "use it or lose it" adage fits well because the injured areas get weaker and the overcompensating structures fatigue and break down. **Movement is medicine,** and we will guide you from rehabilitation to lifestyle fitness.

#### LIFESTYLE - FINE-TUNING SELF-CARE FOR OPTIMAL HEALTH

Repairing from injury is much like growing a garden. A garden needs fertilizer (e.g. nutrition, hydration, sleep, hormones, etc.), proper tilling and preparation of the environment (pre-habilitation), good quality and well placed seeds (Orthobiologics), and then good care with regular watering and sunshine (Rehabilitation) for your garden to bear fruit. Leveraging repair takes all of these into consideration to help you optimize your body's repair capacity.

By combining the benefits of Orthobiologic therapies with the very best protocols in lifestyle and rehabilitative medicine, we consistently improve our patients' outcomes to overcome chronic pain, disability, impairment and illness.



#### **HEALTH (BIOMEDICAL)**

Connective tissue health Autoimmunity • Building Blocks OA & Erosion • Genetics • Labs



#### **ENERGY (MIND & NEURAL TONE)**

Dependency/OUD · Autonomic Tone Mood Disorders · Secondary Gain Trauma History · Self-image





#### **ACTIVITY (KINESTHETICS)**

Flexibility · Sarcopenia · Muscle tone Exercise Tolerance · Maladaptive Movements Balance/Coordination







**LIFESTYLE (SELF-CARE)** 

Nutrition • Hydration • Sleep Quality Stress & Coping • Support Systems Alcohol/Nicotine



#### **HEALTH**

- Identify the root causes
- Remove obstacles to repair
- Understand your body & its needs

#### **ENERGY**

- Reboot the nervous system
- Restore mindful health
- Reaffirm your ideal self

#### **ACTIVITY**

- Benchmark function
- Define vulnerabilities to injury & pain
- Roadmap greater resiliency

#### **LIFESTYLE**

- Identify barriers to wellness
- Empower self-care
- Optimize happiness





### WHY CONSIDER **ORTHOBIOLOGIC THERAPIES?**

If you've been told that you need to have joint replacement surgery — whether that's knee replacement surgery, hip replacement surgery, shoulder replacement surgery (or any other joint), or if you've been told that you need to have spine surgery due to arthritis, bone-on-bone, or other conditions, you owe it to yourself to examine all alternatives to surgery before going under the knife.

Joint Replacement Surgery and Spine Surgery are very invasive procedures, and each comes with its own long list of reasons to avoid as a first-line treatment: hospital stays, potential (dangerous) complications, long recovery times, and the need to have the procedure redone at some point.

#### **ARE ORTHOBIOLOGIC TREATMENTS SAFE?**

The Orthobiologic treatment procedure is also very safe with no concern for cell rejection since the tissue extracted comes from your own body. In addition, all aspects of the procedure are performed in-house on an outpatient basis.

### HOW TO DETERMINE IF ORTHOBIOLOGIC THERAPIES ARE RIGHT FOR YOU?

This guide is the first step. In it you will find how our process determines through a detailed exam and in-depth history what has been tried and which treatment options are best for you.

Through our HEAL process we **screen for all the contributors to your pain** and come to understand your goals to build a tailored plan for you. In some cases, we can treat pain or injuries with traditional methods, but delivered in a comprehensive and synchronized way unlike any other clinic.

In other situations we **accelerate** the process and get the best outcomes through advanced therapies like Orthobiologics.

THE PROCESS STARTS WITH GAINING A BETTER UNDERSTANDING OF YOUR BODY AND WHY IT HURTS.

If you've been told that you need to have a joint replacement surgery — whether that's knee replacement surgery, hip replacement surgery, shoulder replacement surgery (or any other joint), or if you've been told that you need to have spine surgery due to arthritis, bone-on-bone, or other conditions, you owe it to yourself to examine all other alternatives to surgery before going under the knife.

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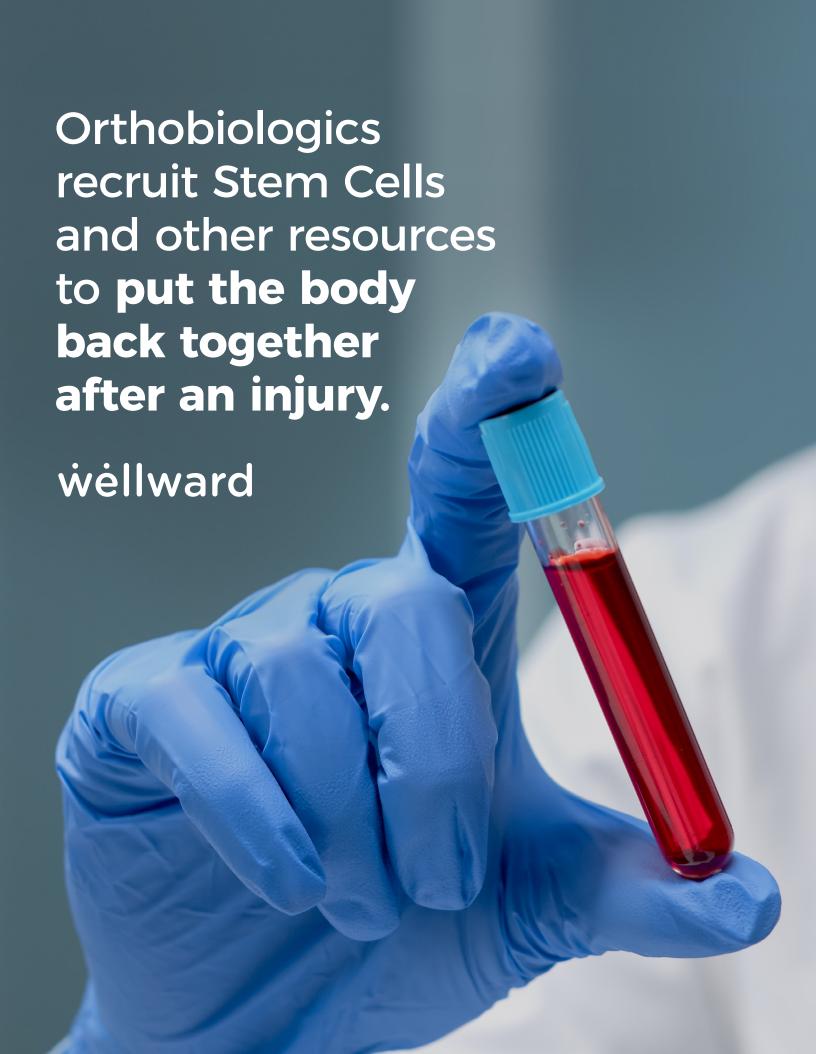
# UNDERSTANDING CHRONIC PAIN

#### WHY DO WE EXPERIENCE PAIN?

Our limbs are held in place by connective tissue like ligaments, tendons, and fascia. Our bodies are tough, which can make us forget that there are limits to what our body can handle. Similar to tears that happen if you pull a fabric hard enough, injuries occur in our body when stresses go beyond the stickiness that holds our limbs in place. This happens even in the most careful, healthy individuals.

When injuries do occur, pain is our body's way of communicating that something is wrong. Different nerves signal different types of injury. Sharp pains, for instance, signal tears in tissue like the sharpness of a cut. Dull aches signal blunt injuries, like crush injuries that happen in a bruise or boney problems like arthritis. Electrical or tingling sensations reflect nerve damage of many sorts.

Hearing these signals out can determine the best treatment because they each call for different kinds of repair. For instance, cuts need to be cleaned and treated, otherwise it makes us vulnerable to infection, whereas a stubbed toe needs bracing and rest. Wellward is adept in hearing these signals to determine the best course of action for your type of pain.



#### WHAT IS CHRONIC PAIN?

Chronic pain is actually a chronic injury unable to repair itself. Even after the body responds to an injury, the area may not heal completely for many reasons - poor blood supply, limited resources due to poor nutrition, or lack of rehabilitation to instruct the body how to recreate new tissue.

When the body has gone through several inflammatory cycles without effective repair, scar tissue forms making it very difficult for the body to repair itself. Scar tissue is a distortion in the body that changes how forces are absorbed. It makes joints excessively loose or tight, either of which becomes a source of chronic pain and eventual arthritis.

Catching these injuries early, when the problem is a nuisance and not a limitation, can make the difference between a joint on a path to end-stage arthritis or years of extended joint function.

Wellward's HEAL method starts with interpreting the messages behind chronic pain using a propriety technique called Pain Mapping.

Through 4-dimensional imaging and advanced diagnostics, Wellward pinpoints the origins of pain, whether minor or major. In doing so, we pave the path for years of function and healthy use of a joint.

#### WHAT IS INFLAMMATION?

We often think of inflammation as a problem, but it is nothing more than the chemistry of injury released by damaged cells. In the body there are good and bad forms of inflammation. The bad is the result of your body cleaning up debris and making nerves more sensitive to pain.

Good inflammation activates repair through the use of Orthobiologics. Orthobiologics are the cells and chemicals that recruit stem cells and other resources to put the body back together after an injury.

Through the HEAL method we control pain with multiple tools such as nerve blocks, electroacupuncture, shockwave therapy, laser, and other advanced treatments to reduce pain and improve the repair response in the body. You can have your cake and eat it too!

#### WHAT IS ARTHRITIS?

People often mistake arthritis for joint erosion or inflammation, but that is only partly correct. X-rays are often used to visualize arthritis which shows up as a loss of joint space, bone spurs, misalignment, or "bone on bone" damage. These are relatively obvious to point out. Though what's invisible on the X-ray are many of the soft tissue injuries that led to the erosion and bone spurs.

Arthritis is the accumulation of small injuries that take place over a lifetime. Just as how our faces show our age through wrinkles, our joints develop wrinkles too. Wrinkles occur because the connective tissue throughout our body weakens over time. Joints are fine-tuned hinges that take a lot of force. Wrinkles prevent the joint from moving the way it was designed.

**Joint wrinkles cause arthritis.** Joint wrinkles involve complex, interwoven tissue or affect parts of our body that are slow to repair. They force the joint to slide to take up the slack, and then it bends at a point for which the joint wasn't designed. As a result, the joint hinges on a smaller surface area causing erosion, muscle cramps and spasms, eventually leading to arthritis.

**X-rays and MRIs have a hard time showing Joint Wrinkles.** Pain often starts long before x-ray changes are seen. If we wait for that to happen, we ignore a lot of opportunities to repair joints. It would be like ignoring oil changes and tune-ups and instead waiting to replace the engine.

This lapse in healthcare is why we are seeing such a dramatic rise in surgeries and joint replacements.

Fortunately, Wellward's Pain Mapping process identifies Joint Wrinkles in early and late stages of development. The **HEAL framework offers a systematic way to identify and repair Joint Wrinkles.** 

## ARE ANTI-INFLAMMATORIES (NSAIDS) GOOD FOR ME?

Orthobiologics use inflammation to mold the body after an injury. Imagine there were three gears to power your healing response. Each gear is dependent on the process that precedes it. Healing needs Inflammation to start the repair process, followed by a Proliferation stage to grow new healthy tissue, then finally Remodeling stage to strengthen and mature the new tissue in the old injury.

Ironically, many healthcare professionals look at inflammation as a negative response from the body that must be stopped. Anti-inflammatories like steroid injections or over-the-counter pills like ibuprofen, aspirin, naproxen and others are often recommended for injuries. Long-term use of NSAIDS may limit repair and lead to chronic pain.

