



FAQs

Whether it's you or your members asking the questions, we're here to deliver transparent, trusted information about OsteoStrong, its technology and the science that supports it. Explore these frequently asked questions and reach out to the corporate team for additional support.

Q. Can I do more than one OsteoStrong session per week?

A. Our research shows that coming in more frequently actually slows the results of osteogenic loading. Ideally, members hit loads of 4.2 multiples of body weight or more, triggering a bone adaptation. A bone adaptation requires time to grow. If members keep triggering adaptation by coming in for sessions more than once per week, they will actually slow down the process.

In some situations, one session per week is too frequent. For example, if you see that a member's results are plateauing over a period of time—we define that as a plateau in their strength increases—it likely means his/her body needs more time to adapt to the response. In this scenario, you may want to recommend that the member waits 10 to 15 days between sessions.

Q. Can I work out and do OsteoStrong sessions at the same time?

A. Yes. Members will see great results if they do both osteogenic loading and workouts. In fact, they will likely experience strength gains more quickly by doing both—as long as the workout doesn't come directly before their OsteoStrong session.

It's not recommended that members work out immediately before their OsteoStrong osteogenic triggering session. Here's why: during a regular workout, especially weight training, we use up a specific type of fuel called ATP. ATP provides the energy needed to drive many processes in living cells. It is also the fuel a member needs in order to complete a proper osteogenic triggering session.

Q. Can I increase my skeletal strength and bone density with weight training and other exercises?

A. The published research on this topic does not indicate that bones are strengthened through conventional exercises or weight training. A study published in 2012 identified that the minimum force required to trigger bone growth is 4.2 multiples of body weight (4.2 MOB). Engaging in that amount of force outside of an OsteoStrong center is not recommended for most people. The good news is that our proprietary Spectrum system safely allows members to experience much more than the 4.2 MOB minimum required to trigger the skeletal building response people are looking for.

Q. What if I miss an OsteoStrong session?

A. What we are doing at OsteoStrong is causing tissue growth, and every time the member completes an osteogenic loading session, that growth is triggered. Because the bone fortification process takes between one to six weeks, missing a single session will not affect that process or cause members to lose the results they have gained. However, if members repeatedly miss sessions over an extended period of time, they will continue to degenerate bone and muscle mass on the same slope that is commonly seen after age 30.

Q. Does health insurance cover OsteoStrong?

A. Traditional health insurance in the United States does not typically cover OsteoStrong sessions. However, medical savings accounts can be used in many cases.

Q. Why do we use 30 Hz for vibration therapy?

A. There are more than 2000 peer-reviewed publications about vibration therapy, the practice of using mechanical products to illicit spinal reflex responses that increase muscle activity potential, as seen in electromyography (EMG) analysis. The most recent meta-analysis attempting to identify optimal settings for muscle activation shows that a frequency between 25 and 45 Hz is optimal, with 30 Hz recommended most for OsteoStrong's application (Cochrane, 2011).

Q. How long will it be until I start feeling results from my OsteoStrong sessions?

A. Results vary from person to person. However, here are some general rules for what our members experience:

- **Joint and back pain.** Osteogenic loading sessions have an amazing track record for reducing joint and back pain. In most cases, members will see a great reduction in joint and back pain within one to four months of starting OsteoStrong sessions. This reduction is often permanent and complete. However, every person's joint and back pain is different, and we can't guarantee results for everyone because we simply don't know what could be causing the pain.

If someone's pain is stemming from a bone-on-bone condition in which they don't have any cartilage left, that individual will always have some level of joint pain associated with that condition. When this person completes an OsteoStrong session, he or she is going to be strengthening the ligaments and tendons around that joint, which will cause the joint to separate. When that happens, it will relieve a significant amount of nerve pain. After experiencing this reduction in pain, it is highly recommended that the member continues sessions to help prevent the return of the joint and back pain.

- **Bone density increases.** Skeletal strength or bone density increases can only be seen on a bone density scan. It usually takes 12-18 months from the time the member starts with OsteoStrong for their DEXA scan to show these results.
- **Balance improvements.** Most people notice improvements in their personal balance in just one to two sessions, and it generally continues to improve for several sessions afterward.
- **Muscular strength.** Regardless of fitness level, most people feel gains in overall strength in about four OsteoStrong sessions. Regular sessions enable these strength gains to continue for many years. Some people may have periods of plateauing in their measured strength gains. When this occurs, tell your member to be patient. We've seen some people experience many months of steady strength gains only to plateau for several months afterward. However, just when they think they've hit their limit, the strength gains typically return and trend upward from there. After more than eight years of sessions, we still have people who show regular strength increases as their skeletal density and strength continue to improve.
- **Posture.** We have had many members with a severe kyphosis, a curved or humped back, standing straight after between five and 15 sessions.

