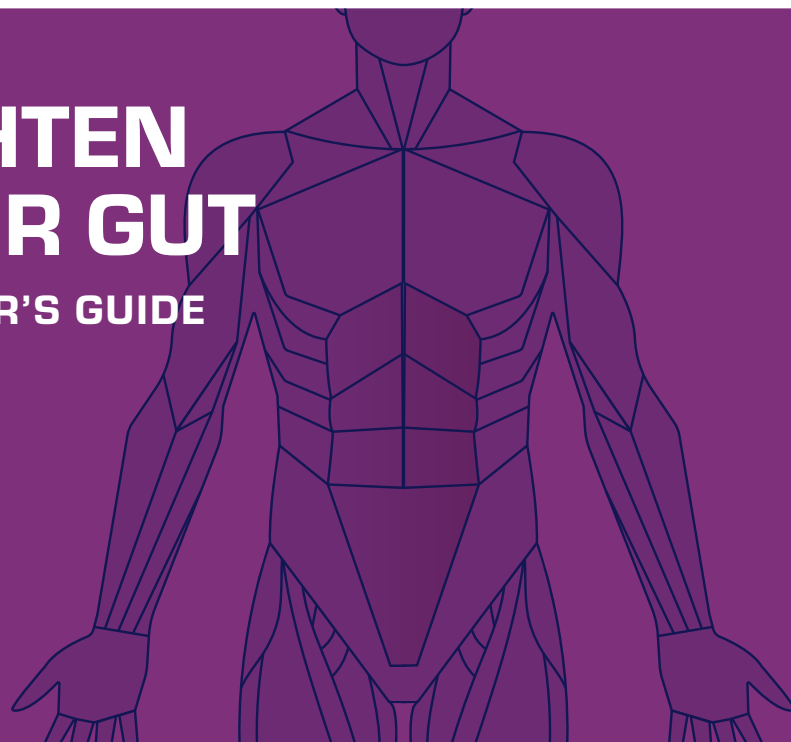
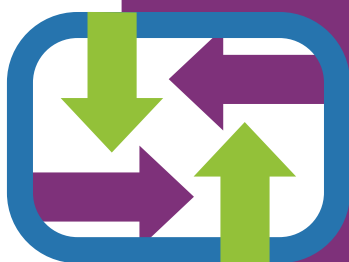


TIGHTEN YOUR GUT

TRAINER'S GUIDE



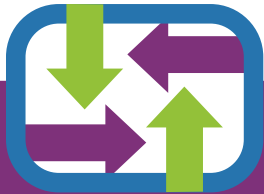
INTRODUCTION

PURPOSE:

This **WALK OFF WITH ONE** help make the individual aware of force being exerted on their low back when handling material. Additionally, it provides practical ways to train core engagement and reduce low back injuries.

Created by:
Javier Alcantar MA, ATC

The core can be described as a muscular box with the abdominals in the front, paraspinals and gluteals in the back, the diaphragm as the roof, and the pelvic floor and hip girdle musculature at the bottom. The core muscles recruited when tightening your gut are the rectus abdominis, internal/external obliques, and transverse abdominis. By tightening your gut, it creates a tight web that protects the small muscles in your back from a strain, or the ligaments in your spine from a sprain, and reduces shear forces to your discs. Anytime you have to push/pull, lift, or carry you are exerting force on that material and that material is creating an equal and opposite force on your low back. Tightening your gut will minimize the force applied to your low back and distribute the stress among your abdominis muscles, as they are intended to do. Broad benefits of tightening your gut have proven to improve athletic performance, prevent injuries, and alleviate low back pain.



DEMONSTRATION

Have your team imagine they are boxers and they are about to get hit in the stomach. Instinct will stimulate their sympathetic nervous system and recruit core muscle groups to brace for impact.

Now have your team practice with a partner. Gently, have one team member simulate hitting the other partner's stomach and the other partner tighten their gut until it becomes a more natural response.

****Remember it's more than just sucking in your stomach.**

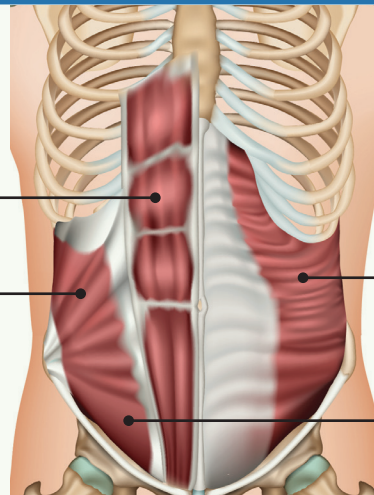
MUSCLES OF THE CORE

RECTUS ABDOMINUS

Located along the front of the abdomen, this is the most well-known abdominal. Often referred to as the "six-pack."

EXTERNAL ABDOMINAL OBLIQUE

Located on the side and front of the abdomen



TRANSVERSE ABDOMINUS

Located under the obliques, it is the deepest of the abdominal muscles and wraps around your spine for protection and stability.

INTERNAL ABDOMINAL OBLIQUE

Located under the external obliques, running in the opposite direction.

BONUS INFORMATION

You can share these exercises with those team members that are asking for more information about how to strengthen their abdominals.

EXERCISE TO BUILD STRENGTH:

PLANKS: The plank is one of the most popular core exercises. It is an isometric exercise that allows for optimal muscle contraction without visible movement.

BIRD DOG: Strengthens your core, improves stability, and promotes proper posture.

DEAD BUGS: The dead bug is a core exercise that can help beginner and experienced lifters reinforce posture, breathing patterns, and core stability during dynamic movement.

MOUNTAIN CLIMBERS: Includes an isometric exercise to the core to maintain stability while engaging lower body through a concentric exercise.

ANOTHER APPLICATION OF SKILL: Begin applying this new skill in a controlled environment. Start by carrying two bags of groceries, one in each hand, to maintain a stable core and emphasize tightening your gut as you walk the groceries into your home. Next, carry one bag of groceries, in either hand, and focus on maintaining a neutral spine and not leaning towards the side the bag is in. Consider navigating around your vehicle or to the opposite end of the table to incorporate holding a tight gut during maneuvering. Through practice, tightening your gut will transition into everyday task and prevent low back injuries.

Resources:

1. Fatoye F, Gebrye T, Ryan CG, Useh U, Mbada C. Global and regional estimates of clinical and economic burden of low back pain in high-income countries: a systematic review and meta-analysis. *Front Public Health*. 2023 Jun 9.
2. Hoy D, March L, Brooks P, Woolf A, Blyth F, Vos T, et al. Measuring the global burden of low back pain. *Best practice and research. Clin Rheumatol*. (2010) 24:155-65.
3. Akuthota, Venu¹; Ferreiro, Andrea¹; Moore, Tamara²; Fredericson, Michael³. Core Stability Exercise Principles. *Current Sports Medicine Reports* 7(1):p 39-44, January 2008.

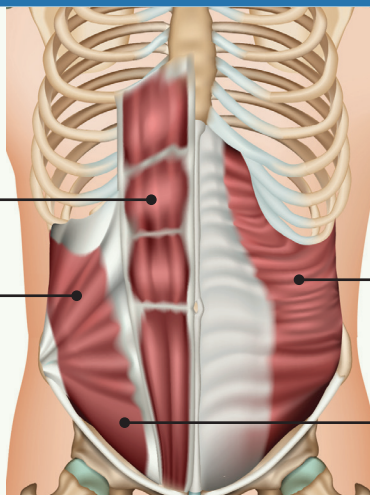
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