The healing process involves a complex intercommunication between a wide variety of cells in our bodies. While the bad parts of inflammation make our bodies more sensitive to pain, the good forms use the inflammatory cycle to understand how to repair.

IN WELLWARD'S HEAL METHODOLOGY WE USE TOOLS THAT LESSEN DISCOMFORT THROUGH CUTTING EDGE AND CREATIVE WAYS THAT DO NOT HINDER THE GOOD PARTS OF INFLAMMATION AND REPAIR.



# ORTHOBIOLOGICS: THE FUTURE OF JOINT HEALTH

#### WHAT ARE ORTHOBIOLOGICS?

Orthobiologics are the cells and growth factors that your body uses to repair when injured.

It is a very efficient system that uses the good parts of inflammation to stitch the body back together. Orthobiologics and other resources can be used successfully for healing and regeneration in the body. They are the most powerful treatments available for repairing bone, discs, cartilage, ligaments, and tendons.

Any injury in the body causes bleeding or bruising, even if invisible to the eye. This is how Orthobiologics normally found in the bloodstream are released into the injury. Once released, they follow chemical signals from inflammation to move into the area and start putting the broken bits and pieces back together.



#### WHAT'S THE DIFFERENCE BETWEEN **STEM CELLS & ORTHOBIOLOGICS?**

Stem Cells are a form of Orthobiologic. In the growing stages of life as children, our bodies were put together by an army of stem cells that worked from a very detailed blueprints found in our DNA. When their job was done and we grew into adults, many of those stem cells went into hibernation. Scattered throughout the body, they act like sentries ready for action when the body is injured.

The few that remain active are tasked with specific duties like making blood cells, skin, or hair – parts of our body that are constantly reforming.

Inflammation activates hibernating stem cells or the chemical signals released by an injury, reanimate sleeping stem cells and give them the breadcrumbs needed to locate the problem. Once they find the damage, stem cells grow and instruct other cells how to put the body back together.

#### WHERE ARE ORTHOBIOLOGICS FOUND?

Orthobiologics are scattered throughout the body. Stem cells, for instance, are found in highest concentration in body fat, linking blood vessels, and in bone marrow. Other Orthobiologics, like platelets and exosomes, are found in the bloodstream. Platelets and exosomes are first responder Orthobiologics mixed in with the blood cells that carry oxygen and immune cells that clean up damage and fight infections. The first responders start the inflammatory and repair cycle, which wakes hibernating stem cells and recruits them to the area of injury.

As we age, the concentration and activity level of Orthobiologics decreases, which makes it progressively more difficult for the body to repair. Have you ever noticed that a 5 year-old child scrapes her knee and is healed within what seems like minutes while at age 45, 55, or 65 it takes progressively longer and longer? Our capacity for repair slows because Orthobiologics become less active and are found in fewer numbers over the years.

Chronic pain is a chronic injury your body is having a hard time repairing because Orthobiologics have a barrier they can't overcome - too few in number, blocked access from excessive scarring, damage doesn't get enough blood stream resources, etc.

WELLWARD HAS WAYS TO REMOVE THESE HURDLES TO MAXIMIZE THE OPPORTUNITY FOR ORTHOBIOLOGICS TO REPAIR YOUR BODY.

#### **HOW CAN I OPTIMIZE MY ORTHOBIOLOGICS?**

Through the HEAL method we will screen for and show you all the ways you can optimize your Orthobiologic system. Fine-tuning your Orthobiologics starts with a healthy lifestyle, hormones, and optimal circulation. If you lack the appropriate building blocks like good nutrition, hydration, hormones and rest, then your body does not have much to work with.

Circulation is the fountain of youth. Anything that improves the circulation to an area of injury brings more Orthobiologics eager to repair. This is why physical therapy and exercise often help return you to function. However, even in the best circumstances some problems cannot be helped with lifestyle and exercise alone.

THROUGH THE HEAL METHOD, WELLWARD GUIDES EACH PATIENT TOWARD OPTIMAL CAPACITY FOR REPAIR, AND WHEN RESOURCES FALL SHORT INTRODUCES ADVANCED THERAPIES THAT INCREASE THE ORTHOBIOLOGIC RESOURCES IN DAMAGED BODY PARTS.

#### **HOW DOES WELLWARD USE ORTHOBIOLOGICS** TO SUPERCHARGE REPAIR?

Orthobiologic therapy is a branch of medicine where the healing potential of your own body is harnessed and applied. Certain tissues do not have easy access to Orthobiologic resources and become chronic injuries that cause pain. Orthobiologic therapies take idle resources not being used and then accurately place them in an area of injury.

Using a proprietary lab method, our Wellward team concentrates Orthobiologics far beyond what your body can do on its own. Using a Pain Map developed in the early stages of the HEAL method, the Wellward team knows exactly where these Orthobiologic resources are most needed. These products are then injected into an area of injury with "surgical" precision (without the knife!!) to "glue" your body back together. The best part is that since the Orthobiologics are your own, there is almost no risk for allergic reactions, rejection, or failure to help.

When injected into an area of degeneration, Orthobiologics control the destructive parts of inflammation found in arthritic joints. Severe arthritis in the joint creates a thick synovium filled with destructive chemicals and cells. These cells become overactive and begin to destroy healthy cartilage further damaging the joint. Orthobiologics detect the overactive cells and deactivate them, thus protecting the healthy cartilage from further damage and breakdown. They also instruct the cells to release helpful growth factors that aid in the repair and healing process.



# DIFFERENT TYPES OF ORTHOBIOLOGICS

#### ARE ALL ORTHOBIOLOGICS THE SAME?

Much as the body is made of different tissue types - bone, ligament, tendons, muscles, cartilage, etc. - there are many different Orthobiologic products. Each has a usefulness depending on what needs repair. Most Orthobiologics are harvested from you, but there are also some products that can be received from donated tissue similar to blood banks that store blood from donors.

Orthobiologics include medications, platelet-rich-plasma or PRP, immune cells, growth factors, and even special kinds of stem cells that lay dormant throughout your body until activated by inflammation and injury. Since Orthobiologics are in high concentration in your bloodstream, donating blood is one of the most accessible forms of harvesting your own Orthobiologics.

## WHAT ARE THE DIFFERENT TYPES OF ORTHOBIOLOGICS WELLWARD USES?

Orthobiologics fall into four general categories:

- o **Medications (Prolotherapy) -** using medications to activate dormant Orthobiologics.
- o **Blood-derived Orthobiologics** circulate in the bloodstream and take many forms. The most common is Platelet-Rich-Plasma (PRP) but other forms include Platelet Lysate or Platelet Releasate (PL or PR), autologous Exosomes, or Plasma Rich Growth Factors (PRGF), A2M, Fibrin/Thrombin, etc.
- o **Stem-Cell Derived Orthobiologics -** these include Bone Marrow Aspirate Concentrate (BMAC) or Adipose Tissue Scaffolding (ATS).
- o **Donated Products -** e.g. Umbilical products, exosomes.

#### WHAT IS PROLOTHERAPY?

Prolotherapy is a technique of using inflammation to attract Orthobiologics to an area targeted by a doctor. Inflammation can be used to mold the body similar to how a gardener prunes a bush to shape it in a particular way - like an elephant or a heart! Much like a gardener needs a certain skill set to know which branches to cut and which to keep, Prolotherapy is a complicated skillset. It takes **in-depth knowledge about movement and body mechanics,** what holds joints together, and the biology of injury/inflammation/repair and Orthobiologics. Medications or chemicals that promote the healthy forms of inflammation are used in Prolotherapy to instruct the body where strength or tissue remodeling is needed. This is the base technique and foundation to all Orthobiologic treatments. Wellward has been pioneering prolotherapy techniques since the mid-1990s and is a leader in the field. In fact, Wellward has been teaching prolotherapy to many clinicians from around the world. So, you know you are in good hands! Understanding prolotherapy gives the knowledge to best use other Orthobiologics.

#### WHAT IS PLATELET-RICH-PLASMA (PRP)?

PRP stands for Platelet-Rich-Plasma, a very potent form of Orthobiologics. As mentioned earlier, platelets are first responders to an injury. Injuries cause bleeding, even on a cellular level, and once platelets are released from the bloodstream, they coagulate to stop the bleeding and start releasing growth factors that initiate repair. PRP contains great reservoirs of bioactive proteins, including growth factors that are vital to initiate and accelerate tissue repair and regeneration. These bioactive proteins initiate connective tissue healing by promoting development of new blood vessels and stimulate the wound healing process, resulting in new collagen formation. As noted earlier, however, age leaves our body with less ability to reach the critical mass of Orthobiologics to fully activate repair, so injuries fail to resolve and pain becomes chronic.

At Wellward, lab technicians take your blood, concentrating the platelets to levels that far exceed what your body is able to amass on its own. This technology is changing the way physicians treat injury, pain, and aging. PRP is often combined with ultrasound or fluoroscopy to guide the injections to the specific pathologic tissue or joint.

PRP IS USED IN TREATING MANY KINDS OF MUSCULOSKELETAL INJURIES - ARTHRITIS, ROTATOR CUFFS, COLLATERAL LIGAMENTS, MENISCUS, DEGENERATIVE SPINES, AMONG OTHERS. THEY ARE EXCELLENT FOR TENDONS, LIGAMENTS, MUSCLES, AND OTHER SOFT TISSUE INJURIES.

# WHAT ARE EXOSOMES AND OTHER GROWTH FACTORS (E.G. A2M, FIBRIN/THROMBIN)?

Platelets are not the only Orthobiologic that circulates in the bloodstream. Platelets contain growth factors stored inside small vessels that when released into the bloodstream are called exosomes. These growth factors contain instructions on how to repair. While these factors are found in high concentration within platelets, exosomes are also freely floating in our blood. Other growth factors and proteins that help initiate the repair process or control bad forms of inflammation are also floating in the bloodstream.

These growth factors include proteins like A2M, fibrin, thrombin, among others. Even though these Orthbiologic products are all floating in the bloodstream, some types of injuries respond better to exosomes and growth factors than PRP. While pharmaceutical labs can produce exosomes and other products from donated after-birth products, our lab technicians are also able to concentrate them from your body.

Wellward has refined lab processes to optimize the exosomes needed for repair in the form of PR/PL, PRGF, and Supershot plasma. These products can be used to repair torn discs in Degenerative Disc Disease, they can heal nerves, or they can even shift bad forms of inflammation to the helpful kind in degenerative joints. The best part about these products is that there is no risk of rejection since they are your own Orthobiologic.

# WHAT OTHER FORMS OF PRP ARE THERE? (E.G. PR, PL, PRGF)

PRP is the most common Orthobiologic extracted from blood, **but Wellward's sophisticated lab can process PRP and many other forms of Orthobiologics, depending on the needs of the injury.**Nerves, for instance, are very sensitive, and PRP can cause too much of an inflammatory process, which can be painful. They respond well to certain growth factors that platelets store in small pockets called exosomes

Platelet Releasate or Platelet Lysate (PR/PL) is a lab process that triggers platelets to release their exosomes and growth factors. Using PR/PL or exosomes gently repairs nerves almost painlessly. Keep in mind, however, that PR/PL take longer to process than regular PRP so you may have your labs drawn in the morning for an afternoon injection.

