

Seven Letters

**Letter #4**

**TABLE OF CONTENTS**

The Health Club Machines vs. The Human Machine.....2

    “Training” at the Gym ..... 3

    The Circuit ..... 4

    If a Monkey Can Do It . . . ..... 4

    The Loop of Innovation – Forcing Us Ahead to the Past ..... 7

    The Machine Mistakes ..... 9

    Rotation ..... 10

    The muscles in movement vs. the muscles in textbooks ..... 11

The Eight Basic Resistance Training Movements ..... 12

The Exercises – The Functional 6 ..... 16

Exercise Illustrations – The Functional 6 in Summary .....21

## The Health Club Machines vs. The Human Machine

This is the fourth of Seven Letters and in the first three I hope to have delivered some clarity. If I've done my job well, we know by now that we must apply the three synergistic elements of supportive eating, aerobic exercise (which can be any activity that asks the large muscle groups to perform rhythmically maintaining a heart rate elevation), and resistance exercise.

We're now going to zero in on the concept of exercising against resistance, otherwise known as challenging muscle. Resistance exercise is commonly thought of as weight training, and while the whine of, "I don't want to lift weights, I don't want to get big," still echoes through ladies' and coed gyms worldwide, our population is ultimately finding some comfort with this exercise modality. There is an acceptance that doing something to challenge muscle is at very least a piece of the fitness solution so many long for. Gym goers recognize barbells and dumbbells, and most have at least experimented with them, but many feel vulnerable or limited in their free weight expertise, so they do what the health club industry has taught them to do. They opt for machines.

The exercise machine industry is cluttered with reinvention as the "look and feel" of a given exercise line is the primary distinction. Virtually every major manufacturer cranks out the staples, the leg extension, leg curl, leg press, chest press, pulldown, etc.



While the innovations originally came to market with respect for human movement, with an aim at filling a need that wasn't being effectively met by conventional exercise at the time, the imitators simply look at the current exercise machine standards and reinvent with their own label and unique marketing spin.

How many times can the leg press machine be reinvented? Based on the trade show floor at the Club Industry convention, hundreds!

The reality is, a primary prerequisite in gaining control over human form and function is a baseline understanding of the human machine, and while the exercise machine is used by human machines of all shapes and sizes, the manufactured machine is not a need at all.

Let's get a quick overview of how most people perceive the specifics of a health-club-based exercise program, and then we'll tear into the flaws, the challenges, the important insights, and the solutions.



## “Training” at the Gym

Daniella found comfort with the idea of weight training and she “trains” with her sister Jackie.

Five days a week, while the kids are in school, Daniella and Jackie spend 75 minutes on the workout floor following the routine Jackie learned from a personal trainer two years earlier. It looks something like this:

Monday – legs + cardio + abs

Tuesday – chest + back

Wednesday – arms + abs + cardio

Thursday – legs

Friday – chest and back + cardio + abs

The routine makes sense. They allow the muscle groups 48 hours to recover. They challenge each major muscle group twice per week. After each weight training session they do cardiovascular exercise (cardio). They work their abs three days a week. Few personal trainers would find fault in this routine.

Jackie is toned. Daniella is envious. The routine just doesn't seem to work for Daniella. She follows it ritualistically, just as her sister, but Jackie, who happened to have a two year head-start and always had a well toned body, manages to stay fit. Daniella's still conscious about what she wears to the gym so “trouble spots” are covered up.

Maybe if we look a bit closer at the routine we can identify “the why.”

On Monday they take turns doing leg presses on the 45-degree leg press machine. They do 3 or 4 sets depending how they feel, and then they put some weight on the Smith Machine where they proceed to crank out 3 sets of Squats. From there it's off to the free weight area where they do dumbbell squats, and finally, the machine Daniella hates but knows is good for her, they go to the seated leg press where they can crank out “high reps” and “feel the burn.”

Seems as if Daniella should be sporting a pair of lean toned thighs? Right? The routine's barely half over. It's time to do hamstrings.

Lying leg curls are followed by seated leg curls and from there they progress to the single leg leg curl machine. The finale, “high reps” on the standing single leg leg curl.



Daniella and Jackie continue through their routine, committed to complete each and every exercise, each and every set, each and every repetition. They've completed training the leg muscles that operate above the knee. Calf raises are next. They do seated calf raises, standing calf raises, and then standing one-legged calf raises, not on a machine, but holding a dumbbell.

A breath, a sip of water, and then it's time to begin cranking intensity up to bring them a total of 40 minutes of aerobic exercise in their Target Heart Zones. They alternate between the stairclimber and the elliptical machines.

When they've cooled down, lying crunches followed by seated ab machine crunches are enough to bring them to their fatigued post-workout pat on the back and it's off to the smoothie shop for the celebratory smoothie.

Daniella and Jackie are representative of health club members who are given a "customized routine" by a personal trainer. The routine incorporates foundational principles, involves integration of various exercise machines, and fails to consider several vital elements of human movement and human capacity.