Q. Can osteogenic loading cause a compression fracture?

A. Compression fractures of the spine are typically caused by abrupt loading, specifically “impact.” This is part of the reason why therapists do not employ impact training as a modality for osteoporosis treatment.

It is possible for someone to abruptly load using an osteogenic loading device, thereby removing the inherent safety aspects of the therapy. However, osteogenic loading therapy was developed to be the antithesis of this. As long as the proper training protocols are followed, the chances of injury are very low. We instruct our members to apply loading in a slow, controlled manner in order to use comfort and neural inhibition as a natural limiter.

It’s worth noting here that the most common causes for compression fractures are coughing and sneezing. Sometimes, people don’t notice they have a compression fracture. If an osteogenic loading user has a compression fracture, we have no way of identifying the cause. These fractures heal on their own and require little medical attention beyond diagnosis. For an excellent description of compression fractures, refer to Brant, William E.; Helms, Clyde A. (2007).

Q. When a member has had a stress fracture, is it safe to engage in OsteoStrong sessions?

A. Many individuals who have a history of stress fractures have achieved clear results with osteogenic triggering. However, people with this medical history should consult their physician prior to starting our program, as there could be other factors in their biochemistry that contribute to those stress fractures. We are not medical professionals and do not provide medical advice.

Q. When a member has a history of chronic broken bones, is it safe to engage in OsteoStrong sessions?

A. In some cases, yes. In others, no. In this situation, other factors are likely at play, ranging from dietary concerns and chemotherapy to exposure to biochemicals. These members must get approval from their physician prior to starting our program. It is our responsibility to provide them with the appropriate research regarding osteogenic loading and OsteoStrong so that their physician can make the best determination based on their unique medical history.

Q. When members have a retinal detachment, is it safe to engage in OsteoStrong sessions?

A. It is critical that these members speak with their physician about exercise stimulus, specifically pressure response, before engaging in OsteoStrong sessions. Because blood pressure goes up when we are engaging the body to a very high degree, their physician must understand that this osteogenic loading is a high-intensity type of stimulus. We must confirm, through the advice of their doctor, that the osteogenic loading session will not exaggerate or agitate that injury.

Q. Are joint problems a contraindication for osteogenic impact triggering?

A. You’re bound to experience questions like this: “I have this knee replacement, or shoulder pain, or back pain. Is this a contraindication for using the equipment at OsteoStrong?” The answer is no. In most cases, OsteoStrong delivers proven results for people with joint and back pain. If members are still concerned, reassure them that they do not need to perform a maximum force production from the very beginning.

Q. Does OsteoStrong do anything for weight loss?

A. Yes, to a minimal degree. The body’s primary calorie burning engine is muscle. At OsteoStrong, we trigger tissue growth in the muscle fiber. With this new tissue, people may begin to process glucose better and burn more calories. Although we are helping members improve the engines that allow their body to burn more calories and process glucose a little better, weight loss comes from improved diet in 90% of cases.

Q. When members tell you they have fibromyalgia, can OsteoStrong help?

A. Yes, but we do not claim to treat any medical condition. When asked by members, rely on known studies first and member testimonials second. Fibromyalgia is the diagnosis given to unexplained pain. Some individuals are just deconditioned and weak. If they can re-engage and start firing more muscle tissue, they will increase the density of that muscle tissue and, in turn, build bones, tendons and ligaments. Many members with fibromyalgia talk about how they have increased their function, decreased their pain and increased their quality of life through OsteoStrong sessions.

Q. What effects does VibePlate™ have on the body when compared with osteogenic loading?

A. The immediate effects of VibePlate™ include range of motion and mobility changes such as balance and flexibility. Its secondary effects include hormonal changes such as anabolic hormone release, growth hormone increases, serotonin increases, a decrease in cortisol and a decrease in inflammatory markers found in the blood. Osteogenic impact triggerin’s long-term effects include improved bone density and the density of muscular tissue, which will aid in the treatment of Type 2 diabetes or pre-Type 2 diabetes.

Q. How should I respond to additional medical related questions that I may be asked as an OsteoStrong owner?

A. When asked medical-related questions not addressed in this guide, follow these steps:

1. Always refer members back to their doctor relationship.
2. Visit the Facebook Owners group to find out about other conditions that members have experienced and what results they have achieved. The group is an incredible resource. Use the group to receive answers directly from Dr. Jaquish, who continually monitors its activity, and connect with other owners who may have experienced these situations and can share their members’ stories with you.

Try posing this question to the Facebook Owners group: “Has anyone ever had a member that is experiencing [condition name] and done OsteoStrong sessions?”
3. After consulting Dr. Jaquish and other owners via the Facebook group, respond to your member by stating, “That decision is always going to be between you and your doctor, but what I can tell you is...”