Plasma-Rich Growth Factors (PRGF) is another form of PRP that is helpful for wounds and ulcers. Non-healing ulcers often have limited blood supply needed to bring these growth factors in to facilitate repair. PRGF is a tool that creates a cell matrix that covers the wound with immune cells to fight infection and mimic the protective barrier provided by your skin. They then slowly release growth factors over time that can help repair the tissue. **Wounds that take months to heal can close within days!** 

### WHAT ARE STEM-CELL DERIVED ORTHOBIOLOGICS?

Stem cells are the main driver of repair from injury and damage. They are located throughout the body in a form call Mesenchymal Stem Cells or MSCs. All other forms of Orthobiologics are primarily used to recruit these cells to the area of injury whereas a Stem-Cell derived Orthobiologic harvesting the MSCs, concentrating them, and putting a critical mass directly at the points of damage. MSCs are in highest concentration in your fat, fascia, blood vessels, and bone marrow.

There are two main types of Stem-cell-based Orthobiologics currently used at Wellward. Bone Marrow Aspirate Concentrate (BMAC) extracts cells from your bone marrow whereas Adipose Tissue Scaffold (ATS) returns cells from your fat. The value of these products is that they concentrate the highest yield of Orthobiologic cells from your body that can repair stubborn or long-standing injuries.

- o Bone Marrow Aspirate concentrate (BMAC) bone marrow derived stem cells are harvested using a gentle technique that is far better tolerated than it sounds. Once collected, these cells are concentrated in the lab and directly put back into damaged structures. This is more helpful for severe damage, people who have a gaps in tissue that need repair or injuries in areas with limited blood supply.
- o Adipose Tissue Scaffold (ATS) Believe it or not, body fat is far more useful than just giving loved ones a love handle. In addition to hosting some of the highest concentrations of stem cells in the body, we can mechanically process fat to create a matrix that acts as a scaffold for tissue repair. So ATS has an advantage of both providing a tissue matrix as well as high numbers of MSCs.

WHILE THESE SOUND LIKE THEY ARE DIFFICULT OR PAINFUL SOURCES OF ORTHOBIOLOGICS, THEY ARE COMFORTABLE ENOUGH TO BE DONE UNDER LOCAL ANESTHESIA AND SOME PATIENTS OPT TO HAVE SEDATION ALONG WITH IT.

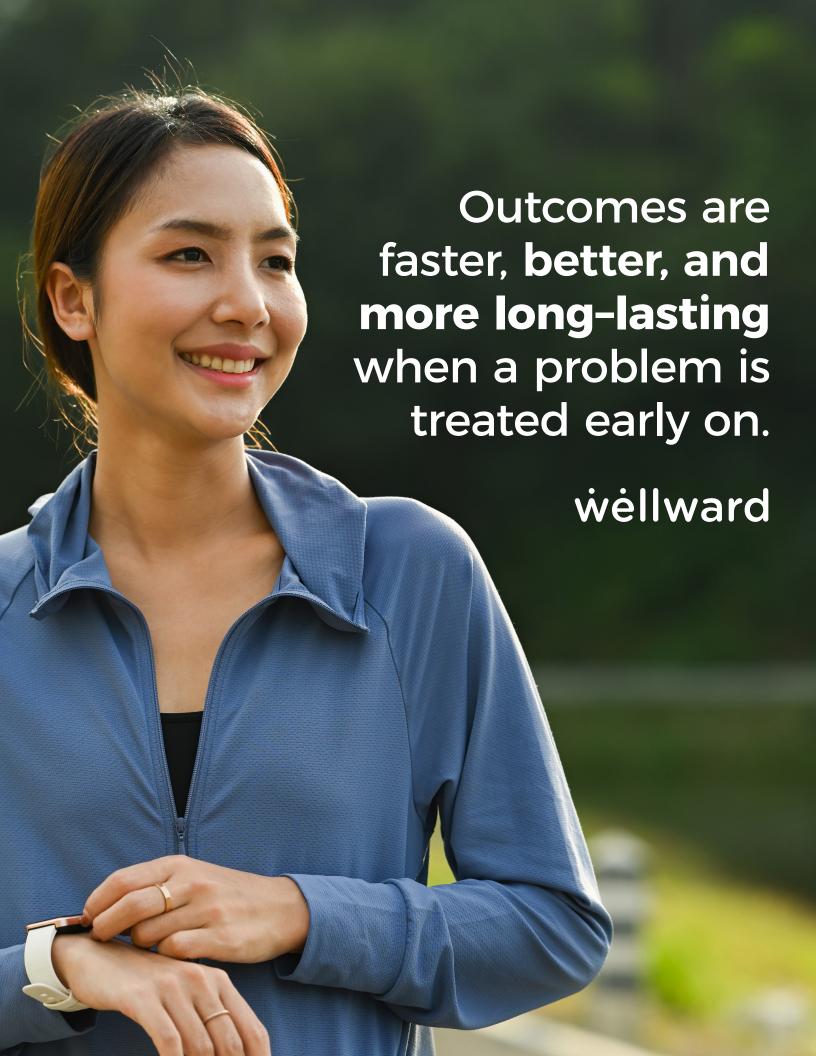


# AM I A CANDIDATE FOR ORTHOBIOLOGICS?

Wellward's HEAL framework is intended to evaluate your candidacy for Orthobiologics and develop a care plan to optimize your outcomes.

HEAL analyzes multiple dimensions of your whole body. Starting with a thorough HEALTH assessment that includes Pain Mapping, a systematic process that flags the sources of pain, we identify all the overlapping problems that domino into a complex pain experience. We screen for issues that affect your ENERGY like neural tone, emotional well-being, support systems, coping strategies, and more. The ACTIVITY dimension evaluates movement vulnerabilities and benchmarks your physical capacity. Finally, LIFESTYLE assesses the basic building blocks of well-being like nutrition, sleep, and hormones.

PUTTING ALL THIS TOGETHER WE CAN ASSESS YOUR CANDIDACY FOR AN ORTHOBIOLOGIC TREATMENT PLAN. PATIENTS SEE THE GREATEST BENEFITS WHEN THEY TRULY INTEGRATE THE ENTIRETY OF OUR HEAL METHOD INTO THEIR BODY/HEALTH MANAGEMENT.



#### WHO NEEDS AN ORTHOBIOLOGIC TREATMENT?

Orthobiologic Treatments help with most causes of pain. It is a great alternative for people who have been told they need steroid injections, surgery, drugs or joint replacement.

The remarkable thing about Orthobiologics is that when injected into the right spots, they recognize the damage – for example, meniscus tears or cartilage loss – and go to work like thousands of miniature surgeons working together from the inside out.

If you have been told that you have...

- o Damaged or torn tendons, capsules, muscles, or ligaments
- o Arthritis or Degenerated joints
- Damaged/worn and torn cartilage
- Degenerative disc disease or pinched nerves
- Only I option left: joint replacement or spine fusion

#### ... you now have more options.

That's because your Orthobiologics have the potential to repair most musculoskeletal or nerve injuries. Their use is growing in popularity in the medical world as an alternative to invasive orthopedic and spine surgeries.

#### WHO IS AN IDEAL WELLWARD PATIENT?

Wellward is the primary source of care for any condition that hurts. People with a wide range of athletic or musculoskeletal injuries, degenerative or arthritic joints, spine pain, and nerve problems have seen improvements from Orthobiologic therapy.

Ideally, patients come to Wellward at the start of their pain problem – minor aches, small sprains, etc. When seen in the early stages of an injury, nearly all patients avoid a prolonged issue or one that evolves to chronic pain. Sadly, our healthcare system is not designed to be so proactive.

IF YOU'RE THINKING OF PUTTING OFF THE CALL OR WAITING A LITTLE LONGER UNTIL YOU'RE "SURE," JUST COME IN FOR A SCREENING. OUTCOMES ARE FASTER, BETTER, AND MORE LONG-ASTING WHEN A PROBLEM IS TREATED PROPERLY EARLY RATHER THAN IN THE LATE-STAGES.

#### WHO IS NOT A GOOD CANDIDATE FOR ORTHOBIOLOGICS?

Not everyone is a candidate for Orthobiologics. The success of these interventions is primarily determined by the patient. Those who optimize all dimensions of the HEAL framework, who put consistent effort into maintaining a healthy lifestyle and activity habits, are those who reliably enjoy the most transformative results.

Those who put less effort into adopting and maintaining healthy habits may see improvements in their pain but not resolution of the issue. While Orthobiologics are potent anti-inflammatories, without the proper support and thorough workup, it can seem insufficient leaving people reconsidering other options like surgery. Nonetheless, after an Orthobiologic treatment, they go into surgery with healthier joint more capable of a repair.

Not all patients or conditions qualify for Orthobiologic therapy. If you are currently being treated for cancer, have been treated in the past for certain types of cancers (such as lymphoma), or have an active infection or compromised immune system, you may not be a candidate for this treatment. Our board-certified physicians and care team at Wellward conduct a thorough HEALTH consultation to determine if Orthobiologics or PRP therapy would be safe and appropriate for your condition.

#### WHAT IF I'VE TRIED IT ALL AND NOTHING WORKS?

Many of our patients have consulted numerous doctors at some of the best-known institutions in the country and were still struggling with pain. They tried what seemed like everything, going through a seemingly never-ending cycle of hope and despair in which they seek care but were then disappointed. This can be very frustrating and can cause a lot of stress on you and your family. In the end, you may feel like you are the problem or that you have a condition with no solution.

#### HEALTHCARE OFTEN PUTS THE CART AHEAD OF THE HORSE, TRYING TREATMENTS WITHOUT PROPER DIAGNOSIS.

They over-rely on X-rays and MRIs to diagnose the problem, but these alone fail to show the full picture of a pain problem. Much as how you look different today than you did when you were 18, your insides are different as well. But not all these changes are problems.

Some patients are labeled with generic diagnoses with vague treatments or given a "wait and see" diagnosis in which they cover up the pain and let it continue to erode until surgery is unavoidable. Pain is so poorly misunderstood!

If this sounds familiar, you are in good company. At Wellward we believe it is essential to understand your journey and what you have been through along the way. The Wellward Team sees many patients who have even gone through band-aid treatments and life-altering surgery without improvement. We want to prevent anyone from going through that. If you have seen harm to body, mind and spirt as a result of our broken healthcare system, we are here to help you heal.

You don't have to live with ambiguous problems. There are solutions! If you've given up hope, you owe it to yourself to investigate Wellward's HEAL framework and our Orthobiologic therapies as a possible solution. Even if you're afraid you'll ultimately be disappointed, rest assured that the vast majority of our patients experience amazing results, even when they think they've exhausted all options prior to coming to Wellward.