### The Circuit

Luis joined a major health club chain a year ago. His first workout session was supervised by a muscular man in a polo shirt with authoritative control over his pen and clipboard. He pointed, he demonstrated, he wrote, he nodded, and then he moved Luis to yet another machine. 12 machines in all. The machines had numbers that coincided with the workout card Luis was given.

- #1 – Leg Extension
- #2 – Leg Press
- #3 – Lat Pulldown
- #4 – Seated Row



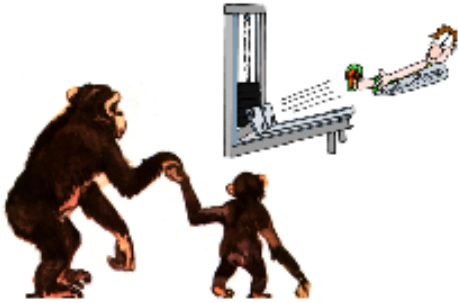
... and so it went through #11, the bicep curl, and #12, the triceps extension. It only took a week for Luis to memorize the routine and relegate the workout card to the archives. He knew the machines by heart, developed a three-times-per-week habit, and grew a bit stronger although he still hasn't seen a significant change in his body.

Luis is typical of the health club member who, instead of customization, is subjected to the assembly line introduction to a circuit of exercise machines.

Daniella, Jackie, and Luis are typical health club exercisers. While they may achieve impressive results, some applied strategy can bring them far less time investment and accelerated improvement. It's time to better understand the machine made of muscle, bone, minerals, organ tissue, water, and amino acids.

### If a Monkey Can Do It . . .

***“I do the machines.”*** It’s a generalization that plagues many who have been through the health club paradigm, learning routines on large sized devices much as a monkey in training learns circus tricks.



When I consult with someone who’s been taught to rely upon a circuit of machines, they often describe their routines using hand gestures rather than descriptions.

“First I do this one” (they push their arms out to the front to replicate a pressing movement), then I do this one (they pull back toward their bodies). This is evidence of a reliance on equipment without a clear understanding of an exercise technique or a

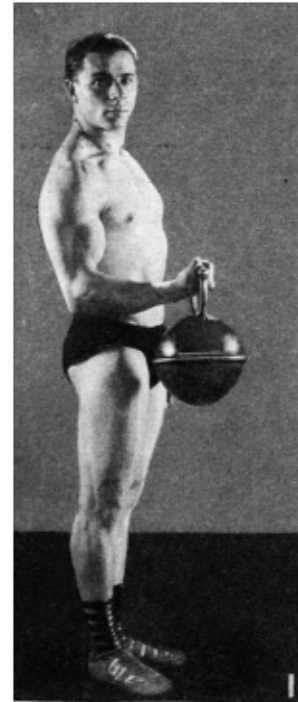
result-oriented approach. They are taught, they replicate, and they repeat.

Even monkeys might be confused by some of the things I’ve seen people do trying to avoid the admission of ignorance as they pretend they know precisely how to use an unfamiliar exercise machine.

Interestingly, if you view any physical education book from the 1930’s or 40’s, you find exercise routines being a series of “movements” rather than a guided tour through machinery. The movements involve balance, stabilization, and resistance. The resistance may be provided either by external weight or by gravity and biomechanical challenge.

Today’s personal trainers attend continuing education workshops to learn to apply the concept of “functional exercise” which has its foundation, not in 21<sup>st</sup> century science, but in old school exercise methodologies . . . training the body the way the body was designed to move.

Exercise machines are of course created to facilitate movement and to challenge muscle, but the human machine is a complex structure designed to operate in three distinctive planes. Resistance exercise machines are predominantly linear in the movement they provide. It’s fair, therefore, to say that exercise machines often challenge muscle without a respect for the intricacy of human movement.



Let’s understand the distinction between a linear “machine repetition” and a natural “exercise movement,” using the chest press as an example.



When you sit on the seated chest press machine in the gym, your hips are bent at a 90-degree angle, your back fully supported. There is some virtue to this, as it ensures a degree of safety by preventing any excess pressure upon or excessive extension of the spine, but it doesn't replicate a real world "push."

Suppose your car breaks down and you have to push it out of the flow of traffic. Maybe you and a friend get behind the car and push while a third person manages the gear shift and the brake.



If we look at the muscles being called upon to push that car, we can go from the

shoulders down to the feet. You are recruiting abdominal muscles, hip extensors, quadriceps, etc. You're also incorporating rotation of the body as you shift weight from one leg to the other. You are moving forward, laterally, and rotationally.

Suppose you finish pushing the car and you're so thrilled with yourself you opt to show off with a few pushups. Again, you're pushing, in a manner closer to the movement the seated chest press requires, but your spine is not supported nor are your hips fixed at a 90-degree angle with the leg muscles at rest. You're balancing, stabilizing, calling upon the torso and core muscles to allow you to move your body through space, down toward the ground and up again to an extended arm position.

While the seated chest press does call upon "the torso push muscles," it does so in a manner that forces all of the resistance upon the shoulders, elbows, and wrists, and neglects those balance and stabilization muscles you'd use in the pushup. Think of the pushup as the movement, the seated chest press as the "machine repetition device."

If you can challenge your body using a pushup, aren't you in essence working the same muscles as you would in a seated chest press, but doing so in a manner that more closely replicates the way the muscles are called upon in the real world?



