



MSK Solutions

Pain Recovery Program

PATIENT HANDBOOK



Introduction

“The doctor of the future will give no medicine, but will interest his patients in the care of the human frame, in diet and in the cause and prevention of disease.”

- Thomas Edison

Before you reach for an over-the-counter or prescription medication to resolve your pain, consider this: what if there was a powerful medicine available that didn't require a prescription or a trip to the drug store? Your diet, daily movement, and mental outlook can relieve pain, decrease inflammation and help your body heal quickly and completely. The human body has an amazing ability to maintain health when provided with the right signals. Think about it: The choices you make each day send signals to each of your cells that either promote health and healing, or damage and disease. When harmful signals are removed, and appropriate signals are enhanced, cells and organ systems can create healthy outcomes. Your food choices, physical function, and psychology have the greatest impact on your pain, inflammation and quality of life.

Table of Contents

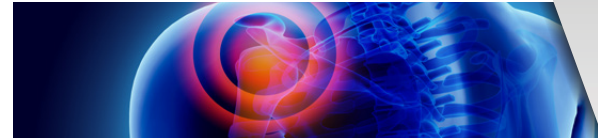
Your Future, Your Choice

Page 04



Pain and Inflammation 101

Page 06



The Principles of the MSK Solutions Pain Recovery Program

Page 08



Avoid Pain and Inflammation through Wellness

Page 24



Anti-Inflammatory Diet and Meal Plan

Page 26



Conclusion

Page 34



Pain and Inflammation 101

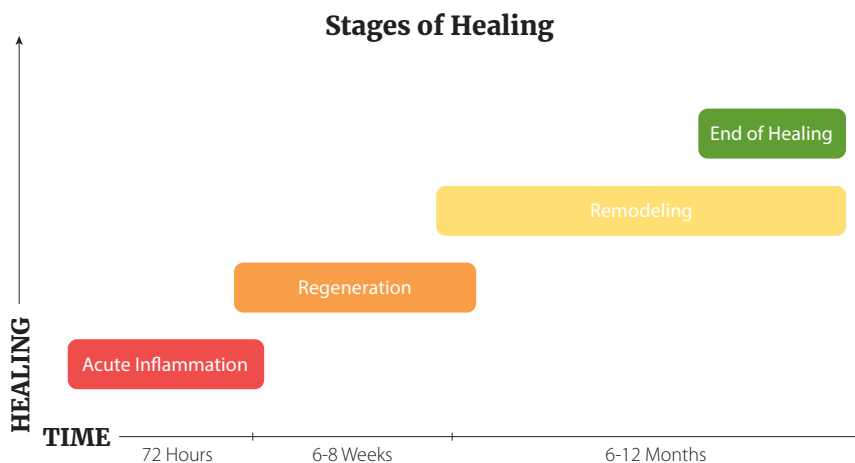
Pain is our body's alarm system; it alerts us when something isn't right. But how does the alarm get activated? Inflammation is the response of our body's defense system to protect against infection and rebuild any damaged tissue. The normal inflammatory process activates pain receptors, sending a signal from the injury site to the brain. Your immune system springs into action, signaling immune cells to start walling off the injured area. New cells will then use collagen and glycoproteins to create new tissue. Finally, new collagen forms scar tissue, healing the wound.



The Principles of the MSK Solutions Pain Recovery Program

Healing of injured musculoskeletal tissues occurs in three phases:

1. The acute inflammatory phase makes up the first 72 hours of an injury. During this phase, initial swelling and inflammation affects the injured tissues, and tissue repair is limited. Due to the increased inflammation, the first few days following an injury are often the most painful.
2. The regeneration phase is the longest phase of healing, lasting six to eight weeks. After the 72-hour mark, damaged tissues begin to be repaired. Repair is initiated by cells called fibroblasts brought in during the acute inflammatory phase. During the regeneration phase, the injured muscles and ligaments is rejoined and linked. When this phase of healing is complete, about 90% of damaged tissue is repaired.
3. The final phase of healing is called the remodeling phase. During this phase, the collagen protein glues laid down for repair in the previous phase are remodeled in the direction of stress and strain. Fibers in the tissue become stronger, and their pattern begins to look like that of the original, undamaged tissue. In this phase, regular movement helps properly remodel and realign the new tissue.