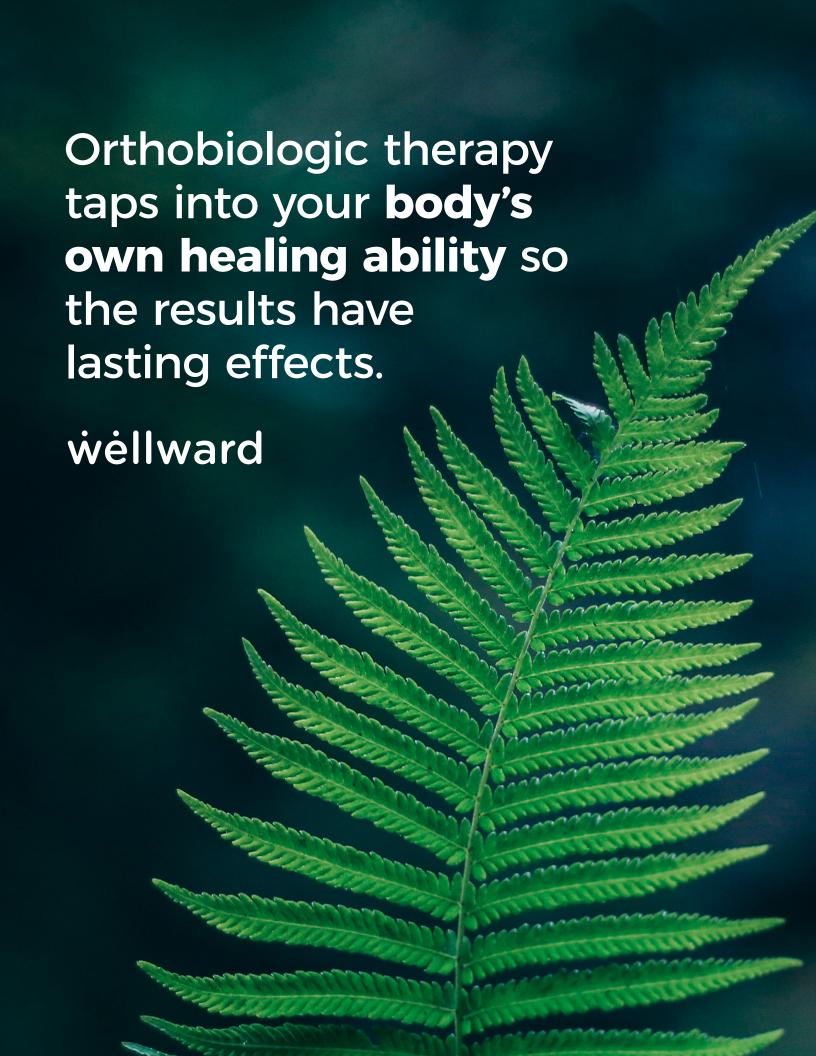
#### **ARE THERE ORTHOBIOLOGIC** PRACTICES TO AVOID?

With more and more practices jumping on the Orthobiologic bandwagon, we see that most of these clinics fail to give patients sustainable and optimal outcomes by failing to address the full picture of how the body heals. They often fail to investigate the potential reasons your body cannot heal or why it remains inflamed.

Too many practices take shortcuts and treat Orthobiologics as a revenue stream rather than an evolving and promising science. This gives a bad impression of our advanced technology. A growing garden needs skilled farmers, robust seeds, healthy soil, and a nurturing environment. A short-sighted approach that only focuses on one of these elements fails, no matter how vigorous that element may be.

Similar to the garden, your body has an organic capacity to repair itself when given the right support. At Wellward, we recognize the science of healing and see you through the process from proper diagnosis, goals, body mechanics, nutrition, rehabilitation, spiritual health, and lifestyle using the HEAL method.

HEAL method is a comprehensive deep dive on exploring the inner-working systems of your body and their interactions to optimize health, not simply mask the symptoms of a disease process. It is the foundation upon which we build your customized treatment program – focusing on recreating and restoring health, rather than picking yet another prescription medication designed to manage the bothersome and painful down-stream symptoms of the real problem.





### WELLWARD'S ORTHOBIOLOGIC PROGRAM

#### WHAT KIND OF ORTHOBIOLOGIC TREATMENT DO I NEED?

By guiding you through the HEAL methodology, Wellward's team of experts will help you select the best Orthobiologic treatment to meet your needs and goals. Different tissues have different Orthobiologic needs. By assessing your HEALTH, we are seeking to understand what is damaged and the gaps that hinder repair. This helps us select an Orthobiologic treatment tailored to you.

By understanding your ENERGY state, we align with your goals and timeline to optimize your Orthobiologic response. Chronic pain impacts your nervous system and can affect your mood, ambitions, and neural tone or the "fight or flight" readiness of your nervous system. These all influence your response to an Orthobiologic in profound ways. Sometimes we need to optimize your ENERGY alongside the Orthobiologic plan.

Assessing physical capacity through the ACTIVITY Dimension informs the Pain Map and identifies vulnerabilities that could hinder optimal Orthobiologic response. This is a two-way street because the ACTIVITY assessment guides your choice of Orthobiologic, and the Orthobiologic choice drives the rehabilitation after care.

Finally, by learning about the challenges within your LIFESTYLE, we determine the potency of needed Orthobiologics and guide you in areas that assure longevity.

Your body needs certain building blocks for repair, so making sure your nutrient, sleep, hormones, and other needed resources are available will give a greater chance for a long-lasting outcome.

While there is no crystal ball revealing the best path, Wellward's systematic approach has led to a refined process that has helped thousands of patients overcome the limitations of pain.

#### WHERE DOES WELLWARD **HARVEST ORTHOBIOLOGICS?**

We obtain living, viable Orthobiologics in their most natural and potent form, from your own body - the most reliable, optimal source. Orthobiologics are obtained in a minimally invasive and often painless way. Where we obtain Orthobiologics from your body depends on the condition being treated and the type of Orthobiologic best suited for you.

We have perfected techniques that follow all accepted guidelines for safety and efficacy to isolate Orthobiologics. Orthobiologics can come from a simple blood draw similar to giving blood for lab work.

For more advanced care, we can obtain them from bone marrow or fat tissue for top tier Orthobiologic therapies. Most of these can be done under local anesthetic, but we provide the option of sedation for these harvests as well.

#### **HOW LONG WILL IT TAKE TO RECOVER** FROM AN ORTHOBIOLOGIC PROCEDURE?

These procedures are minimally invasive and done on an outpatient basis. The recovery time is typically 1-5 days of discomfort and then back to baseline. Most people resume normal activity within a week, but some patients need to progress back to normal activity more slowly, as determined in the ACTIVITY assessment of HEAL.

REMEMBER THAT THIS IS LIKE PLANTING A SEED, SO IT TAKES A FEW WEEKS TO BEAR FRUIT. RESULTS MAY TAKE 6-8 WEEKS BEFORE BECOMING OBVIOUS. BUT MANY PATIENTS REPORT MODEST GAINS BEFORE THEN. THE AREA WILL CONTINUE TO SEE INCREASED REPAIR ACTIVITY EVEN A YEAR OUT FROM THE INITIAL TREATMENT.

#### ARE THERE ANY SIDE EFFECTS TO ORTHOBIOLOGIC THERAPY?

Side effects are typically minimal and can include minor pain and irritation at the injection site. Since we are using your own Orthobiologics, chances of immune system rejection are essentially eliminated. As with any procedure, there is a risk of infection, however we take the most proactive measures to reduce this and all other risks for the patient.

At Wellward we call these procedures "surgery without a knife." They are done using advanced image guidance like ultrasound or X-ray, so there is no incision. So, there are no stitches which makes recovery much faster and safer than surgery!

#### **HOW LONG WILL MY ORTHOBIOLOGIC RESULTS LAST?**

Orthobiologic therapy taps into your body's own healing ability, so the results have lasting effects. The outcome depends on many factors, like how your body responds to injury, the resources and building blocks available for repair, and how well the rehabilitation process progresses.

THE HEAL FRAMEWORK WILL ASSESS ALL OF THESE VARIABLES IN A SYSTEMATIC WAY. WE AIM FOR LONG TERM, SIGNIFICANT AND SUSTAINABLE BENEFITS.

This is different from typical steroid injections, which calm inflammation but do nothing to help repair. Steroid shots and traditional pain treatments put patients into a revolving door of continued treatments. At Wellward we seek to fix the problem so you don't need to keep coming back. Orthobiologic treatments extend the life of joints beyond their originating point.

#### WHAT ARE THE BENEFITS OF ORTHOBIOLOGIC THERAPY?

Traditional medicine treats symptoms of disease and dysfunction with drugs and surgery but does not address the root cause. Orthobiologic therapy is designed to repair the source of your problem, instead of masking the symptoms.

Orthobiologic therapy provides a sustainable and significant relief of symptoms and restores function by optimizing the repair capacity of the body. It all but eliminates the need for drugs or surgery in most cases of orthopedic and neurologic pain. Surgery should be the last option rather than the starting point.



# WELLWARD'S WAY TO HEAL

Orthobiologics are just one step in a comprehensive program to optimize your body's capacity to heal. At Wellward, we achieve outcomes that set us apart from other orthopedic, pain, and Orthobiologic providers because we optimize multiple dimensions of your health represented through the HEAL framework that represent HEALTH, ENERGY, ACTIVITY, and LIFESTYLE.

These four dimensions give you a better understanding of how we work but it may seem overwhelming at first. Not to worry! We have broken this down into a step by step roadmap that makes navigating these dimensions simple and easy to follow. Not everyone needs every step within this roadmap. Think of the Wellward team as your private guide who will screen for and help you decide your best path.

ET'S FIRST START BY REVIEWING THE DIMENSIONS, AND THEN WE WILL EXPLORE THE ROADMAP.

#### **HEALTH: HEARING THE MESSAGE OF YOUR BODY**

Traditional pain clinics function as if pain is the disease and by numbing it, they claim to have solved the problem. At Wellward, we consider pain a common messenger to many different conditions. This is the key to our success in resolving problems rather than just "managing" them. Our diagnostic process is systematic and more robust than many other clinics, and puts your pain in the context of your overall health.

Within the HEALTH Dimension, The Wellward team uses Pain Mapping to understand with confidence the cause of your pain and lessen discomfort at the same time. Through 4-dimensional diagnostic imaging, we go beyond the limitations of X-rays and MRIs which only show the body in snapshots. Instead, live imaging using motion ultrasound or x-ray goes from snapshots to movies, giving a view into how things move in painful positions. This localizes the origin of the problem. As such, we can numb it in pinpoint spots to tease apart the cause and effect by identifying the origin of pain versus your body trying to adapt to a bad problem.

Pain Mapping is both calming and informative, lending an ear to the messages your body sends through pain. While insurance only allows us to do this in steps separated over the course of weeks, you have the option of scheduling a self-paid Pain Mapping Session to define the problem in a matter of hours. Like connecting dots on a puzzle all at once instead of bit-by-bit, the Pain Map guides us toward the best Orthobiologic treatment that can resolve your problem.

#### **ENERGY: ENVISIONING GOALS** & REBOOTING NERVES

Chronic pain can be all-consuming, depleting your emotional energy. People feel fatigued, foggy, and emotionally irritable or sad. It changes your goals, priorities, and aspirations. In essence, pain is a cannibal to your identity and a thorn in your nervous system. Unless someone has experienced this loss of identity through pain, it is difficult for them to relate to you. The Wellward care team understands that pain can be both a physical ailment but also a figurative cage, isolating you from your loved ones.

With the ENERGY Dimension, the Wellward care team takes the time to get to know you better on a personal level to align with your priorities and set achievable health goals. Wellward has assembled a team of clinicians who understand the multidimensional impacts of chronic pain. Treatments range from one-on-one therapy to nerve blocks depending on your need to downshift your nervous system from survivor mode and back to the person you love within yourself.

Our Pain Coping & Thriving Group not only gives you a greater sense of agency over your pain, but it also connects you with others who deal with similar conditions. Interacting with a community

Our clinicians separate fact from hype and offer solutions that minimize harm and maximize outcomes.



of people who understand the challenges you face on a daily basis makes the difference between struggling and feeling betrayed by your own body, versus empowerment and validation.

