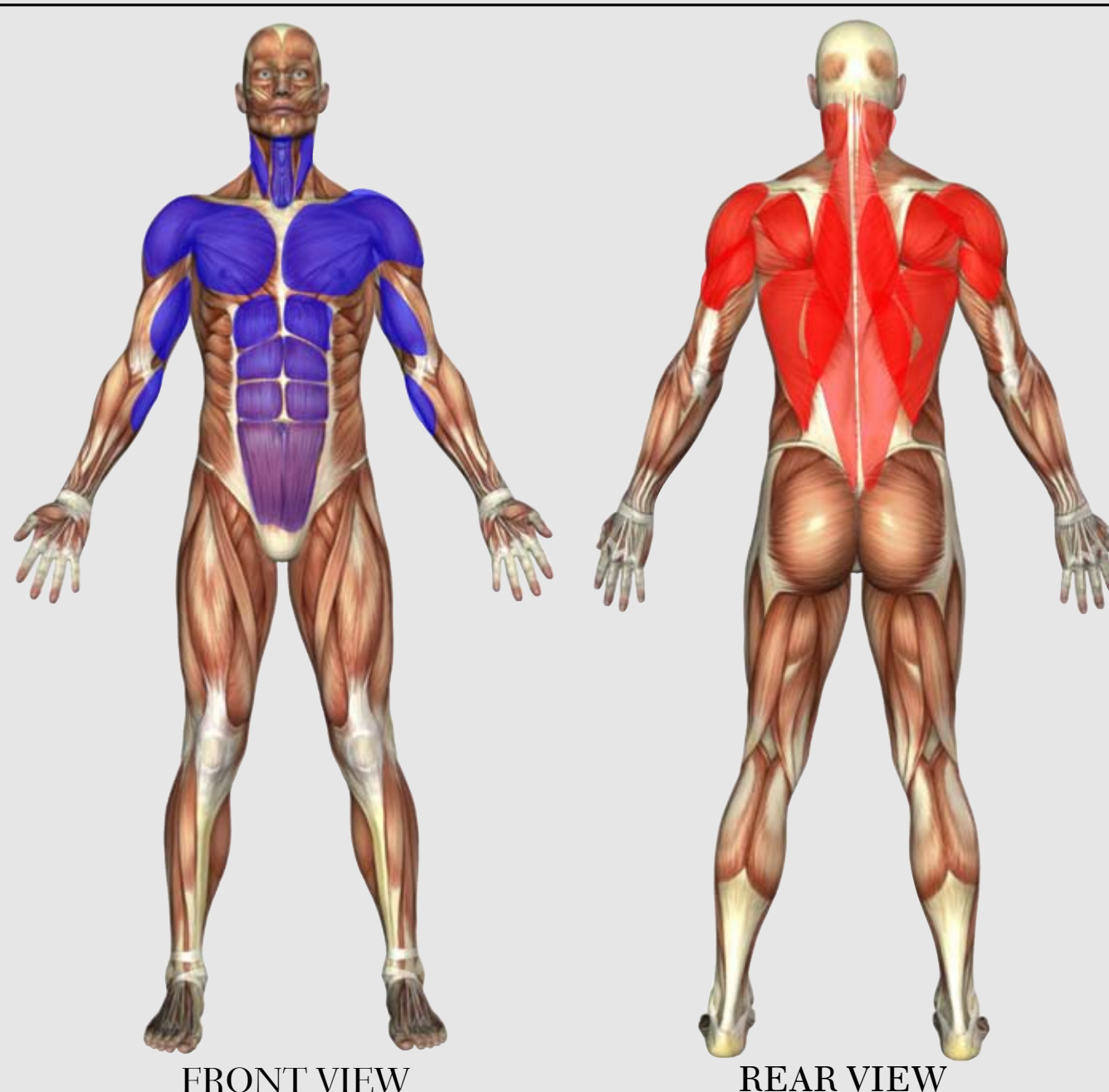


# THE AFFECT OF THE BODY-ALINE EXERCISE ON ANTERIOR & POSTERIOR MUSCULATURE AS A METHOD FOR ALIGNING POSTURE



## STRETCHED MUSCLES HIGHLIGHTED IN BLUE

Stretched muscles include, but are not limited to:

- Sternohyoid, Omohyoid (**NECK**)
- Pectoralis Major (**CHEST**)
- Flexor Carpi Radialis (**FOREARM**)
- Anterior Deltoid (**SHOULDER**)
- Bicep Brachii (**ARM**)
- Rectus Abdominus (**TRUNK**)

## STRENGTHENED MUSCLES HIGHLIGHTED IN RED

Strengthened muscles include, but are not limited to:

- Sternocleidomastoid (**NECK**)
- Infraspinatus, Mid- Trapezius, Teres Major, Rhomboids Major, Latissimus Dorsi (**BACK**)
- Posterior Deltoid (**SHOULDER**)
- Triceps Brachii (**ARM**)