If you were able to turn the pushup into a movement that required even greater stabilization and greater overall muscle recruitment, wouldn't you then be better at translating the exercise into improvement in real world function?



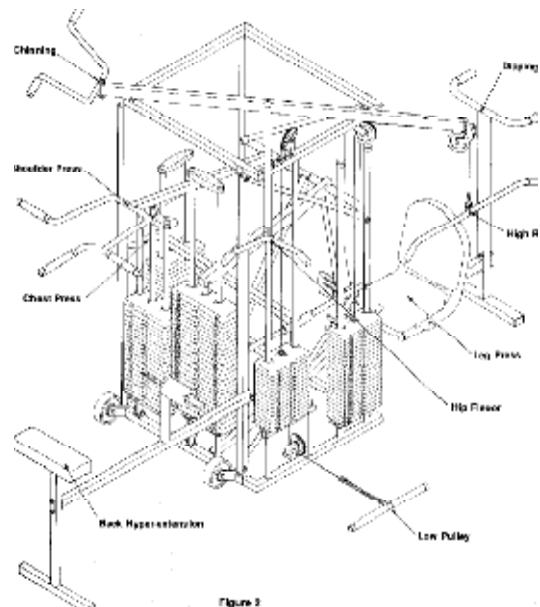
If I'm suggesting that "human movement" may be superior to the limited movements "the machines" provide, why do we have the machines at all? In order to answer that question, let's look back just a few decades at a time when innovation really had come to the exercise world.

### The Loop of Innovation – Forcing Us Ahead to the Past

Innovation, over time, can run full circle, and in the realm of exercise equipment, from the 1970's to the 2000's, that's precisely what happened.

In the 1950's, 60's, and 70's, weight training was reserved for strength athletes and the knuckleheads like me who wanted to grow muscle by pounding out repetitions of squats, deadlifts, and curls in some dungeon granted the generous name of "a gym." We'd use barbells and dumbbells, hex shaped, round, or any combination thereof. As long as we could challenge muscle with it, it served a purpose.

Three years before I was born, a bodybuilder named Harold Zinkin was awarded the title Mr. California (1957). Zinkin was innovative, entrepreneurial, and committed to fitness, and with the intention of bringing the benefits of resistance exercise to the masses, he conceptualized the multi-station weight-stack machine, a relatively compact unit minimizing the space required for a complete "gym." His steel-rod-guided weight selection mechanism added simplicity and safety and the popularity of weight training began to spread. This was the beginning of the Universal Gym Equipment company and Zinkin's machine, the Universal machine, fast became a must in order to space efficiently offer exercise variety to schools, athletic teams, and fitness centers.



While a Universal machine was becoming a mainstay in high school gyms, an eccentric genius named Arthur Jones was working to create a simple concept that provided maximum challenge to muscle with a single goal. The goal was muscular strength, and with strength, as a side effect, came hypertrophy (muscle growth). Arthur Jones gave the world the cam, which found its introduction to the fitness-wanting population in the explosive growth of Jones' Nautilus Machines.

Nautilus machines were intended to bring to the market a concept. Arthur Jones developed a branded Nautilus training protocol requiring one strategic set on each machine allowing for a full body "workout" in 20 minutes.

Nautilus centers opened up nationwide, and while the training principles were often ignored, the machines made "resistance exercise" even more user-friendly.

The Universal and Nautilus machines were wonderful additions to the previously available barbells and dumbbells, and they were vital in bringing an exercise modality to wider segments of the population, but they also led people to equate “muscle training” with machines, and over time, the idea of balance, stability, and rotational movement had to be re-introduced to the exercising segment of the public.

Despite the need for a re-education, commerce had found a new marketable vehicle. Exercise machines. Nobody in the 80's and 90's was all that concerned about returning to an understanding of human movement, as the machine age was electric.

As Universal and Nautilus found explosive growth, bandwagon jumpers came from far and wide, and the “circuit” became a series of machines set up in a strategic order to provide a “workout,” and with this new user friendly system, the popularity of resistance exercise found its way right into the mainstream.

The challenge over time became this. The machines designed to develop local muscular strength and hypertrophy neglected the core muscles that initiate movement. Decades of “machine workouts” contributed to connective tissue wear and tear, to exercise regimens neglecting core muscles that initiate movement, and a widespread ignorance of the importance of teaching muscles to cooperate for optimal functional improvement.

Today trainers worldwide are buying “functional training” equipment consisting of bands, medicine balls, and stability balls, ironically resembling the exercise equipment found in gym s in the 1930's and 40's.

In the 21<sup>st</sup> century we have more equipment than was ever necessary, but the point is, all that this offers us is a nice array of options. Exercise machines are NOT a need.

Show me a gym full of exercise machines and I'll show you eight basic resistance training movements expanded into iron and ball bearings. Before I share the 8 basic movements, and the six-movement routine I've used to help thousands find improvement whether machines were present or not, allow me to address just a few of the more common mistakes.