Pain and mood are regulated by the same chemicals in the brain. So chronic pain, anxiety, or depression can deplete these resources and make both systems fight for energy. Through 1-on-1 counselling or psychiatric review of medications, we can replenish these resources and bolster your capacity for both mood and pain regulation.

Wellward offers more advanced resources than any other clinic. Ketamine infusion therapy (KIT) allows for a separation between conscious thoughts and feelings, giving you the space to look inward and rearrange the pieces, giving you peace. Transcranial magnetic stimulation (TMS) helps remodel nerves in the brain and trains them to create more of the brain chemicals that sustain mood, rather than just relying on a pill. Stellate Ganglion Blocks (SGB) have been used in Veterans successfully for years and are now available to anyone struggling with trauma-related disorders such as PTSD.

# **ACTIVITY: FROM FUNCTIONAL LIMITS** TO AN ACTIVE LIFESTYLE

Chronic pain takes time to develop, and your body is an evolving, organic machine that adapts and compensates. So, while problems start in one area, pain can eventually affect multiple areas and change the muscle memory of movement. This causes your other joints and parts of your body to break down faster or overcompensate, snowballing into rapid erosion, arthritis and prolonged pain.

The ACTIVITY dimension of HEAL assess your movements to better understand both the contributors and the consequences of your pain. This involves functional movement evaluation to better define the areas of vulnerability leading up to your pain and the limitations that prolong the problem.

This information integrates with ongoing HEALTH treatments as part of the HEAL method. Working side-by-side reinforces the impact of each area and shifts the tide from the body breaking down to the body adapting, evolving and repairing.

Using a variety of scientifically proven resources, we temper the pain technically and holistically. MLS laser and electro-acupuncture help improve the circulation and resources available to areas undergoing repair. Extracorporeal Shockwave (ECSW) Therapy is used to break up scar tissue and accelerate cellular activity, putting the pieces of your body back together.

Many of these tools have been validated and even recommended by the FDA, Veterans Administration, CDC, and other agencies but have not been made available to the mainstream medical community.

The ACTIVITY platform takes you from being broken and out-of-shape to an easy to follow routine in which movement and exercise are a norm to your lifestyle. Science has shown that movement is a potent medicine for many conditions – heart disease, diabetes, dementia, and many more – often more effective than medications. Building this habit is challenging, especially when you hurt. So, we bring people together through group movement classes to give you cheerleaders and peers dealing with similar issues. These groups make accountability fun and active lifestyles achievable.

# LIFESTYLE: THE LONG-TERM RESOLUTION PLAN

If your body has a barrier to repair, it is often found in daily routines. A nutritional deficit in a single ingredient, for instance, may make the difference between having all needed bricks to build a building versus missing a few that make the structure crumble.

Unfortunately, modern healthcare has inadvertently marginalized these core supports of a healthy life, favoring instead medications and surgery which cannot by themselves bridge these health gaps. Adding to that norm is a the Standard American Diet, often termed SAD, that is pro-inflammatory and harmful to our joints.

Wellward has a multidisciplinary team including clinicians well versed in LIFESTYLE Medicine.

Anything from sleep, hormones, diet, supplements, hydration, and stress management can be the missing element that holds you in chronic pain. Our team of experts will screen for and develop a plan to make your lifestyle as fruitful as you like. Think of our Lifestyle Division as the farmers tending to the seeds we plant in your Orthobiologic treatment. They make sure you get the appropriate sun, rain, and environment for optimal growth.

By maximizing these basic building blocks of life, Wellward goes beyond traditional medical standards and helps you seek a healthier body that you feel empowered to maintain. We draw a full spectrum of labs to assess your nutrition, electrolytes, hormones, genetics and connective tissue strength any of which may be a barrier to repair processes. This knowledge then guides the steps to correct these deficits and optimize healing.

#### LIFESTYLE also refers to building a community that rallies support and motivates accountability.

The Wellward team believes that leaning on each other empowers all of us. Much like a community of Wellward clinicians impacts your life, we understand that it takes a community of people to influence healthcare.

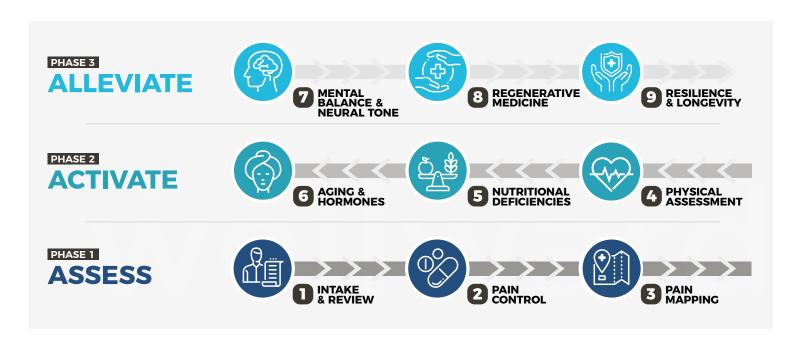
The LIFESTYLE Dimension of HEAL calls upon you to be an ambassador to your friends, family, and the larger healthcare community. Together we can inspire better health and take healing beyond medicine.



# THE WELLWARD WAY HEALING ROADMAP

It may seem overwhelming or, on the surface, unnecessary to cover all these dimensions. Be assured that the Wellward team will guide you through the HEAL methodology using a step-by-step roadmap that screens and prioritizes the pitstops you need to take on your healing path. Through this roadmap,

we cover all four dimensions of HEAL but delivered in a sequence that is manageable to you.



- 1. First visit we take a comprehensive history and screen for the HEAL Dimensions needing attention.
- 2. Pain Control some very common pain treatments like steroids and opioids can be counterproductive or even harmful when over-used. Wellward designs a pain containment strategy to keep you comfortable without the harms of traditional pain management by using scientifically based options like nerve blocks, acupuncture, MLS laser, shockwave therapy, safe medications and more.
- **3. Pain Mapping** At Wellward we believe "test, don't guess" when it comes to understanding the root cause of your pain. Our Pain Mapping process can be done through insurance in multiple steps or in a single, self-pay afternoon where we map the problem and develop our treatment plan.
- **4. Physical Assessment** Physical Therapy and Chiropractic care can be so much more when integrated within the overall treatment plan. We use biomechanical specialists who can do a functional movement evaluation, develop your rehabilitation plan, and build in a program for long-term lifestyle fitness all within the Wellward system.
- **5. Nutritional Deficiencies** By understanding your biology and nutritional routines, we fill gaps through diet and supplements which will reduce inflammation and provide the building blocks for repair. This includes educating you on often overlooked topics like shopping, cooking, hydration, and timing food with your body's energy and vitamin needs.
- 6. Aging & Hormones Wellward's biochemistry and hormone specialists screen for deficits and normal aging changes that may affect your electrolytes and hormones. By monitoring them in context to your overall well-being, we make decisions based on you rather than absolute lab numbers.
- 7. Mental Balance & Neurologic Tone to assess your ENERGY, we screen for mental wellness, neurologic tone (e.g. the balance in flight-or-flight vs rest-and-repair neural networks), mindfulness, and how depleted your internal reserves may be. We have a comprehensive team that uses Integrative Health tools like Reiki, massage, life-coaching and advanced resources like TMS, ketamine-assisted-therapy, and stellate ganglion blocks to help you heal from the inside out.
- **8.** Regenerative Medicine leveraging the healing capacity of Orthobiologics, you can tip the scale from your body breaking down to building back up. Your joints are your mobility and we intend on keeping them fit through the most advanced resources.
- **9. Resilience and Longevity** To ensure long-lasting effect and continued repair, we will assess your HEAL dimensions periodically and help ensure optimal wellbeing. You are now an ambassador of Wellward and will help us reshape how healthcare is delivered.

# WHO ARE THE GUIDES ON MY HEAL ROADMAP?

Wellward's greatest strength is the coordination of multiple disciplines working together as one.

Though you may have a single point of contact provider who coordinates your care, **multiple providers will collaborate to help you achieve the best outcome.** Our team spans numerous disciplines, including:

- o Anesthesiologists
- Family Practitioners
- Sports Medicine
- Life Coaches
- Massage Therapists
- o Mental Health Therapists
- Musculoskeletal & Non-surgical
   Orthopedists

- Nurse Practitioners
- Nutritionists
- Physical Medicine and RehabilitationSpecialists
- o Physical Therapists
- o Physician Assistants
- Psychiatrists
- o Reiki Masters

Wellward has a multidisciplinary team including clinicians well versed in LIFESTYLE Medicine. Anything from sleep, hormones, diet, supplements, hydration, and stress management can be the missing element that holds you in chronic pain.

Our team of experts will screen for and develop a plan to make your lifestyle as fruitful as you like.

Think of our Lifestyle Division as the **farmers tending to the seeds we plant in your Orthobiologic treatment.** They make sure you get the

appropriate sun, rain, and environment for optimal growth.



# PREPARING FOR YOUR ORTHOBIOLOGIC TREATMENT

# **BECOMING A NEW PATIENT**

If you are interested in becoming a Wellward patient, your first step is to **call the office and make a new patient appointment.** During this visit, one of our team members will take a comprehensive history screening for issues in your HEALTH, ENERGY, ACTIVITY, and LIFESTYLE needs. This will help determine who among our team we need to engage in your roadmap. Since this is the most comprehensive evaluation, we need as much information as you can provide. **Prior to your visit,** 

#### please gather the following:

- New Patient Paperwork
- Any relevant medical documents past doctor's notes, procedure or surgical summaries, PT/chiropractor assessments, etc
- o Any labs done within the past year.

- o Photo ID
- Insurance card
- Any discs or images of radiology taken (please bring the images as well as the reports so we can look for things often missed by a surgical interpretation)

#### Please complete and hand carry all of your new patient paperwork to your first appointment.

You should receive this paperwork from our Front Desk in an email or mail prior to your appointment. If you don't receive the paperwork, please contact our front desk prior to your arrival at the clinic.

# **MEAL TIPS TO OPTIMIZE ORTHOBIOLOGIC CARE**

At Wellward, we believe every patient has the capacity for self-care but may need guidance and resources. Proper nutrition is one of the first steps to obtaining optimal healing. The goal is to **modify** inflammation by increasing the intake of anti-inflammatory foods combined with the elimination of specific foods that contribute to chronic inflammation, like dairy, grains and sugar. These are basic food tips to help give your body the best chance of repairing itself.

#### **PROTEIN**

Protein is an essential building block for optimal nutrition. It performs multiple functions in the body, such as helping to stabilize blood sugar levels, stimulating muscle repair and development and increasing fat loss. In addition, amino acids, the building blocks of protein, allow the body to effectively **detoxify** by forming enzymes that bind to toxins in the liver, helping the body rid them.

Thus, it is important to get at least 2-3 servings of protein per day.

Whenever possible, we recommend high-quality sources of protein that are lean, pasture-raised, organic, grass-fed, non-GMO, and/or wild-caught. It's best to consume your daily protein needs in 2-3 sittings, rather than snacking throughout the day.

Consuming sources from smaller animals like chicken and fish are slightly more beneficial, as large animals tend to have higher amounts of hormones in their meat. Aim to get at least 0.75 grams per pound of ideal body weight per day.