For most people experiencing an acute pain event, acute pain and inflammation usually resolves in a matter of days or weeks, but can last up to three months. At the three-month mark, damaged tissue should have undergone full healing and tissue regeneration, and be well into the remodeling phase. The inflammatory process should be completely resolved and no longer causing swelling or pain seen in the first few weeks of injury.

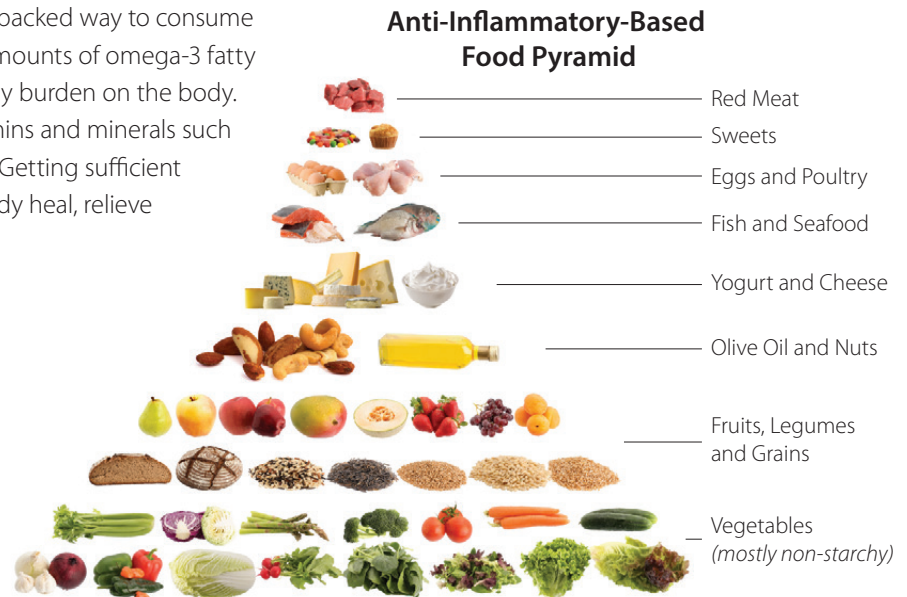
The Healing Matrix

The latest research on pain management shows three areas need to be addressed simultaneously to relieve your pain quickly, allow your body to fully heal, and prevent your pain from coming back. Your body must be balanced physically, nutritionally and psychologically to maximize the healing process. This multi-faceted approach is the Healing Matrix.

Nutritional

Nutrition is what your body uses to create and repair muscle, joints, connective tissue and bones. Nutrition can also play a role in either feeding or resolving inflammation and contributing to pain. Diet, supplements and good bacterial balance can help with digestion and absorption, and ensure your body is eliminating harmful waste products that can accumulate during inflammation and the healing process. Consider your environment as a nutritive source, and avoid or reduce toxin exposures like smoking, environmental pollutants, and harmful chemicals. Reading labels on skin care products is as important to your health as reading food labels. Using natural, organic skin care products, cosmetics, detergents, and cleaning products will significantly reduce your exposure to harmful, pro-inflammatory and often carcinogenic chemicals.

The Anti-Inflammatory Diet is a research-backed way to consume nutrient-dense vegetables, obtain vital amounts of omega-3 fatty acids, and help decrease the inflammatory burden on the body. Most Americans are deficient in key vitamins and minerals such as vitamin D, magnesium, and vitamin K. Getting sufficient amounts are foundational to help the body heal, relieve pain, and bounce back quickly.







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† These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.