## The Machine Mistakes

The idea of training (working) a bodypart to reduce a bodypart is an old myth hard to put to bed. Machines named after bodyparts contribute to the longevity of the myth. It's no wonder many believe the "ab machine" will bring them the great abs they seek.

There are benefits to training the rectus abdominus (the superficial muscle with tendinous inscriptions that attribute to it being referenced as "the six pack) to develop the muscle using machines that allow you to move the rib cage toward the pelvic bone, but even the standard abdominal crunch machine has its limitations. It tends to involve the hip flexors to a great degree, lessening the perceived focus on "abs," it challenges the surface musculature while neglecting the deeper lying core musculature, and repetitive use with compromised form can bring undue stress to lumbar spine. With all of that said, if it did have the ability to shave away layers of fat, it would be the most popular machine in the gym. It doesn't have that ability at all. Those who mistakenly believe the "ab machine" will trim their tummies are those who are potentially doing slow damage while moving not a bit closer to the goal.



A second common mistake involves failure to understand basic biomechanics in using machines that offer variations in performance. This can lead to gradual microtrauma damaging connective tissue and leading to chronic overuse injuries.



An elegant example of this is commonly seen in use of the lat pulldown machine. Because the bar is attached to a cable, the user can control the direction of the pull, pulling the bar down in front of the chin toward the collarbone, or pulling it down behind the head. Too often trainers explain that the behind the neck version offers greater benefit to the lats. What they fail to explain, or in many cases fail to understand is, the degree of rotation at the shoulder joint required to bring the bar behind the neck puts the shoulder at a severe mechanical disadvantage.

I meet quite a few advanced exercisers who, primarily due to force of habit, insist the behind the neck pulldown is a superior upper back developer and they insist after years of performing the movement their shoulders are as stable as ever. Closed minded thinking is a hazard, and while it's

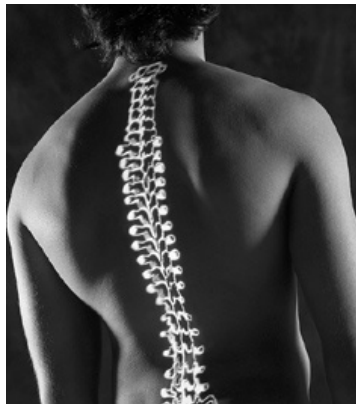
unreasonable to expect that everyone who ever performs a rear pulldown will experience ligament damage or rotator cuff compromise, the research clearly illustrates that the front pulldown offers identical benefit with far less risk.

## Rotation

While I can dedicate volumes to exercise mistakes using conventional machines, by now you get the picture. Moving from machine to machine is not as valuable as the kid who signed you up at the heath club might have led you to believe.

I'm going to share six exercise movements, a routine I developed to challenge anyone of any fitness level seeking functional improvement, strength, coordination, balance, and improvements in body composition. I'll share it shortly, but it's valuable to move out of the explanation of a handful of mistakes into an explanation of a primary neglect of "the machines."

If we take a close look at the spine and the musculature of the torso we'll notice that the human machine is far more than an entity that can push, pull, bend, and locomote. Its structure reveals it to be an amazing rotational machine.

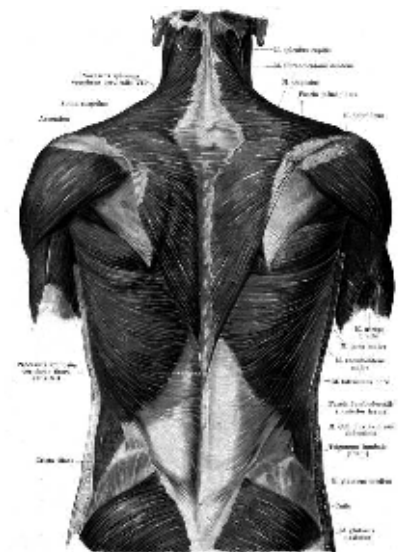
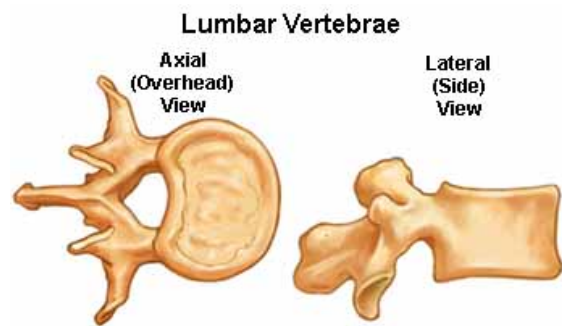


The spinal column is a virtual stack of bones extending

from the base of the skull to the tailbone, each of those bones referred to as vertebra. They are oval-shaped and between each spinal column "bone" lies a pad of cartilage referred to as a disc. The vertebrae have a bony ring attachment as well as extensions known as processes, and the vertebrae are attached by ligaments creating a stackable series of articulating joints. Each spinal joint allows for slight forward and backward movement, as well as

rotation to the right and left.