#### **NUTS AND SEEDS**

A variety of nuts and seeds is also very important and can be added to meals for a nutrient and flavor boost. They also make a great snack choice as well, for those that are always on the go. Studies show that eating a handful of nuts each day helps to reduce the risk of chronic disease.

Eat raw, unsalted nuts rather than nuts roasted in oil; try sprouted nuts. These are the most optimal source of nutrients and easiest for the body to digest.

#### **FATS & OILS**

Fats are essential nutrients that our bodies need for energy, cell growth, and proper digestion and absorption. High-quality choices include minimally refined, non-GMO, cold-pressed and organic fats and oils. Consuming healthy fats promotes reduced inflammation, improved heart health, stabilized blood sugar levels, joint support, proper immune function, and reduced cravings.

#### SUGAR AND SIMPLE CARBOHYDRATES

Sugar, sweets, bread, pasta, juice, white rice, potatoes... yes these are all the foods we enjoy indulging but try avoiding or minimizing these for 1-2 months before and after your Orthobiologic treatment.

These simple sugars and carbohydrates spike insulin which can hinder repair activities. If you are diabetic, work extra hard to keep your sugar under control during the period of your Orthobiologic treatment to get the best outcome.

#### **VEGETABLES**

Increasing your consumption of veggies is one of the simplest choices you can make to **improve** your overall health. A diet rich in vegetables supplies highly bioavailable nutrients that work together for optimal function.

Vegetables have the greatest positive impact on health by protecting the body from chronic disease and diminishing the aging process. Eating a variety of colorful veggies is the most desirable goal, though it is good to keep in mind that dark-colored plants are generally highest in phytochemicals.

#### **FRUIT**

Fruits are packed with phytonutrients that provide antioxidant protection, counteracting the damaging effects of free radicals. Boosting the body's antioxidant intake is crucial for ideal health, supporting immune function, assisting in detoxification, and eradicating oxidation contributing to inflammation and chronic disease.

#### WATER

Water makes up nearly two thirds of the human body and is literally involved in every process that happens. Proper hydration helps the body eliminate toxins, enhances metabolic function, promotes digestion, aids in weight loss, and improves our stress response. We recommend you drink filtered water throughout the day and before meals aiming for at least 1/2 your body weight in ounces per day (minimum of 64 oz.).

#### **ALCOHOL**

Alcoholic beverages have a significant impact on growth and repair. The reason alcohol is not given to children is the same reason we advise avoiding alcohol for at least 2 weeks after Orthobiologic – you are in a growth phase.

# **MEAL TIP TABLES**

FOOD TO SEEK	FOOD TO AVOID		
Grass Fed/Finished Beef	Dairy		
Game Meat	Processed Grains & Corn Products		
Poultry	Alcohol		
Healthy Fats	Sugar		
Cage Free Eggs	Nicotine		
Nuts & Seeds	Excessive Caffeine		
Organic Vegetables	Soda		
Dark Leafy Greens	Soy		
High Fiber Fruits	Fast Foods		
	Artificial sweeteners		

# THESE MEAL TIPS WILL BENEFIT YOU IN THE FOLLOWING WAYS:

Reduced cravings Detoxification ✓ Increased metabolism Decreased inflammation **❷ Balanced** hormone levels Accelerated healing Stabilized blood sugar **⊘** Reduced chronic pain

PROTEINS	0.75 g of Protein per Ib.  of body weight  For context: chicken breast the size of a deck of cards is about 30 grams of protein	Meat: lean beef, extra-lean hamburger, flank steak, top sirloin, lean pork, buffalo, elk, venison lamb  Fish: halibut, mackerel, salmon, sardines, tuna, walleye, northern, perch, shellfish, scallops  Poultry: (skinless) chicken breast, turkey breast, Cornish hen  Protein Powder: Whey, egg white, hemp, bone broth, pea powder  Beans & Legumes  Avoid Processed Meats
NUTS & SEEDS + FATS & OILS	<b>5 servings/day</b> 1 serving= 45 cal, 5 g	Nuts: almonds, Brazil nuts, cashews, hazelnuts, macadamias, pecans, pine nuts, pistachios, walnuts, coconut, nut butters  Seeds: chia seeds, hemp seeds, flaxseed, pumpkin seeds, sesame seeds, sunflower seeds  Fats: avocado, canned coconut milk (no additives), olives  Oils: avocado, coconut, ghee, olive, sesame, walnut, flaxseed, sunflower
VEGETABLES	7-10 servings/day (intake not limited)  1 serving =  1 cup raw,  1 c greens	Vegetables: artichoke, asparagus, bamboo shoots, beets, bell peppers, broccoli, Brussel sprouts, cabbage, carrots, cucumber, cauliflower, celery, eggplant, endive, green onions, hot peppers, jicama, kohlrabi, mushrooms, onions, parsnips, pumpkin, radish, rutabaga, scallions, squash (summer), tomatillos, tomato Greens: arugula, beet, Bok choy, collard, dandelion, kale, lettuce, mustard, purslane, seaweed, spinach, Swiss chard, turnips, watercress, wheatgrass  Herbs: basil, chives, cilantro, dill, fennel, garlic, marjoram, mint, oregano, parsley, rosemary, sage, spearmint, tarragon, thyme
FRUITS	<b>3-5 servings/day</b> 1 serving = 60 calories	<b>Fruits:</b> we encourage a wide variety of fruits families, such as berries, apples, citrus and melons.

## **MEDICATIONS**

Research suggests that certain medications may interfere with your Orthobiologic procedure. While these medications can affect the outcome, it's critical to consult with your primary care physician or clinicians prior to making any changes or discontinuing medications. The following information is simply for your awareness. The risks of stopping may not be worth the effect:

MEDICATIONS	EXAMPLES	STOP BEFORE (WEEKS)	RESUME AFTER (WEEKS)	NOTES
Asthma & Breathing Medications	Singulair, Advair, Nasonex, Flonase	2	2	Suppresses inflammation & slows healing
Non-Steroidal Anti-Inflammatory drugs (NSAIDs)	Advil, Alleve, Aspirins, Celebrex, Ibuprofen, Indocin, Indomethacin, Motrin, Naproxen	1-2	1-2	Blocks the body's natural ability to heal
STATINs (for high cholesterol)	Altocor, Advicor, Crestor, Caduet, Lescol, Lipex, Lipitor, Lipostal, Livalo, Mevacor, Pitava, Prevachol, Selektine, Torvast, Vytorin, Zocor	2-4	6-12	Discuss with your Doctor
Steroids or Cortisone (in any form: oral, injections, inhaled, topical, drops)	Cortisol, Cortisone, Prednisone, Steroid Dose pack	4	4	VERY IMPORTANT. Suppresses the immune system's inflammatory responses, which influence repair
Testosterone Blockers	Propecia, Proscar, Finasteride	2-4	2-4	Discuss with your Doctor
Anti-Rheumatic Drugs or Immune Modulators	Humira, Enbrel, Remicade Rituxan, Orencia, Methotrexate, Plaquenil, Sulfasalazine	2-4	2-4	Discuss with your Doctor
Not Recommended Supplements	Any over the counter supplements	1	1	

All medications must be discussed with our clinic prior to treatment. A telephone review may be required in some circumstances for out-of-town patients. Patients must consult with the physician and coordinate with a Primary Care Provider before stopping any medications.

# ORTHOBIOLOGIC SUPPLEMENTS

Certain supplements are recommended to optimize your body's healing potential. These supplements are not required. However, patients who get exceptional results from Orthobiologic therapies understand that **cells need certain nutrients as basic building blocks and gaps in our diet are not always obvious.** For optimal results, begin taking 2-4 months prior to procedure and continue for at least 3 months after. Consult with your doctor. Some of these are not advisable if you may be pregnant.

#### COLLAGEN (hydrolized) - 15 GRAMS/1 HOUR BEFORE EXERCISE

Helps regenerate tissues as part of an Orthobiologic and exercise program.

#### FISH OIL/OMEGA 3 HEALTHY FAT -4,000MG DAILY

Helps modulate abnormal inflammation and improve healing

# GLUCOSAMINE/CHONDROITIN – 1500MG / 65MG A DAY

Acts as a natural anti-inflammatory and aids in healthy cartilage.

#### O HYALURONIC ACID - 50MG DAILY

A lubrication and hydrating molecule used in joints, fascia, skin. A quarter teaspoon can hold onto about half a gallon of water!

#### L-ARGININE - 5000MG DAILY

An amino acid that improves cell health by increasing Nitric Oxide production. It increases blood flow and oxygenation of the tissue.

#### L-GLUTAMINE - 3,000-5,000 MG DAILY

An amino acid for tissue repair and immune function.

#### **O MANGANESE - 10 MG DAILY**

Assists many other enzymes in building bones, bolstering the immune and reproductive system, and helping to repair wounds.

#### PROTEIN - INTAKE OF 0.75 GRAMS/POUND FOR YOUR IDEAL BODY WEIGHT

Need to maintain an anabolic state during the healing phase. With injury and healing, the body has a higher need for healing amino acids and protein.

#### QUERCETIN - 45 MG DAILY

A plant pigment (flavonoid) that is a potent antioxidant, anti-carcinogen (anti-cancer), and anti-inflammatory.

#### RESVERATROL - 500 MG DAILY

A natural and powerful antioxidant and antiinflammatory found in peanuts, blueberries, cranberries, and grape skin. The supplement has higher concentrations with less sugar than many foods that have it.

#### RESVOXITROL - 25-50MG A DAY

Protects the cartilage and reduces cartilage loss.

#### TURMERIC - 500-1500 MG/DAY

Acts as a natural anti-inflammatory.
Upregulates bone formation and decreases bone loss.

#### UBIQUINOL (CoQ10) - 100 MG DAILY

A powerful anti-oxidant that also boosts the powerplants within cells called mitochondria for when cells need all the energy they can get.

#### VITAMIN C - 2,000 TO 3,000 DAILY

Increases bone marrow production of Orthobiologics. Used as an anti-oxidant and modulator of the immune system. Also, cross links collagen during healing.

#### VITAMIN D3 - 5,000 U/DAY

Helps reduce the aging of Orthobiologics and helps Orthobiologics differentiate into other cell types.

#### ZINC - 50 MG DAILY

Helps in the growth of cells, building proteins, healing from injury, and keeping the immune system functioning.



# DAY OF TREATMENT

# TIPS FOR DAY OF TREATMENT

#### **PREPARATION**

Please be sure to bring any pertinent or requested information, including imaging and paperwork, if not sent previously.

#### **MEALS**

If you are having sedation, please refrain from eating 2 hours prior to the procedure. We encourage you hydrate well before your blood draw. After the procedure, you may eat and drink as tolerated.

#### **MEDICATIONS**

Do not change your medication routine, unless otherwise specified. Please review with your Wellward clinician if you take any of the following, so that we can make a mutual decision if it is necessary to stop: NSAIDs, blood thinners, steroids, immune suppressants, statins, or rheumatoid medications.

#### **ATTIRE**

Dress comfortably in clothes that are easy to get on and off. It is preferable that the area being treated be easily accessible, but if not we can provide a gown for your privacy and comfort. You may be asked to do some exercises on the day of your procedure, so make sure you don't mind being active in your attire.

#### **STAY HYDRATED**

64 oz of water on the day of and each day following procedure for at least 2 weeks.

#### **DRIVING**

You must have a driver for these procedures. Remember, this is like surgery without a knife. If you cannot bring a driver, you are welcome to leave your car and take a taxi or ride-share home, but we would ask for someone to be available at home to help. Patients receiving sedation MUST have a driver for your own safety.