Q. I feel sore after my sessions. Is this normal?

A. Certain tissues in the body can experience deconditioning with disuse—in some cases, after only short periods of a lack of use. For example, after having a cold or influenza, members sometimes notice soreness when they begin to stand and move, even if they have recovered from the illness. This could be the result of short-term disuse and the resulting tissue deconditioning.

Consider the levels of force that stimulate joints in an osteogenic loading session. The last time most individuals absorbed this level of load was during their adolescence. When some people beginning osteogenic loading, they feel soreness in the joints over a few days after a session. This is not an injury; rather, it’s just the stimulus of some tissues that may not have been used in that manner for decades. Over the next few months, their body will become accustomed to this and develop, thereby becoming stronger and less likely to fracture.

Q. I’ve reached a plateau. What does that mean?

A. Some members who engage in osteogenic loading therapy experience a plateau in their progress. When this happens, there are a few things that must be conveyed to the member to keep them motivated.

1. In the lower extremity growth trigger, if members are achieving greater than 4.2 multiples of body weight (MOB), which is the minimum threshold for triggering osteogenesis, they are indeed affecting bone mass even if they have plateaued at a particular level. Based on osteogenic loading research, we also know that 7 MOB is associated with rapid bone density gains. If individuals are surpassing either 4.2 MOB or 7 MOB, they are continually stimulating development. There is no research that indicates an ever-increasing number is required for continued growth.
2. Not all elements of the musculoskeletal system progress at the same rate or at the same time. An individual could hit a plateau because of neural inhibition in a certain weaker area of a musculoskeletal kinetic chain that just needs to progress before the other tissues can. We have seen individuals plateau for 18 months, then begin to progress again.
3. The more powerful a tissue becomes in the human body, the less development can be stimulated in the future. For example, you would not expect force production/ functional bone performance changes of 200% to happen with a competitive gymnast. But we do see 2300% adaptations happen with seniors and other deconditioned members because they have lost, and can thus regain, greater levels of their performance. However, all populations should want to protect the musculoskeletal performance they have gained with little risk of injury by continuing to engage in osteogenic loading therapy.

Q. What is the difference between regular weight lifting and osteogenic impact triggering?

A. Typically, weight lifting exhausts ATP, glycogen and creatine phosphate, which are the fuels in a muscle cell. When you do pushups and your arms feel tight, it means the central nervous system is triggering an adaptation to hold more fuel.

Osteogenic impact triggering, on the other hand, creates kinetic fatigue instead of fuel fatigue. This engages the muscle to the fullest degree. In a natural, real-life situation where people experience impact, their muscles, tendons, bones and ligaments are optimized. The exhaustion has to do with a lack of structure to continue the contraction, not a lack of fuel.

Q. At what rate can members expect to increase their bone density?

A. It's different for everyone. Some of the first research into osteogenic loading showed a 7% bone mineral density (BMD) increase. The most recent study in the U.K. revealed a 14% BMD increase. But here's what we do know for sure: the more force the individual imposes, the greater the bone adaptations. An MOB of 4.2 is the minimum dose response required to trigger increases in bone density. People who went over 4.2 MOB experienced a faster increase. Can we guarantee they are going to see increases? No, because every person's metabolism is different. Some people may have a degenerative disease that we don't know about. Even if those individuals saw zero loss, that would be a win. Also keep in mind that some postmenopausal women will see about a 1% to 2% decrease in BMD after starting OsteoStrong sessions. When we see this, we know they have outpaced the degeneration that would have occurred without OsteoStrong. That should be considered significant progress.

Q. Can I use OsteoStrong if I've had a knee or hip replacement?

A. Yes, OsteoStrong actually helps strengthen the bone around your hip or knee replacement. At OsteoStrong, the member is going to be strengthening the trabecular bone, enabling it to grip onto the replacement more effectively. For the same reason, OsteoStrong sessions are also great for preconditioning before knee or hip replacement surgeries. With a stronger trabecular bone, the surgeon will have an easier time getting the replacement to hold on to the bone.

As with all medical conditions, we encourage people to consult with their physician prior to starting sessions at OsteoStrong. If members are concerned, it's also important to tell them they can start off slow.

Q. How does OsteoStrong help alleviate old muscular injuries? (For example, we have a member that had neck pain for years from severe whiplash from a car accident. OsteoStrong has alleviated her neck pain. How does it help, scientifically speaking?)

A. Compressive forces improve the density of not only of bone, but also tendons and ligaments. This reinforcement of tendons and ligaments dissipates stress at the joints, allowing for greater performance and less pain during movement (Benjamin & Ralphs, 1998). This means bone can realign to optimized biomechanics, improving posture balance breathing and reducing the chance of future injury. OsteoStrong uses this compressive force to induce adaptation.