The spine, with its 33 joints allows the body to twist dynamically from right to left, and the muscles are positioned on angles to facilitate rotational movement. Virtually everything we do, from reaching up to a grab something from a high shelf to bending down to tie a shoe, from swinging a golf club to carrying shopping bags through the mall, from walking to running, skipping to jogging, working to playing, involves rotation. If we are to exercise the body as it was designed to move, we must incorporate the freedom to rotate, and with the exception of few exercise machines that may have their own inherent limitations, most standard "circuit" machines prohibit rotation.



## The muscles in movement vs. the muscles in textbooks

In summary, human movement is rotation, and as our bodies face various tasks and challenges, we balance, we stabilize, we subconsciously contract muscles, and we propel forward, backward, or to the side. We twist, we turn, we lift, we lunge, we jump, we bend, and we recruit muscles harmoniously to become the ultimate multi-faceted machines.

Manufactured exercise machines have their place. They can target and isolate specific muscles, they can be used to facilitate local muscular strength increases and muscle hypertrophy, but they may not offer most people the most efficient method of exercising.



In a textbook you'll read that the primary function of the triceps would be to extend the elbow, and in that most people will exercise the triceps using a machine that isolates the entire body so the elbow joint can be singled out as a pivotal point from which to extend the arm against resistance. In the real world, rarely if ever is your body stabilized when you call upon the triceps for the purpose of elbow extension. You may be tossing an object, moving furniture, pushing a shopping cart, or placing your child up on your shoulders for a better view of the parade. The triceps are involved in movement, but movement does not rely solely upon the triceps. I use this as an example to help you accept that the most efficient exercise can incorporate movements that ask the muscles and muscle groups to perform in concert.

There are some muscles that we hear of more often than others. While we don't hear the adductor brevis come up much in conversation, sports enthusiasts often hear, "Ouch! Pulled hamstring!" How many times do we hear of hamstring pulls, tears, and ouches among pro football players, amateur tennis buffs, and weekend warriors? Gym goers hail the leg curl as the single most effective hamstring movement, as the primary textbook function of the hamstrings is knee flexion (bringing the heel toward the buttocks). What most people fail to understand is the hamstrings' role as a hip extensor, and if you look at how we typically call upon the hamstrings, especially in sports, we ask this group of three muscles to extend the hip with force. I can think of hundreds of examples of hip extension in real world movement, but struggle in vain to come up with a single real-world scenario where you're asked to bring the heel to the butt against resistance while the rest of the body is supported and stationary.

As we move forward, as we come to understand the eight basic resistance training movements, and as we further progress to understand the virtues of my "Functional Six," you'll find it simple, valuable, and even fun to incorporate an unconventional method of resistance exercise, one that is aimed at one target. Your betterment.

## The Eight Basic Resistance Training Movements

Let's go back to the movements Daniella and Jackie were performing at the onset of this letter. They believed that the 45-degree leg press, the Smith machine squat, the dumbbell squat, and the seated leg press are unique movements. Here's the reality. When performing those movements, they bend from the knee and hip and then they extend from those same joints. Knee flexion and simultaneous hip flexion followed by knee extension and simultaneous hip extension.

If the movement, as far as the anatomical movement, is performed intended to improve performance, increase strength, or facilitate greater muscle tone, logically we can surmise that any exercise that allows you to challenge the muscles that flex and extend the knee along with those that flex and extend the hip can provide similar challenge.

The movement, therefore, is knee and hip flexion followed by extension. We'll call that Movement #1. The Squat. In essence, they performed several sets of the squat movement (on a leg press machine) followed by several sets of the squat movement using a Smith Machine. They then progressed to squats holding dumbbells, followed by several sets of the squat movement on a seated leg press machine. It's overkill. It's excessive repetition. It's unnecessary. It can be counterproductive by leading to overtraining syndrome, causing more microtrauma than is necessary for the body to respond with positive muscle repair.

When we look at the squat movement in the real world, we find few if any variations that directly replicate those the machines offer. The direction of resistance varies, the resistive forces requiring stabilization vary, and the assisting muscles called to act in real world incidental squatting are barely called upon in machine based movements.







I won't go through this lengthy explanation for each of the movements, but I hope it enhances the point I make throughout this Letter. Human movement can be effectively and optimally enhanced if we can call upon exercises that ask our bodies to move as they are designed. I've used the Squat movement (knee and hip flexion followed by simultaneous extension) as an example. This example carries over to thousands of real world scenarios.

Pet a dog, line up a putt, bend to pick up a child, pick a heavy object off of the ground. In any of those activities, you bend from the knees and hips and ultimately return to an erect position. They all require the Squat in synch with a number of other human movements.

I'll give you one more example before listing all eight basic movements.

If we go on a tour through the typical health club machines, we'll find lots of machines that ask your arms to pull toward your torso, flexing from the elbow as you contract the muscles of the upper back and draw the scapula toward each other. Let's call this "The Row," or in real world language, "pulling." There are various angles, various options (bilateral, unilateral), and various mechanisms for shifts in resistance (selectorized stack, hydraulic pressure, etc.), but anatomically all of these machines are asking you to "pull."

When we pull in the real world, the resistance can be varied, can be in motion, can be unpredictable, and can be erratic in the challenge it provides. Moving handles that are set to articulate around a pivot point to take your arms through a predetermined path against selectorized resistance is extremely limited in its human relevance.