#### **OUT OF TOWN**

If you are flying to Lexington, please book a return flight at least 24 hours after your final appointment. This gives us time to address any questions or problems in the unlikely event they should arise. Please also ask the front desk for the hotel discount code to get a reduced rate at our partner hotel.

#### **BRACING**

If you have been prescribed a brace, please remember to bring it with you for support after the case.

#### **PAIN CONTROL**

During the first 24 hours we want the inflammatory response to start the healing process, so avoid treatments that will reduce inflammation. For instance, do not ice the injection site and avoid all anti-inflammatory medications (see Medications Table on p. 45 above).

You may use heat to help with the pain, but be mindful to not use the highest setting or use it under blankets, as it can burn your tissue from the inside out. Tylenol may be taken as needed for pain, but take no more than 4,000 mg total in a 24-hour period. Tylenol may be contraindicated for patients with liver issues, so please discuss these issues with the Wellward team.

In rare instances, the pain can exceed what you can tolerate. Rest assured that the Wellward team has resources to help with that pain and can prescribe a short-term pain medication to help bridge the worst of the discomfort.

#### **HYGIENE**

In most cases, you may shower 12 hours after the procedure. Keep the area clean and dry. If there are any bandages or dressings, they can usually come off after 2-3 hours.

## WHAT TO EXPECT FOR YOUR TREATMENT

After you check in for your Orthobiologic treatment, you may be asked to do some exercises with our rehabilitation specialist. Since we are harvesting cells, we want to make them active by getting your circulation going and releasing growth factors that will amplify the Orthobiologic we are using.

Don't worry! We won't push you past your comfort level, but this may make you breathe heavily or sweat a little.

If you can't do the exercise, that's ok too. We use exercise to optimize the Orthobiologic, but going ahead without the exercises will still have a great effect.

# HARVESTING & LAB PROCESSING

After the initial preparation, you will be guided toward your Orthobiologic harvest corresponding with the type of Orthobiologic (PRP, BMAC, etc.) you have chosen:

#### PRP OR BLOOD-DERIVED ORTHOBIOLOGIC

A sample of blood will be taken from a vein in your arm by a phlebotomist.

These samples are sent to our on-site lab where they are processed and prepared for reinjection on the same day.

We use this blood to prepare highly concentrated platelet rich plasma.

**Duration:** 2–3 hours

Priming/exercise (optional): 20 minutes

**Preparation:** 15–30 minutes

Harvest: 15 minutes

**Processing in the lab:** 1–2 hours

PRP injection: 30–60 minutes

#### **BONE MARROW ASPIRATE CONCENTRATE (BMAC)**

For a bone marrow harvest, we will take you to the procedure room and lay you on your stomach. If you opt for sedation during the harvest, we may start an IV or do an injection in the arm to help sedate you.

After sterilizing your skin, we will numb an area around your pelvis and use some form of imaging – ultrasound or x-ray – to visualize where we will obtain the sample.

Once the area is numb, the clinician will insert a probe to withdraw the samples. You may feel some tapping and periodically a sensation of suction from the inside during the procedure, but you are always in control. If you experience any discomfort, alert your clinician, and we will numb it better.

Once the samples are drawn, they will be sent to the lab for processing.

o **Duration:** 3–5 hours

Priming/exercise (optional): 20 minutes

o **Preparation:** 15–30 minutes

o **Harvest:** 30 minutes

o **Processing in the lab:** 1–2 hours

o **BMAC injection:** 30–60 minutes

#### **ADIPOSE TISSUE SCAFFOLDING (ATS)**

To process ATS, we will first decide where we are going to harvest the cells – either from your stomach or your "love handles."

If you have opted for sedation, we will start give you a shot in the arm or start an IV. After you have positioned yourself comfortably, we will clean the skin and start the numbing process by injecting numbing solution throughout the area. Once it is numb, we will insert a probe and start sucking out the fat tissue. You should feel pretty numb in this process, but if you experience any discomfort, it will be brief and your clinician can change to a more numb area or add more numbing.

Once we have harvested all the product we need, we will process the ATS and prepare for the injection.

o **Duration:** 3–5 hours

Priming/exercise (optional): 20 minutes

Preparation: 15–30 minutes

Harvest: 30 minutes

Processing in the lab: 1–2 hours

ATS injection: 30–60 minutes



# AFTER YOUR PROCEDURE

# **IMMEDIATELY AFTER YOUR PROCEDURE**

The Orthobiologic injection causes a micro injury in the joint. As a result, expect the area to be sore. This can last anywhere from 1 to 3 days. This can be anything from mild soreness to a loud ache. Your physician may prescribe stronger pain medicines that are safe with the procedure. Continue to avoid anti-inflammatories.

# REHABILITATION

These guidelines are a general recommendation regarding how you should progress through rehabilitation after a regenerative procedure. This is not intended to replace your physician's specific recommendations for you. Every patient and situation is different.

Wellward's Rehabilitation expert will assess you prior to your Orthobiologic treatment to design a treatment plan. Depending on your proximity to the office and the rehabilitation regimen you need, you will either work with a physical therapist convenient for you or one of the Wellward Rehabilitation experts.

In general, we recommend that **your progression through the rehabilitation phases and return to activity should be based on your symptoms.** In most cases, you will be asked to rest the treated joint for 1-3 days. The first 2 weeks should be a "conservative" return to activity. Mild pain during or after activity is a good indicator that your body is healing. Severe pain or pain that lasts more than 48 hours may indicate that you are doing too much. You should **begin with isometric activities,** then slowly progress to more strenuous exercises as tolerated. If you are able to perform light activity with minimal pain, you may increase your activity. However, always follow the recommendations of your doctor or physical therapist.

#### **1ST-3RD DAY**

Limit activity on the treated joint. You may experience some post-procedure soreness. For joint treatments, simply limit the motion and use of the treated area. Avoid all contact sports as well as jogging, running, or sports that involve impact on the treated joint. Wear all recommended braces or boots. While infections are incredibly rare, always be looking for potential signs including warmth, red "bullseye" skin irritations, or extreme pain and swelling. If you experience any of these signs or symptoms, call the clinic or the nearest urgent care facility right away.

#### **4TH DAY- 2ND WEEK**

For treatments below the waist, you can **start to walk normally - If you were set up with a brace or a boot for the procedure, use this during activity.** Avoid all contact sports as well as jogging, running, or sports that involve impact on the treated joint. Bicycling, stationary bikes, elliptical machines, and swimming are all typically permitted. For upper extremity treatments, start range of motion exercises and only light activities that do not overly exert the treated joint. Working with a physical therapist who has experience in Orthobiologic Therapy is highly recommended.

#### **3RD - 6TH WEEK**

**Avoid all contact sports** including jogging, running, or sports that involve impact on the treated joint. You can walk as much as your body tolerates. Engage in bike riding, use stationary bikes, elliptical machines, and swim as tolerated. Start supervised, low-impact, strength training.

#### **AFTER THE 6TH WEEK**

With pain serving as the guideline, **patients typically are able to return to full activity with limits to frequency and duration of activity**. For instance, running may be permitted at this point, however, at reduced distances with consistent and gradual progression. Note that every person and situation is different. Some people will progress faster or slower than others, but the speed of recovery does not indicate overall success of the treatment. Complete healing can take up to 3-6 months for PRP procedures and 6-12 months for Orthobiologic procedures.

### **FOLLOW-UP CARE**

You will receive a phone call from a medical assistant within 1-3 days from your treatment to check in on you, but if at anytime if you have problems that need immediate attention, please call our clinic. A follow-up clinic appointment typically occurs at 4 weeks after your injection to check on your progress with rehabilitation and recovery from the injection. We don't expect you to see significant changes in that time.

Typically, it takes 6-8 weeks for the Orthobiologic to mature and start showing an impact. It is critical to keep up with the recommended exercises, otherwise it is like planting seeds and forgetting to water them. Exercise is a prescription similar to any medication. During this time, you may meet with our rehabilitation specialist or be set up to work with one of our community partners in physical therapy. Again, keeping these appointments and keeping up with exercises are a critical part of getting the most out of the Orthobiologic injection.

If you have questions regarding progress, follow-ups or additional treatment recommendations please contact our clinic.

### WHAT PROBLEMS SHOULD I LOOK FOR?

Notify your doctor immediately if you experience any of the following symptoms within the first week of your injection:

- Fever / Chills
- Pus at injection site
- Excessive swelling
- Pain that increases over
  - time

- Nausea Redness

Local hardness

# WHAT TO EXPECT AFTER MY **ORTHOBIOLOGIC TREATMENT?**

#### **1ST WEEK: INITIAL REACTION**

You will likely experience mild to moderate pain and swelling in the first 2-3 days. Some patients experience moderate to severe pain during the first 24 hours, but this typically subsides considerably after that. Acetaminophen (Tylenol) and a heating pad can be used to manage the pain. Again, do not ice and do not use NSAIDs. If necessary, your doctor will prescribe a stronger, short-term pain medication. During the first 5-7 days, you will want to take it easy, but activities of daily living are usually fine. Your doctor will instruct you if that is not the case. If bracing was prescribed, it is helpful to use it until the soreness starts to normalize.

#### 2-4 WEEKS: START REHABILITATION

#### You may notice a small improvement after the initial pain wears off, but this may be short lived.

This is from the change in inflammatory chemicals in the area of injury, but as the area starts to repair itself it may return to your normal pre-procedure level of pain. DON'T PANIC! This does not indicate failure. It usually takes several weeks for a patient to start noticing any changes. Most patients report a modest improvement by the end of the first month.

In this time, it is essential to begin exercise, which will help rebuild the parts of your body undergoing repair. Your rehabilitation plan will ensure the damaged area will continue to see healthy stresses that instruct the body how to put the pieces back together.

You may consider adding resources like MLS laser, electroacupuncture, or shockwave therapy because all of these modalities complement the Orthobiologic injection.

- o Laser helps to increase circulation and resource delivery from the blood stream.
- o **Electroacupuncture** has been shown to help align damaged fibers along the planes of strength needed most.
- o **Shockwave therapy** sends pulses through the body, which help breakdown adhesions and scars from the inside out. This allows for new healthy tissue to fill the gaps that are otherwise filled with unhealthy internal scars.

#### 6-8 WEEKS: JOINT HARDENING

At 6 to 8 weeks, patients are usually encouraged to take on more vigorous exercises. Most of our very active patients are able to return to their regular routine in 6 weeks and push their performance to higher levels in 8 to 12 weeks. **Improvements will continue throughout this time period.** 

#### **FIRST YEAR AND AFTER**

**Most patients notice continued healing over many months.** It is not unusual, however, for patients to return for a booster PRP or additional treatment to gain complete restoration of a joint. Of course, this depends on the condition of the area treated, age, lifestyle, and general health.