**METHOD OF POSTURAL ALIGNMENT EXPLAINED:** In most cases, poor posture (*in its many forms*) is caused, initially, by the intentional and habitual positioning of the body into a forward position. Since most physical tasks are performed in front, where the eyes are located, there is a strong tendency for the head, shoulder, arms & torso to migrate forward during the performance of such tasks - if for no other reason than practical purposes. Over time, a muscular and neuromuscular imbalance can develop, which is merely the body's adaptive response to the constant forward positioning. This adaptation is typified by a shortening and/or tightening of anterior musculature, combined with an increase in neurological activity; along with a lengthening and/or weakening of posterior musculature, combined with decreased neurological activity. Soon, the affected person will display the typical characteristics of poor posture -at all times- regardless of tasks being performed. This is indicated by constant rounding of the shoulders forward, sunken chest, protruding belly, misaligned head and palms that face backward. It is important to note that this adaptive response, and corresponding muscle & neuromuscular imbalance, is hastened because of general inactivity. In other words, if the body is put through very few other movements - beyond slouching - the muscular & neuromuscular adaptation will occur at a faster rate, simply because the body "knows no other way." Once the adaptation reaches a certain threshold, the muscular and/or neuromuscular imbalance "sets in." At this point, the condition becomes very difficult to reverse through common means because the slumped position begins to feel very natural to the affected person. Thusly, the tendency to slump (*poor posture*) may become further reinforced over time and, in most cases, will continue to digress with a myriad of health problems to ensue.

It has been shown that the muscular and/or neuromuscular imbalance that contributes to the forward migration of posture can be corrected with guided exercise movements in the exact, opposite direction. The **BODY-ALINE™** exercise machine accomplishes this by first requiring the user to sit down, facing forward and, with arms extended, grasping the handles in front with palms facing up. Then, in order to execute the movement, the user leans back into the foam roller & rotates their arms rearward, against tension. This combination of movements (*back extension & rearward arm rotation*) serves to stretch and lengthen the anterior muscles (*as shown*), while strengthening & toning (*increasing tightness*) the posterior muscles (*as shown*). The movement concludes with the user's head-up, shoulders drawn down & back, chest-out and palms facing up - all against constant tension. It is important to note that this finish position is the exact opposite of poor posture.

The immediate and long term affect of the exercise is to create a "Muscle Action," in which the stronger muscles in back, working against the stretched muscles in front, will literally pull the head, shoulders, trunk & spine rearward into better alignment (*good posture*). Also, a neurological response occurs just by doing the movement (*with or without resistance*), whereas previously dormant (*or semi-dormant*) nerves in the back are "woken up" (*particularly on and in between the shoulder blades*) because they are now subject to more activity than before. With increased neural activation, comes greater muscle control. Understand too, the use of variable tension in the exercise is paramount to stimulating the desired muscular response in an expedient manner. The **BODY-ALINE™** also provides a soothing massage to the muscles along the spine, via a soft foam roller, which travels along the spine and provides the point of contact where tension is applied to the back muscles. The massaging effect serves to loosen any "binding" or "knotting" that may exist in these muscles while, at the same time, providing a mild fascia release; thereby making the muscles more functional and receptive to the training effect of the exercise. A unique aspect of the **BODY-ALINE™** treatment lies in the fact that, in most cases, the user can detect the "realigning effect" immediately. After performing 15-20 repetitions of the exercise movement, 9 out of 10 users report standing-up (*to exit the machine*) and literally feeling their head, shoulders & torso draw backward towards proper alignment, as the muscle action manifests\*. The sudden effectiveness of the exercise does provide an immediate gratification, which serves to increase user motivation and continuance of the program. Consistent use also raises the level of postural awareness. Often times, the user gains the ability to recognize when they are slouching (*and take steps to correct it*), whereas before, they may not have realized. Overall, the **BODY-ALINE™** program provides several physiological, neurological & psychological benefits that work, in unison, to create a highly effective method of postural alignment.

**IN SUMMARY**, the highly specialized **BODY-ALINE™** exercise motion reverses the muscular and/or neuromuscular adaptation responsible for reinforcing poor posture in just minutes of use per day or every other day. This results in a gradual migration of the head, shoulders, trunk & spine rearward into better alignment (*good posture*). Generally, anywhere from 1 to 6 months\* may be required to achieve total body alignment, depending on the severity of the user's initial condition & frequency of use (*greater frequency of use will yield faster results*). Ultimately, when proper alignment is achieved, **BODY-ALINE™** users will stand taller & feel better, as they enjoy renewed confidence in their back and the many health benefits of good posture. The **BODY-ALINE™** has demonstrated an 87% user satisfaction rating in terms of achieving proper body alignment within the first 6 months of use\*. The methodology of retraining the body's musculature to achieve therapeutic balance is commonly known as "Mirror Image Muscle Rehabilitation."

\* Results based on customer survey 2005