With that type of thinking, assessing the “movement” rather than giving unique power to any given machine, we’ll come up with:

- #1 – The Squat
- #2 – The Row (pull)
- #3 – The Chest Press (push)
- #4 – The Overhead Press
- #5 – The Curl (elbow flexion)
- #6 – The Tricep Extension (elbow extension)
- #7 – The Leg Curl (knee flexion against resistance)
- #8 – The Calf Raise

We can also add the abdominal crunch, the adductor machine and the abductor machines, but the muscles targeted by these machines are worked peripherally in the performance of “movements” incorporated in the “8.”

I want to make an important point here before I go on. Before I state a point I’ve already alluded to, before I assert that machines in some cases may do more harm than good, and I am soon to make that assertion, I want to repeat that exercise machines have value, have their distinctive place and with proper application can be invaluable tools for physical improvement.

The machines are ideal for muscle isolation, and if local muscular strength is a primary goal, or, as in bodybuilding, if muscle hypertrophy is the #1 agenda, a strategic program utilizing the exercise machines is highly recommended.

The challenge comes in among the majority of the population being thrown into the gym environment believing machines offer remedies. Women sit and crank out reps on the adductor machine believing the effort will pay off with a shapely pair of thighs. Men continue to crank out repetitions on abdominal machines wondering when the ever-growing waistlines will begin to shrink. “Back-to-the-gymers” who make their appearance a few times a year vowing that “this time they’re going to stick with it” believe their bodies are simple assemblage of parts and believe that a full circuit of machines addressing “quads,” “hams,” “lats,” etc. will result in the fit and beautiful bodies they long for.

If the goal involves overall muscle development, functional improvement in any task, event, or arena, greater health, wellness, and a sense of well being, forget the machines and master movement. You don’t have to become a world renowned kinesiologist, but you want to understand how the parts and the muscles of the body interplay.

You’re a skeleton at your core, and upon that skeleton the body you see in the mirror is built. The skeleton offers support, but without muscle it doesn’t move on its own. By understanding what movements move what bones, and by further understanding what muscles are involved in those movements, you being to understand how integrated movement with a resistive challenge makes you “better.”

In working with populations ranging from athletes to obese folk considering drastic surgical measures, I've developed an exercise regimen that serves all. This is a component of several of my programs including the newer version of my TRANSFORM! Program and the 21 Day Journey to Excellence. It's also a regimen my staff of trainers relies on to help experienced exercisers break plateaus, stimulate new improvement, or find greater benefit from their exercise investment.

The routine is called "The Functional Six." I'll share the exercises here exactly as they're included in my 21 Day Journey to Excellence.

You'll note in the pages that follow the use of the term, "Thoroughbred."

While we are all very much the same mechanically, we are all unique in our fitness levels, exercise histories, recuperative abilities, etc. I teach the functional six routine in three variations. The exercises are identical. The activity times, the intensity, and the rest intervals are specific to three different categories.

Advanced exercisers I refer to as "thoroughbreds," this within the scope of the routine I offer variations that offer an enhanced challenge.

This Letter cannot hope to provide an entire routine, as my TRANSFORM! Program includes 17 hours of video/audio and a complete voluminous manual. The 21 Day Journey is taught over three weeks.

What I hope to provide is clarity as to why "movement" is superior to "machines," and further to provide a hint of user-friendly "I can do this" attitude to anyone who might have felt overly challenged by an attempted commitment to resistance training.

With that in mind, I conclude this letter by sharing "The Functional Six."

If you'd like to pursue a complete program, consider TRANSFORM or the 21 Day Journey remote which is fully accessible on the web. Both programs can be obtained at [www.philkaplan.com](http://www.philkaplan.com) or by calling my office at 954 495-8065.

Next Letter . . . Understanding Recovery!

For now . . . find new betterment with a greater understanding of your body, a new perception of resistance exercise, and an introduction to The Functional Six.



## The Exercises – The Functional 6

The following exercises require coordination, stabilization, and balance. Because they're somewhat different than conventional resistance exercises, I'll explain each one at some length. If you need additional assistance you should consider the assistance of a qualified competent fitness professional.

### The Squat, Curl, Press

#### The Movement:



With a ball resting on the floor between your feet, grasp the ball on both sides by bending from the hips and the knees so you're in a squat position. Now, in a single motion, raise the ball up to chest level by straightening the hips and knees simultaneously as you bend the elbows. After a momentary pause raise the ball overhead, then return to the mid-position (chest level), and finally return to the squat. Repeat for repetitions.

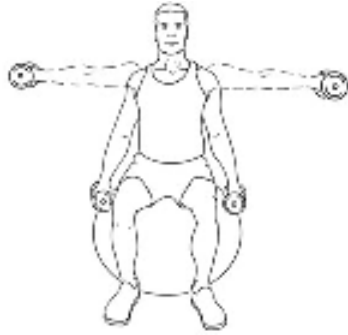
**The Muscles:** This movement focuses primarily on the quadriceps and the glutes (in plain English, the front thighs and the butt).