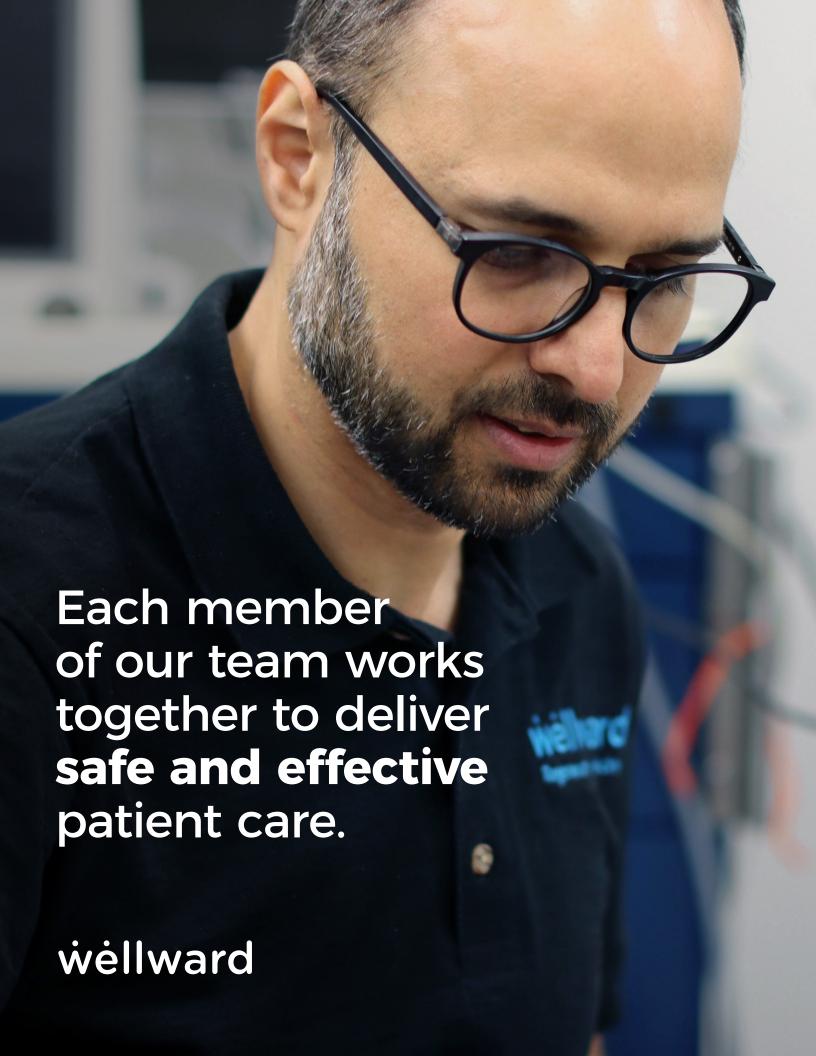
If you have questions regarding progress, follow-ups or additional treatment recommendations, please contact our clinic.



# 10 IMPORTANT QUESTIONS TO ASK POTENTIAL ORTHOBIOLOGIC THERAPY PROVIDERS

Before you decide to work with any provider, use this helpful checklist of questions to ensure that you are receiving the best care for your condition.

- 1. What formal training does the doctor have in Orthobiologics? (Would you trust an untrained clinician to do surgery on you?)
- 2. Does the doctor address and treat the cause of your condition, instead of treating only your symptoms?
- 3. Will the doctor **take the time to confirm the source** of your dysfunction before treating you?
- 4. Do they look at your images and discs personally to correlate it with your exam?
- 5. Is the treatment offered customized to your needs instead of a "one-size-fits-all"?
- 6. Does the doctor/clinic utilize current imaging technology (ultrasound or x-ray) to diagnose and administer my Orthobiologic?
- 7. What is the **success rate** of patients under their care?
- 8. Does the doctor **specialize in helping patients** with complex health conditions involving multiple body systems?
- 9. Does the provider's treatment plan offer long-term results?
- 10. What makes this clinic different from other clinics in the area and why should I choose this clinic for my care?





# WHY CHOOSE **WELLWARD?**

We are home to doctors and clinicians that are seasoned, knowledgeable, and passionate about helping patients. We also know that an injection alone may not be the whole answer. We cover all aspects necessary for the best possible outcome in our Wellward Way to HEAL.

We use the most advanced technology available for our patients. Each member of our team works together to deliver seamless, safe, effective patient care. We strive for absolute perfection. Patient health and comfort are always our top priority.

The HEAL method is a unique holistic approach that optimizes the results of our Orthobiologic procedures.

WE KNOW THAT IF WE TAKE THE TIME TO OPTIMIZE THE BODY'S NATURAL FUNCTIONS, UNDERSTAND THE UNDERLYING CAUSE OF PAIN, THEN OUR ORTHOBIOLOGIC THERAPIES HAVE THE BEST OPPORTUNITY TO SUCCEED.

Our clinic specializes in looking at the full picture. This empowers your blood and cells to be working in their optimal state at the time of your procedure. We are proud to have assisted people worldwide in restoring their body through our regenerative therapies.

# FREQUENTLY ASKED QUESTIONS

#### DO I NEED A REFERRAL TO BE SEEN?

Most patients do not need a referral to visit our clinic, however, some insurance carriers require a primary care physician to make a referral to a specialist. While it is your responsibility to know your insurance requirements, we can help coordinate a referral with your primary provider and submit the referral to your insurance prior to your appointment.

#### DOES INSURANCE PAY FOR ORTHOBIOLOGIC TREATMENTS?

While many of the services at Wellward are billed through insurance, Orthobiologic treatments are still not covered by many medical insurance carriers. Wellward provides numerous insurance-based services, some of which are not offered anywhere else. In some cases, the copays and deductibles for insurance-based treatments exceed the cost of a well-conducted Orthobiologic treatment. We recommend contacting your insurance company for more information on your specific coverage details.

#### HOW MUCH DO ORTHOBIOLOGIC PROCEDURES COST?

The procedure protocol will vary from person to person and because each person will have a unique condition to be treated, the pricing of procedures can vary considerably. An evaluation and/or consultation with a clinic staff member will give vou a better idea of condition, treatment, and costs specific to your condition. Prices range from \$800-\$16,000.

#### WHEN WILL I KNOW MY EXACT PAYMENT FOR **ORTHOBIOLOGIC PROCEDURES?**

You will know the total cost for your treatment after your initial intake and evaluation appointment. A deposit is needed to schedule the Orthobiologic procedure and payment is due in full on the day of your Orthobiologic procedure. Please contact a member of our staff to learn more about payment plans and financing options.

#### WHAT FORMS OF PAYMENT ARE ACCEPTED?

Cash. check, credit card, Care Credit, and Health Savings Accounts (HAS) and Flexible Spending Accounts (FSA). Contact your company's HR department for questions on HSA/Flex spending account eligibility.

#### **CAN I DRIVE AFTER MY PROCEDURE?**

Most Orthobiologic procedures will need a driver. You may feel sore or have numbness after your procedure and we want you to return home safely. Every patient responds differently, and it's best to take precautions to ensure your safety and comfort.

#### HOW SOON AFTER MY PROCEDURE CAN I **TRAVEL?**

It is possible to travel on the same day of your procedure if driving less than 150 miles. Individual circumstances differ, so please consult with the clinic regarding any questions. We highly advise scheduling your flights and travel arrangements at least 24 hours after your last appointment.

#### WILL I NEED A BRACE, CRUTCHES. OR WHEELCHAIR AFTER MY PROCEDURE?

Depending on the procedure and injection site, some patients will be prescribed a brace or crutches.

#### SHOULD I EAT BEFORE MY APPOINTMENT?

**Drink plenty of water** the day before and the day of the procedure for good hydration. Water improves cell hydration and lessens the discomfort of the injections. A light meal may be consumed up to 3 hours prior to the procedure, unless otherwise advised. Patients report less discomfort when they drink water right up to the time of the injections.







# CONTACT INFORMATION

#### **ADDRESS**

101 N. Eagle Creek Dr. Lexington KY 40509



Mon-Fri 9am-5pm

#### **室 PHONE**

(859) 275-4878

#### **EMAIL**

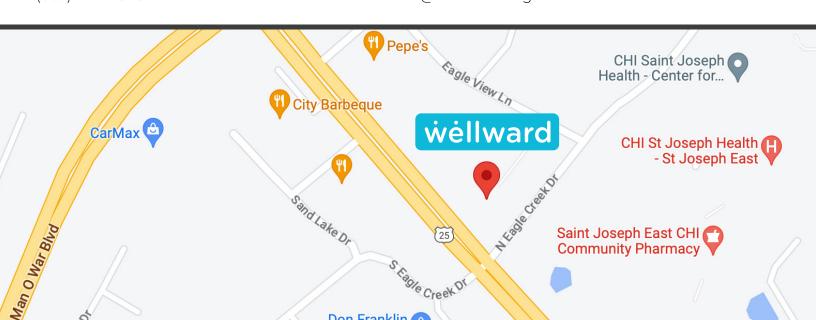
Reception@WellwardMed.com

### **O INSTAGRAM**

@WellwardMed

# **f** FACEBOOK

@WellwardRegenerativeMedicine



# MEET YOUR TEAM



DR. DANESH, M.D. MEDICAL DIRECTOR, THE VISIONARY BEHIND WELLWARD

He is at the frontier of scientific innovation, having trained at prestigious institutions including John Hopkins and MD Anderson. His numerous publications include esteemed journal articles and book chapters on new treatments for pain and information technology advances in medicine.



**CHRIS ETHRIDGE, M.D.** 

Having attended medical school and then training in family medicine at the University of Louisville, Dr. Chris Ethridge believes in exhausting non-surgical options for the management of injury and pain prior to undergoing invasive surgeries. Dr. Ethridge enjoys providing care within a team based approach.



Orthopedic and Manual Physical Therapists and is certified as a registered musculoskeletal sonographer. James teaches around the world on manual therapies and identifies the causes of

James is a fellow of the American Academy of

pain in the most complex patients.

**JAMES ESCOLONI, D.P.T** 



TRAVIS BRIDGES, D.O.
PHYSICAL MEDICINE AND REHABILITATION

Dr. Bridges has extensive training in diagnosing and treating musculoskeletal conditions, neurological disorders, and physical disabilities. Driven by the body's innate healing abilities, he has devoted his career to exploring and integrating regenerative medicine techniques into his practice.



**JEANNIE WILKINS, PMHNP-BC, CIMHP** 

Jeannie is a practitioner who believes in a holistic, client-centered approach to healing. She is also a certified integrative mental health provider that believes the healing process begins with establishing a therapeutic alliance integrating your story and feelings.



**MEGAN BEGLEY, LCSW** 

Megan specializes in somatic and depth psychology approaches for trauma, other mental health disorders, and identity growth. Her skill set is ideal for ketamine-assisted therapy, and the development of innovative treatments for chronic pain and illness.



TREVOR MCHARDY, MMS, PA-C

Having been trained at St. Louis University, after years of working in the operating room, specializing in orthopedics, despite his extensive surgical knowledge, Trevor believes that noninvasive therapeutic modalities should always be pursued first optimizing the body's potential for healing.



### **CAMELLIA SHIRAZI, M.D.**

Camellia Shirazi, M.D. combines anesthesiology and psychiatry to bring greater insight to the cause and effect of mental health problems, particularly in the context of physical pain. Her interests include the chemistry of the brain and how mood affects body function ultimately finding her calling in psychiatry.



#### DR. MAZ, M.D. FOREFATHER OF PAIN MANAGEMENT FIELD SINCE 1983

Manoochehr Mazloomdoost, M.D. (known as Dr. Maz) is a former Director of Pain Management at the University of Pittsburgh. In 1992, he and his wife, Dr. Shirazi, began one of the first comprehensive pain practices in Kentucky. Together they began the legacy that is now Wellward.