**Notes:** I personally use a medicine ball in this movement, as it's well balanced and it becomes simple to increase the challenge when necessary by using a heavier medicine ball. The movement can be performed using bodyweight only simulating holding a ball, and as strength increases you can do it holding a dumbbell in each hand. You can also use a basketball or a soccer ball. This movement incorporates the same actions you'd use to lift groceries out of your trunk, to pick up a child, or to reach up to place something on a high shelf.

**Advanced Notes for Thoroughbreds:** To make this exercise more intense, you can add a sort of a jumping jack movement. When you squat your feet are just beyond shoulder width, but as you thrust from the *squat* position to the *curl*, jump the feet together, and when you *press* overhead lift all the way up on your toes.

## Side Lateral Raise on Stability Ball

### The Movement:



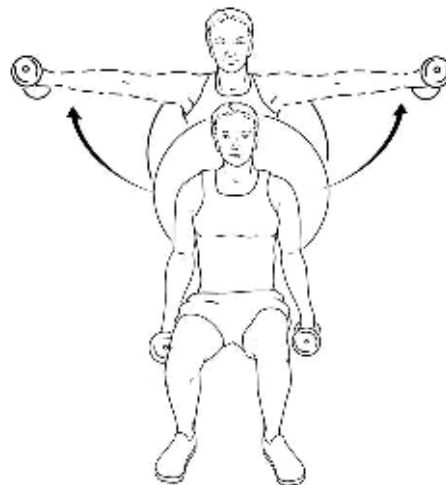
Seated on a stability ball with a dumbbell in each hand, raise your arms out to the sides until they're parallel with the ground and slowly lower. Repeat for repetitions.

**The Muscles:** The primary muscles involved are the side deltoids . . . the shoulders.

**Notes:** While this movement can be performed standing or sitting on a bench or a chair, by positioning yourself atop a stability ball you integrate the core muscles, muscles involved in balance and stabilization, muscles that are called into play anytime you lift something above the waist.

### Advanced Notes for Thoroughbreds:

To make this exercise more intense, instead of sitting on the ball, position the ball between your low back and a very sturdy, solid wall. Squat as you lower the weights, allowing the ball to roll up your back as you descend, and extend the hips and knees as you raise the weights back out to the sides.



### Lying Leg Curl with Stability Ball

#### The Movement:



Lying on your back, with your feet resting upon a stability ball, hands at your sides, palms flat, raise your hips to a “bridge” position where only your palms, arms, upper back and head are touching the floor. Keeping the hips raised, slowly roll the ball in toward your buttocks by bending your knees and then slowly extend to the starting position.

**The Muscles:** The primary muscles involved are the hamstrings (rear thighs)

**Notes:** This movement is conventionally performed on a leg curl machine where the entire body is supported and you bend your knees against resistance to challenge the hamstrings. By performing it as outlined here you still work the hamstrings, but you do so in a manner that your lower back muscles, core muscles, and various muscles around the hips work to keep you balanced.

### Hip Roll (reverse crunch)



#### The Movement:

Lying on your back with a stability ball under your knees, bend from the hips to raise the ball (held between heels and rear thighs). Continue an upward movement rolling the hips in toward you so the pelvic bone tilts slightly. Slowly lower and repeat for repetitions.

**The Muscles:** You'll feel this in the abs. It also uses the hip flexors.

**Notes:** This is a great exercise to strengthen the “core” muscles. Many people seeking a flat tummy perform crunches, but crunches neglect the deep lying muscle called the transversus abdominus. The transversus acts as an internal corset and as it's strengthened it becomes more effective at holding in the tummy, preventing that undesired abdominal bulge.

## Standing Chest Press

### The Movement:



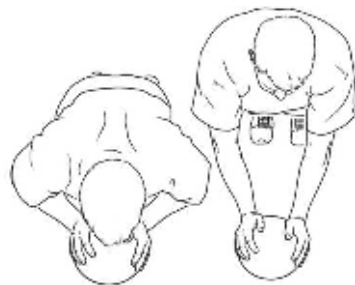
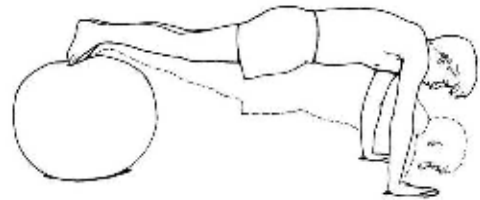
Using elastic tubing (designed and approved specifically for resistance exercise), you'll stand with the center point of the elastic tube firmly fixed behind you at a point near chest height. You'll hold one end in each hand and with one foot placed about 18 inches in front of the other (or as illustrated with a slight bend in the knees), you'll press your hands out in front of you bringing your arms to a full extension, then, resist as you slowly return the hands to opposite sides of the chest. Repeat for repetitions.

**The Muscles:** This movement asks the "pushing" muscles, the muscles of the chest, front deltoids and triceps to perform most of the work.

**Notes:** This movement replicates activity that requires you to push, be it pushing a car out of the snow or pushing lawn furniture across the yard. As an added benefit, this works to develop muscle tone in the rear of the arm, an area many women perceive to be a "trouble spot."

### Advanced Notes for Thoroughbreds:

If you feel you need a more challenging exercise than the tubing allows for, perform modified pushups in place of the chest press placing either the feet on a stability ball or keeping the feet on the ground and resting both hands upon a medicine ball.



This modification involves the same muscles, however, the need for stability recruits a greater number of assisting / balance / stabilization muscles.

## Standing Cable Row

### The Movement:



Using elastic tubing (designed and approved specifically for resistance exercise), you'll stand with the center point of the elastic tube firmly fixed in front of you at a point near chest height. You'll hold one end in each hand and beginning with your arms fully extended, the tubing taut, with one foot placed about 18 inches in front of the other (or as illustrated with a slight bend in the knees), you'll pull your hands in toward your chest and then you'll resist as you slowly return to the starting position. Repeat for repetitions.

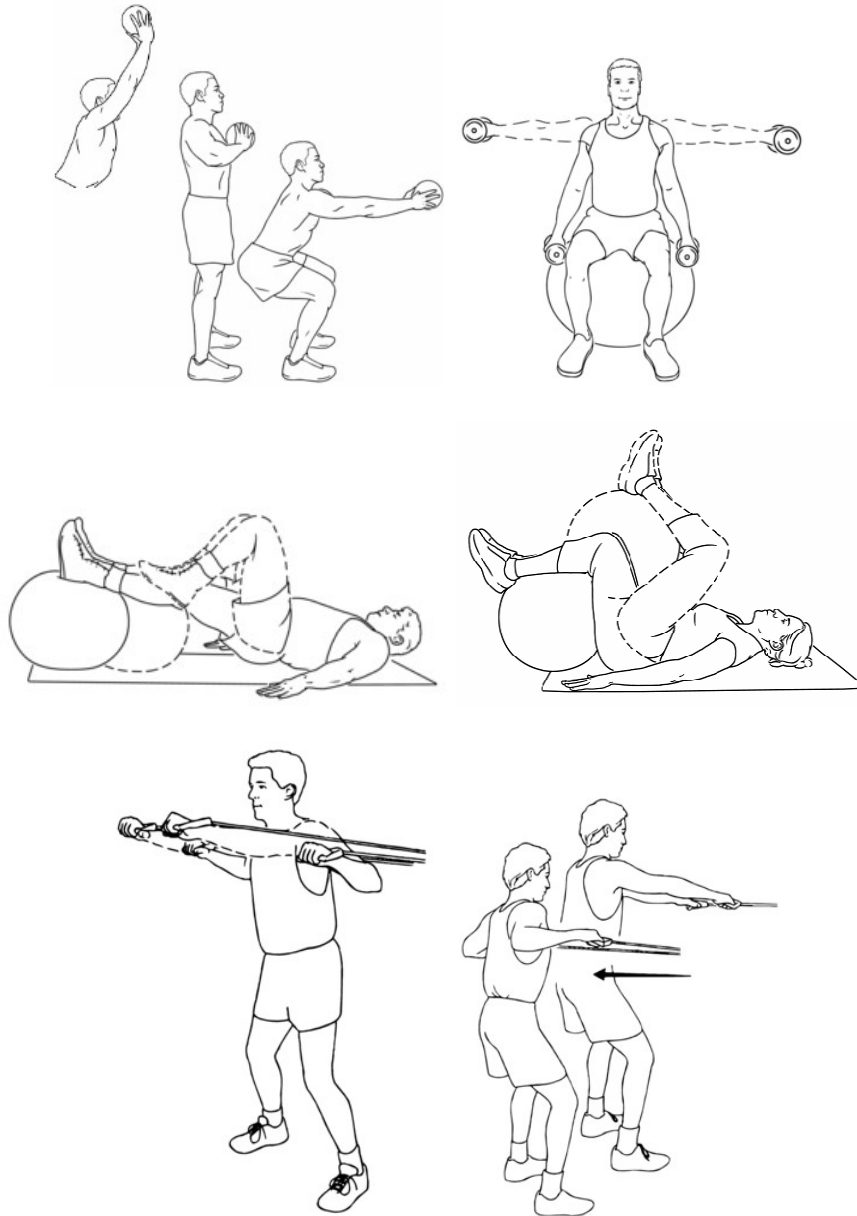
**The Muscles:** This primarily asks the muscles of the upper back and the biceps to do the majority of the work.

**Notes:** Anytime you pull anything toward you you're going to use the muscles being called to action in this movement. When you perform both movements, The Standing Chest Press and the Standing Cable Row you are quickly stimulating all of the muscles of the upper body while integrating the core muscles and the leg muscles.

### ***Advanced Notes for Thoroughbreds:***

*This movement can effectively be replaced, for those who are more advanced, with any variation of a chin or pullup.*

### Exercise Illustrations – The Functional 6 in Summary



Find these exercises in the complete TRANSFORM Program or the 21 Day Journey to Excellence.

Call 1 800 552-1998 or email [phil@philkaplan.com](mailto:phil@philkaplan.com) for more info.

Find a menu of the Seven Letters at [www.philkaplan.com/SevenLetters/LetterMenu.htm](http://www.philkaplan.com/SevenLetters/LetterMenu.htm)